Architecture Program Report

University of Oregon Department of Architecture

09/07/2021

MAGB

National
Architectural
Accrediting
Board, Inc.



Architecture Program Report (APR) 2020 Conditions for Accreditation

2020 Procedures for Accreditation

Institution	University of Oregon	
Name of Academic Unit	Department of Architecture	
Degree(s) (check all that apply) Track(s) (Please include all tracks offered by the program under the respective degree, including total number of credits. Examples: 150 semester undergraduate credit hours Undergraduate degree with architecture major + 60 graduate semester credit hours	 ☑ Bachelor of Architecture 231 quarter credit hours ☑ Master of Architecture Track 1: 144 quarter credit hours Track 2: 87 quarter credit hours ☑ Master of Science 45 quarter credits minimum 	
Undergraduate degree with non- architecture major + 90 graduate semester credit hours)	 ≅ Ph.D in Architecture 84 quarter credits minimum 	
Application for Accreditation	Continuing Accreditation	
Year of Previous Visit	2013	
Current Term of Accreditation (refer to most recent decision letter)	Continuing Accreditation (Eight-Year Term)	
Program Administrator	Michael Zaretsky, Architecture Department Head	
Chief Administrator for the academic unit in which the program is located (e.g., dean or department chair)	Michael Zaretsky, Architecture Department Head	
Chief Academic Officer of the Institution	Patrick Phillips, Provost and Senior Vice President	
President of the Institution	Michael Schill, President and Chief Executive Officer	
Individual submitting the APR	Michael Zaretsky, Architecture Department Head	
Name and email address of individual to whom questions should be directed	Michael Zaretsky zaretsky@uoregon.edu	

Submission Requirements:

- The APR must be submitted as one PDF document, with supporting materials
- The APR must not exceed 20 MB and 150 pages
- The APR template document shall not be reformatted

MAB

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INTRODUCTION

Progress since the Previous Visit (limit 5 pages)

In this Introduction to the APR, the program must document all actions taken since the previous visit to address Conditions Not Met and Causes of Concern cited in the most recent VTR.

The APR must include the exact text quoted from the previous VTR, as well as the summary of activities.

Program Response:

Program Response to Conditions Not Met (2013)

A. 1.1.4 Long Range Planning

2013 Team Assessment: The department provides information regarding the process, data sources related to long-term planning and discusses the five-year perspectives within the APR 2012. However, the actual long-range plan and the multiple-year objectives of the program are lacking. This is noted in the APR by identifying that the new department head is expected to develop a long-range plan in 2013. In the teams' various conversations with students, faculty and administration several points have become clear. First, the changes in leadership at the university level have resulted in an unsettled context regarding direction and resources. Second, these changes appear to be promising in the near future, providing the department a propitious opportunity to engage in this activity. Third, recognized leadership in the area of building sustainability can be enriched and extended through collaborations within the department (areas of social and cultural sustainability) and beyond (e.g., Green Product Design Network) as illustrated by the Sustainable Cities Initiative. Fourth, both the University of Oregon and Portland State University are moving toward independent university boards providing the opportunity to move beyond past political economic challenges and create meaningful collaborations to further each other's missions and strengths, while serving the City of Portland and the State of Oregon.

Response from Program (2016): This condition was met in 2015. The 2016 response to the 2015 IPR in the appendix of this report, "concluded that the IPR demonstrated satisfactory progress toward addressing deficiencies identified in the most recent Visiting Team Report."

Response from Program (2021): In September 2013 the department began a Strategic Planning process that resulted in a Strategic Plan that was approved by a vote of the faculty in September 2015. The Strategic Plan includes both long-range and short-term plans, with goals, actions and timelines included. The two-year process involved several faculty retreats, a number of external professional focus groups and a University Program Review (2014-15). The faculty began acting on some of the issues that emerged as early as 2013 and continued to address others. The Strategic Plan was periodically reviewed and updated as progress was made, most recently in spring 2021. The Strategic Plan is included in this submission.

In order to comply with the 2020 NAAB Conditions the department is working to meet <u>5.2</u> <u>Planning and Assessment</u>. A new strategic planning process will be initiated in September 2021 and will comprehensively evaluate the 2015 Strategic Plan, identifying progress made, new opportunities and challenges, and the department's alliance with the mission and goals of the university and college. The department has identified performance criteria and benchmarks in each course or area required to meet NAAB 2020 Conditions as well as tracking mechanisms, both internal and external. Please see **Program Changes in Response to Changes in NAAB Conditions** and **5.2 Planning and Assessment** below for further detail.

B. A.9 Historical Traditions & Global Culture



2013 Team Assessment: While there is evidence of some exposure to these themes in ARCH 201, ARCH 430/530, ARCH 450/550 and ARCH 610, the student work does not illustrate meeting the criterion.

Response from Program (2016): This condition was met in 2015. The 2016 response to the 2015 IPR in the appendix of this report, "concluded that the IPR demonstrated satisfactory progress toward addressing deficiencies identified in the most recent Visiting Team Report."

Response from Program (2019): The 2019 Response to the 2018 IPR, finds that sufficient evidence was not provided for SPC A.9 Historical Traditions and Global Culture.

Response from Program (2021): The department made several significant changes to the B.Arch and M.Arch programs in this area. In 2014-15 the department worked with faculty in the Department of the History of Art and Architecture in the College of Design to update and revise their architecture history surveys to have a global focus and the undergraduate history sequence was revised to require that B.Arch students take both ARH 314 and ARH 315:

- ARH 314, History of Western Architecture I: Ancient to Gothic, was changed to ARH 314
 History of World Architecture I, first offered in Winter 2017
- ARH 315, History of Western Architecture II: 1400 to the Present was changed to ARH 315 History of World Architecture II, first offered in Fall 2016.

This change was reported on in the 2015 IPR. In that report we stated that we were working to implement changes to the M.Arch program to address this deficiency, however those changes had not been implemented when the 2018 APR was submitted. We have now made the revision to the M.Arch program; the required architectural history course ARCH 610 was revised to have a global focus: ARCH 610 20th Century Architecture History was revised in 2018-19 and became ARCH 610 Global Modern Architecture in 2020.

Other required courses supplement these courses in both the B.Arch and M.Arch programs. Please see PC.4 History and Theory below for more detail about how the department is meeting both **A.9 Historical Conditions and Global Culture** of the 2009 NAAB Conditions and the current 2020 NAAB Conditions.

Program Response to Causes of Concern (2013)

A. Eugene and Portland

2013 Team Assessment: There is concern about the relationship between the Eugene and Portland campuses and curriculum. There is a lack of consistency in the courses, apparent discrepancies **in** the course content, and differences in student expectations. In addition, there is a lack of communication and coordination with adjuncts in Portland. The program seems to rely on GTAs to communicate information from the program to the Portland adjuncts rather than the administration.

Response from Program (2016): This condition was met in 2015. See the 2016 Response to the 2015 IPR in the appendix of this report.

Summary: The central issue of establishing consistency and coordination with the Structures and Environmental Controls courses offered in Eugene and Portland has been addressed by the senior faculty offering these courses in Eugene working directly with the non- tenure-track faculty (NTTF) teaching in Portland so that the same syllabi and course content are offered on both campuses. With the current move to online courses necessitated by the pandemic, further opportunities for close coordination have been provided by hybrid courses, with online lectures. The content for these courses will be co-taught as hybrid (online and in-person) classes beginning fall 2021.

B. Lack of differentiation of graduate learning experience



2013 Team Assessment: While the integrated courses have positive outcomes, there is concern about the lack of differentiation of the graduate learning experience and additional expectation in course content.

Response from Program (2016): This condition was met in 2015. See the 2016 Response to the 2015 IPR in the appendix of this report.

Summary: There is a distinction made within the UO registrar between undergraduate and graduate expectations of time (see link for syllabi text).

Within the Architecture program, all undergraduate and graduate courses are differentiated by course number (4xx is undergrad number in a mixed course, 5xx is a grad number in a mixed course).

Under the UO quarter system, each undergraduate credit reflects approximately thirty hours of student engagement. Therefore, a 3-credit course would engage students for approximately 90 hours total among the activities listed below, whereas a 4-credit course would entail approximately 120 hours of activities in which students are actively engaged in learning over the course of the term.

Graduate students are expected to perform work of higher quality and quantity, typically with forty hours of student engagement for each student credit hour. The UO Committee on Courses requires syllabi specify how graduate students must accomplish more complex, in-depth work, and demonstrate how the mastery of course content at the graduate level differs from successful mastery at the undergraduate level. Therefore, a 3-credit graduate course would typically engage students approximately 120 hours; a 4-credit graduate course may be expected to entail approximately 160 hours for the average student for whom the course is designed. It is up to the faculty to provide additional expectations for graduate students. This is applied in lecture and seminar courses.

In order to further differentiate the graduate learning experience from the undergraduate one, the department created five new Specializations (16 credits) for graduate students: Architectural Technology, Housing and Interior Architecture offered at the Eugene campus and Historic Preservation and Urban Architecture and Urban Design offered at the Portland campus.

C. Academic advising

2013 Team Assessment: Academic advising seems inconsistent and a clear process has not been developed.

Response from Program (2016): This condition was met in 2015. See the 2016 Response to the 2015 IPR in the appendix of this report.

Summary: In 2014 the department created a staff position of student advisor and the College followed shortly after with establishing staff positions of student advisors. The department student advisor works closely with the department administrative leaders (Head, Directors of Graduate and Undergraduate Studies, Portland Director) and, pre-pandemic, traveled to Portland frequently to meet with students there in person. These changes have made student advising much more consistent, with scheduled appointments available for students at both the department and College levels.

D. Unpaid internships

2013 Team Assessment: Unpaid internships are unethical, raise a concern about consistency with AIA policy, and should not be allowed.

Response from Program (2019): The 2016 Response to the 2015 IPR required continued reporting on this issue. This condition was met in 2019. See the 2019 Response to the 2018 IPR in the appendix of this report.



Summary: The course syllabus for the department's Practicum was revised to reflect consistency with AIA standards, to make it clear that students enrolled in the course could not perform duties that would be required to be paid under those standards. The 2018 IPR provided extensive evidence of this revision and compliance.

E. Inconsistency in delivery of capstone studios

2013 Team Assessment: There is apparent inconsistency in the delivery of the capstone studios. These inconsistencies include a variation in project complexity and the requirement of a prerequisite seminar for select capstones.

Response from Program (2016): This condition was met in 2015. See the 2016 Response to the 2015 IPR in the appendix of this report.

Summary: While there is still inconsistency in the requirement for a prerequisite seminar for the capstone or "Terminal" studios, the delivery of the content of those studios has been coordinated to meet the requirements of the 2020 NAAB Conditions SC.5 and SC.6. In particular, in 2019-20 and 2020-21, the department head met with all Terminal studio instructors in both fall and spring to discuss required learning outcomes in the areas of Design Synthesis and Building Integration and to share performance criteria checklists and suggested schedules over the two term studios. In addition, there are now workshops in structures, environmental control systems, building enclosure and building codes available to all terminal studios.

F. Student command of digital technology

2013 Team Assessment: There is uncertainty as to whether students have a command of digital technology, its application, and the student's preparation for the profession.

Response from Program (2016): This condition was met in 2015. See the 2016 Response to the 2015 IPR in the appendix of this report.

Summary: The introductory digital media courses for both the B.Arch and M.Arch programs have been closely coordinated with the concurrent studios and additional digital media courses have been offered in the Design Media course area, along with additional new digital technology electives.

G. Social Equity

2013 Team Assessment: While the program has made gains in relation to social equity, there remains a need to improve diversity amongst students, faculty, and staff.

Response from Program (2016): This condition was met in 2015. See the 2016 Response to the 2015 IPR in the appendix of this report.

Summary: The percentage of new and enrolled B.Arch and M.Arch Black, Indigenous, People of Color (BIPOC) students compared to our total B.Arch and M.Arch students have been increasing slightly between 2009 and 2013 with 12% in 2009 out of 674 students, 14% in 2010 out of 725 students, 13% in 2011 out of 766 students, 15% in 2012 out of 713 students, and 17% in 2013 out of 724 students. Our BIPOC students remained steady at 20% in 2014 out of 686 students and 20% in 2015 out of 687 students. In 2016, B.Arch and M.Arch BIPOC students increased slightly to 19% out of 716 students. Between 2017 and 2020, B.Arch and M.Arch BIPOC enrollment continued to increase despite lower overall enrollment numbers with 19% in 2017 out of 687 students, 21% in 2018 out of 665 students, 19% in 2019 out of 638 students, and 24% in 2020 out of 663 students.

The department has been able to hire four tenure-track faculty members since 2012, two male, two female. One of the two females was hired in 2017 and is of international origin. With the formation of the Interior Architecture Department, she has now shifted out of the Architecture faculty. The other hired tenure-track faculty are not from underrepresented groups. However a



significant number of retirements has resulted in opportunities to hire a diverse group of non-tenure-track faculty (NTTFs), in particular through the Design for Spatial Justice Fellows Initiative, initiated in 2019, which is an international recruiting effort that solicited an impressive array of applicants teaching diverse course material for both the Eugene and Portland campuses. The DSJI Fellows have been very important additions to our faculty. In addition, the UO Target of Opportunity program provides one mechanism for hiring faculty that meet goals such as diversity, equity, and inclusion. Please see the Shared Value on Equity, Diversity and Inclusion below for further detail.

Further, if the Accreditation Conditions have changed since the previous visit, the APR must include a brief description of changes made to the program as a result of changes in the Conditions.

This section is limited to 5 pages, total.

Program Response:

Program Changes: Administrative Structure

The department has undergone significant administrative changes since 2013. In 2016-17 the new Dean of the School of Architecture & Allied Arts, Christoph Lindner, was charged by the Provost to reorganize the School into a College with several Schools. In Fall 2017 the College of Design was initiated with the Department of Architecture joining the Departments of Interior Architecture (formerly a Program within the Architecture Department, converted to a department in 2018), Landscape Architecture and the Historic Preservation Program to form the School of Architecture & Environment (SAE). The position of School Head was created in Fall 2017 and changed to Director and Associate Dean in August 2019; In Summer 2021, this position was converted to Director of SAE. The reporting structure for staff formerly under the direction of the Department of Architecture Head was changed to a report to the School Head/Director.

Program Changes: Curricular

The following are curricular changes since 2013:

- A new dual-degree M.Arch./M.IArch was initiated in which students may earn two graduate degrees in four years.
- ARCH 4/561 Structural Behavior + ARCH 4/562 Structural Design was revised from 4 credits to 6 credits to reflect the actual contact hours (3 @ 1 hour, 50 minutes of lecture and 1 hour, 50 minutes of lab).
- Additional electives were offered regularly as multi-listed Architecture + Environmental Studies courses: Climate-Responsive Design, Passive Heating, Passive Cooling
- As noted above under Program Response to Causes of Concern (2013) B, the
 department created five new <u>Specializations</u> (16 credits) for graduate students combining
 existing courses and new electives: <u>Architectural Technology</u>, <u>Housing</u> and <u>Interior</u>
 <u>Architecture</u> offered at the Eugene campus and <u>Historic Preservation</u> and <u>Urban</u>
 <u>Architecture and Urban Design</u> offered at the Portland campus.
- As mentioned above, ARH 314, History of Western Architecture I: Ancient to Gothic, was changed to ARH 314 History of World Architecture I and ARH 315, History of Western Architecture II: 1400 to the Present was changed to ARH 315 History of World Architecture II.
- ARCH 610: Global Modern Architecture was created to address non-western perspectives in architectural criticism and theory. This is currently required in the M.Arch Track 1 program.
- In response to a fall 2018 concern regarding the consistency and level of technical
 integration in students' final comprehensive studio projects, an initiative was developed to
 increase rigor and depth of integration of building technology throughout the entire studio
 sequence. The curriculum committee and technical-teaching faculty developed a
 proposal in 2018-19 to incorporate a matrix of technical expectations into the vertical



(intermediate) studio sequence. In winter term, 2019, a curricular proposal was passed to require that three of the five 584 intermediate studios for graduate students would be rigorous, comprehensive integrative design studios. Parallel implementation of a requirement of two of four 484 intermediate studios for undergraduate students is in process. This was launched in the AY19-20 academic year and is currently being integrated into the curriculum. See here for further description of the Building Integration Curriculum Development proposal.

- In additional response to the need to increase building integration competency, in spring term, 2020, we added a terminal studio <u>matrix of technical content</u> that must be addressed and we significantly expanded structured opportunities for terminal studio students to meet with engineers and code consultants for direct technical feedback in a pin-up public review format.
- In spring 2020, the Department of Architecture received a <u>STEM designation</u> for all degree programs.

Program Changes: Facilities

Six studio spaces in Pacific Hall used for introductory design studios were converted into labs for the Biology Department, along with two others used by the Landscape Architecture Department. Space in the lower floor of Gerlinger Hall was renovated to provide eight new studio spaces, along with break out rooms and pin up space, with occupancy starting in winter term 2017. To allow Landscape Architecture to consolidate their studio spaces in Lawrence Hall, the Architecture Department gave up two Lawrence Hall studio spaces and occupied all eight studios in the new Gerlinger Hall renovation.

Some minor renovations were performed in Lawrence Hall, with new flooring, tables and chairs provided in Lawrence 206, 278 and 279 in 2015-16. The Wallace and Grace Hayden Gallery space was established in Lawrence for the use of the Departments and programs in the School of Architecture & Environment in 2014.

Other Program Changes: Personnel

The department has had a significant number of tenure-related faculty retirements since the previous NAAB visit in 2013. A number of faculty chose to take advantage of the Tenure Reduction Program, which allows faculty to commit to retiring in no more than three years, gives them a 6% salary increase for those three years, and allows them to continue part-time in their positions after retirement for 500 hours/year for five years, which amounts to 10 quarter terms (which can be taken in consecutive terms, i.e. for three years + one quarter term if agreed to by the department head). The faculty who chose to retire with the Tenure Reduction Program were:

- Associate Professor Glenda Utsey, ret. 2016
- Professor GZ Brown, ret. 2016
- Professor Jenny Young, ret. 2017
- Associate Professor Rob Thallon, ret. 2018
- Professor Michael Fifield, ret. 2019
- Associate Professor Virginia Cartwright, ret. 2020
- Professor Donald Corner, ret. 2020

Other faculty chose to retire without opting for the TRP program:

• Professor Donald Genasci, ret. 2018

Two faculty members took a special retirement offer for complete retirement with one year of salary as incentive offered in 2020-21:

- Associate Professor Peter Keyes, ret. 2021
- Associate Professor Hajo Neis, ret. 2021

Two additional faculty members took positions at other universities:

Professor Kevin Nute, 2018



Professor Brook Muller, 2019

School of Architecture & Allied Arts Dean Frances Bronet, a Professor of Architecture, after serving as Interim Provost 2014-15, left the university in 2015.

Three new faculty members were hired during this period:

- Associate Professor Kevin Van Den Wymelenberg, 2015 (expedited tenure review)
- Assistant Professor Siobhan Rockcastle, 2017 (tenure-track)
- Associate Professor Michael Zaretsky, 2021 (expedited tenure review)

Several tenure-related faculty were tenured and/or promoted during this period:

Granted tenure and promoted to Associate Professor:

- Associate Professor of Interior Architecture Kyuho Ahn, 2014 (promoted while the Interior Architecture Program was in the Architecture Department)
- Associate Professor Erin Moore, 2015
- Associate Professor Mark Donofrio. 2017
- Associate Professor Daisy Williams, 2017
- Associate Professor Philip Speranza, 2018

Promoted to Professor:

- Professor Mark Gillem, 2015
- Professor Ihab Elzeyadi, 2017
- Professor Nico Larco, 2018
- Professor Kevin Van Den Wymelenberg, 2019
- Professor Erin Moore, 2021

Additionally, while Interior Architecture was a program within the Department of Architecture:

Two IARC faculty took positions at other universities:

- Assistant Professor Erin Cunningham, 2016
- Associate professor Alison Snyder, 2016

One IARC faculty hire was made during this period:

Assistant Professor Solmaz Kive, 2017

Program Changes: Response to NAAB 2020 Conditions

While the 2020 Conditions differ in form considerably from the 2009 Conditions, which were in effect at the time of our last NAAB Accreditation visit in 2013, the content of the program and student performance criteria do not differ significantly in terms of content requirements and expectations. What has changed significantly is the requirement for demonstration of continuous self-assessment and improvement in all aspects of the accredited degree programs and the department performance in general.

In order to comply with the new 2020 Conditions, the department has:

- Mapped the Program Criteria and Student Criteria onto the programs and courses that address each of the specific criterion. (See <u>NAAB PC-SC Matrix in NAAB Matrix folder</u>)
- Specified performance indicators and benchmarks for each course identified (See <u>NAAB</u> Criteria Assessment Matrix)
- Created PC and SC <u>Assessment Forms</u> for each course identified as the primary one in which a PC or SC is addressed. These include identifying assessment mechanisms, expected level of attainment, and percentage of students achieving attainment.
- Required the faculty teaching each course associated with these forms to provide the quantitative data specified in the form on an annual basis (or biannual in the case of



courses which are taught biannually, such as some of the required courses on our Portland campus). This data is available for the NAAB visiting team.

Please see section 5.2 Planning and Assessment for more details.

For all studio courses, which are graded Pass/No Pass in our department, faculty are required to fill out a <u>rubric specifying levels of achievement</u> in both the Design Process and Quality of Design Project, including a broad range of categories. The department recently digitized these forms to facilitate quantitative assessment of expected student achievement in each level of studio: introductory, intermediate, and advanced.

In addition to these internal studio assessment forms, the department created <u>Terminal Studio</u> <u>Reviewer form</u> distributed via Qualtrics survey and PDF for assessment of student studio work for the final required introductory studios, identified as meeting **PC.2 Design**, and terminal studios, identified as meeting **SC.5 Design Synthesis** and **SC.6 Building Integration**. This was distributed to internal (faculty) and external reviewers for all Terminal Reviews in spring 2021. The results of these assessments have been tabulated to demonstrate what percentage of students at each studio level are achieving at least satisfactory performance in the criteria.

In order to determine what the students themselves believe they have achieved with respect to their own education and, specifically, the PC and SC, all graduating students are given a <u>Self-Assessment Survey</u> that they are asked to fill out via Qualtrics survey. The results of this survey are tabulated to assess how well the students think that our degree programs deliver the education required for NAAB accredited programs. This data for SP21 has been incorporated into this APR. The data is available for the NAAB visiting team in the NAAB folders.

These Self-Assessment and ongoing improvement efforts follow a Strategic Planning process begun in fall 2013, as described in Progress since Previous Visit. This planning process included faculty discussions at three fall retreats (2013-15) and several special faculty discussion sessions each year, a student-conducted survey, several external professional focus groups, and a University Program Review (2014-15). The plan, which included both long-range and short-term plans, with goals, actions, and timelines, was discussed, voted on and approved at the September 2015 faculty retreat. Since that time, the Strategic Plan was periodically reviewed and checked against the original goals, outcomes, and timelines, most recently in spring 2021. Several curricular changes were realized, including the creation of graduate Specializations, updates to our required architectural history classes, and revisions of course content and sequencing in our introductory studios in both the B.Arch and M.Arch programs. Other curricular initiatives are in progress, notably one directed at requiring specific technical content to be integrated at the intermediate studio level for both B.Arch and M.Arch students. Progress was also made in the development of several of our key research institutes and in other areas noted on the Department of Architecture 2015 Strategic Plan, which is included in this submission.

With a new Dean of the College of Design, Adrian Parr, starting her role in spring 2021 and new Architecture Department Head, Michael Zaretsky, starting his position at the same time, the department has an opportunity to make a significant re-evaluation and self-assessment of our Strategic Plan within this new administrative context, which has now been in place for four years, but is still working to define the administrative structure of the School in relation to the Department as well as to the other departments and program within SAE.

Following a series of meetings with firm leaders in Portland in spring 2021, Department Head Michael Zaretsky set forth the creation of an Advisory Group for the UO Department of Architecture in summer 2021. The members of this committee include firm leaders from Eugene, Portland, Bend, Seattle, San Francisco, Los Angeles and other locations where UO alumni are working. The Architecture Advisory Group has been charged with offering insight and direction to the Head and the department in regards to strategic planning, program and curriculum decisions. They will continue to be informed of our current program and curriculum and then be asked to help us address any issues that are keeping our students from being as prepared as possible to succeed in practice. Initial conversations with members have focused on specific issues including



how well our students are learning digital fabrication tools and their overall understanding of professional practice.

The department will be embarking on a discussion and re-examination of our vision and mission at the fall 2021 faculty retreat, as a start to a new self-assessment and strategic planning process for 2021-2025. This process will also include discussions with faculty, staff and students, the Architecture Advisory Group, external focus groups and be informed by evaluation of our established metrics for assessment of our achievement of the 2020 NAAB Conditions requirements. The department will also evaluate our program in terms of the current mission and goals of the university, and in the context of the College of Design and SAE. We expect that a new Strategic Plan will take several years to form and that, with annual evaluation and assessment of how well we are meeting the outlined goals and outcomes, it will provide a basis for continued improvement for some years into the future. Please see **5.2 Planning and Assessment** below for further detail.

While most of the PC and SC were significantly reorganized from previous NAAB Conditions, as noted above, the performance requirements in terms of content were somewhat similar. However, in one area of Student Criteria, the department made a change to the delivery of the Terminal studios, which are the courses that address the new **SC.5 Design Synthesis** and **SC.6 Building Integration**. As noted above in response to a 2013 VTR Cause for Concern, the department head met with all Terminal studio instructors in both 2019-20 and 2020-21 to discuss the requirements of SC.5 and SC.6, provide a performance criteria checklist and suggested schedule, and also made available expert consultants in structures, environmental control systems and building code compliance for students in those studios.

Program Change: Educational Delivery

As did most U.S. universities, the University of Oregon shifted to remote instruction on March 15, 2020 due to the coronavirus pandemic. Current university plans call for a return to in-person instruction for fall 2021 for many classes, with large lecture courses remaining largely online, with in person discussion and lab sections. As a result of the shift to online teaching, we learned of the benefits and challenges of online teaching. We had already begun to take some large courses (such as ARCH 201) online. The department is adopting some hybrid teaching models for its large lecture classes and some smaller lecture courses, while studios are expected to return to predominantly in-person instruction. The hybrid course models developed during the pandemic will allow for better integration of courses on the Eugene and Portland campus, both for required and elective courses, as noted above in Program Response to Causes of Concern (2013 A.), as well as more integration of content from external practitioners and academics.

NARRATIVE TEMPLATE

1—Context and Mission

To help the NAAB and the visiting team understand the specific circumstances of the school, the program must describe the following:

The institutional context and geographic setting (public or private, urban or rural, size, etc.), and how the program's mission and culture influence its architecture pedagogy and impact its development. Programs that exist within a larger educational institution must also describe the mission of the college or university and how that shapes or influences the program.

Program must specify their delivery format (virtual/on-campus).

Program Response:

The <u>Department of Architecture</u> is in the <u>School of Architecture & Environment</u> (SAE), part of the <u>College of Design</u> at the <u>University of Oregon</u>. University of Oregon is a public university, an <u>Association of American Universities</u> member and a tier-one research institution that is ranked "highest research activity" by the <u>Carnegie Classification of Institutions of Higher Education</u>, with

a total enrollment of just over 19,000 undergraduates and 3500 graduate students. SAE includes the Departments of Architecture, <u>Interior Architecture</u>, <u>Landscape Architecture</u>, and the <u>Historic Preservation Program</u> and offers doctoral degree programs in architecture and landscape architecture, graduate degrees in historic preservation, fully accredited graduate and undergraduate professional degrees in architecture, interior architecture, and landscape architecture, and concurrent graduate degree programs.

The School of Architecture and Environment's Architecture, Landscape Architecture, and Interior Architecture departments are based in the University's Eugene, Oregon main campus. <u>Eugene</u> is the second most populous city in Oregon (pop. 174,000), after Portland (pop. 665,000). The campus is located about 65 miles from the Pacific coast and the Cascade mountains and 110 miles south of Portland, where our satellite campus is located in the White Stag building in the Pearl District, less than a 2-hour drive from Eugene. With visionary leadership in urban design and transportation policies, Portland is the urban laboratory for the satellite Department of Architecture program and for the Historic Preservation program. Both Portland and Eugene are socially progressive, bike-friendly, and family-friendly cities with ambitious goals for carbon emissions reduction and for community wellbeing.

The University of Oregon's Mission Statement, Purpose, Vision and Values align closely with those of the department. In particular, the University of Oregon is broadly committed to sustainable principles, with disciplinary and interdisciplinary degree programs in this area in design, business, law, the sciences, and environmental studies. The Department of Architecture has been recognized as a leader in the field of sustainability since the early 1970s. Faculty in the department are at the forefront of efforts to reduce energy use, promote greenhouse gas reduction and increase environmental stewardship in buildings and communities through research, policy formation and application to design and construction; the department is committed to sustainability in all its multiple aspects.

The department adopted Vision and Mission statements in 2002 that were reaffirmed in the 2013-15 Strategic Planning Process. Since that time, through recent administrative restructuring, the department has maintained our internationally recognized leadership position in environmental sustainability and our commitment to cross-disciplinary activities with the continued development of existing laboratories and institutes and the creation of new interdisciplinary ones: the Institute for Health in the Built Environment (IHBE); Sustainable Cities Institute (SCI) and Urbanism Next; and TallWood Design Institute (TDI). Our students take leadership positions in critical thinking about the future as demonstrated in the annual student-led Holistic Options for Planet Earth Sustainability (HOPES) conference. We continue to value collaboration and a non-competitive teaching and learning environment, as exemplified in our design studios which are evaluated on a Pass/No Pass basis to encourage group and individual exploration and development. And, we have embraced a commitment to community service through programs such as OregonBILDS, the Sustainable Cities Initiative, the Build Health Research Consortium, and with many studios that take on community clients.

The Department is committed to advancing social equity and diversity and has demonstrated this in a recent revision of our course syllabi to reflect a wider range of cultural perspectives. These efforts are supported by the College of Design which has completed a <u>Diversity Action Plan</u> as part of the University's Diversity, Equity, and Inclusion <u>I.D.E.A.L. framework</u> (Inclusion, Diversity, Evaluation, Achievement, Leadership), a Dean's Equity and Justice Faculty Fellow, and <u>Design for Spatial Justice Initiative Fellowships</u> to bring in scholars with a range of lived experiences, and with other University resources, including the <u>Many Nations Longhouse</u>, the <u>Pacific Northwest Tribal Climate Change Network</u>, and the Lyllye Reynolds-Parker Black Cultural Center.

The program's role in and relationship to its academic context and university community, including how the program benefits—and benefits from—its institutional setting and how the program as a unit and/or its individual faculty members participate in university-wide initiatives and the university's academic plan. Also describe how the program, as a unit, develops



multidisciplinary relationships and leverages unique opportunities in the institution and the community.

Program Response:

The Department of Architecture faculty play active roles in university shared governance, including participation in the University Senate, Faculty Personnel Committee, Graduate Council, Faculty Advisory Council, and Design Advisory Board, along with other committees, and were also active in the formation of the faculty union, United Academics (formed in 2013). In addition, UO Construction, Planning and Facilities Management has worked with Professor Kevin Van Den Wymelenberg, and his predecessor Professor GZ Brown, and the Energy Studies in Building Laboratory (ESBL) on facility operational energy evaluation and reduction projects and, more recently, with the Biology and the Built Environment Center (BioBE) on COVID-19 environmental surveillance.

In February 2021, Provost Patrick Phillips <u>announced an update on five critical university</u> <u>initiatives</u> that "represent unique opportunities to draw on university-wide strengths across multiple schools and colleges." All five are areas in which our department has made contributions:

Environment Initiative: As noted above, our department has led efforts in sustainability in buildings and communities since the 1960s and continues to lead with new interdisciplinary labs and institutes, including High Performance Environments Lab (HiPE), NetZed Lab, <a href="Urban Design Lab, ESBL, Institute for Health in the Built Environment (IHBE), SCI and TallWood Design Institute (TDI). In addition, the College of Arts and Sciences and the College of Design's collaboration recently received a \$4.52 million grant from the Andrew W. Mellon Foundation for a racial and climate justice project, with participation from Professor of Practice Jerolim Mladinov and Professor Erin Moore.

Innovation Initiative: This initiative connecting research to community partners is exemplified in the work of HiPE, IHBE, BioBE, SCI and TDI, all of which engage in applied research with civic and industry partners to advance economic development, environmental stewardship and social equity. SCI's Sustainable City Year Program connects SAE resources to a city in Oregon each year and TDI partners with city and county governments in Oregon on feasibility studies for utilizing mass timber in new civic buildings and with state agencies such as Business Oregon for the development of mass timber affordable housing; our labs connect with industry partners, in architecture, engineering, construction and manufacturing to conduct studies that advance our research and promote more sustainable buildings. Notable examples include the formation of Taskshade LLC, Duktile LLC, and our department's role in EnviralTech and Phylagen, all examples of UO startups and/or spinout companies.

Diversity Initiative: As noted above, the department has committed to diversifying the cultural perspectives in our courses and has welcomed the SAE Spatial Justice Fellows and their impact on our faculty, staff and students. Our DSJI Fellows program has become a model that other programs around the world are now emulating. We have active DEI committees at the department, college and university levels and we are slowly increasing the diversity of our students. We are reaching out into communities to identify and support potential students who may not have had access to our program in the past.

Data Science Initiative: Our <u>HiPE Lab, Façade Integrated Testing facility (FIT), NetZed Laboratory, BioBE Center</u> and the <u>Baker Lighting Lab</u>, both part of the Institute for Health in the Built Environment, produce data-driven work that leads directly to new knowledge on building performance and user experience as well as higher performance buildings.

Sports and Wellness Initiative: The IHBE is working with partners, including Oregon Health Sciences University (OHSU), Nike, and TDI on healthy buildings and indoor surfaces and environments. The HiPE lab has long established collaborations with Saint-Gobain Corporation, SAGE Glass, Terrapin, and many other companies on R&D projects to test the impact of high-performance technologies and materials on Occupant's health and wellbeing. In addition, Professor Ihab Elzeyadi is an advisor to the WELL™ buildings institute and has contributed to the



development of the WELL™ credit criteria. His SPEQ™ survey is one of five pre-approved survey tools by WELL institute for credits verification.

As noted above, our labs, centers and institutes work across UO disciplines, with Biology, Physics, Planning, Public Policy and Management, Psychology, Physiology, and Neuroscience, among others, and also, in the TallWood Design Institute. We also collaborate with Oregon State University's Colleges of Forestry and Engineering on advancing engineered timber in a state in which that industry is still central to the economy. We also collaborate with OHSU, OSU Environmental Health Sciences Center and Portland State University on healthy buildings and environments.

Our curriculum allows undergraduate students to have space for minors in other disciplines and many B.Arch. students take advantage of this, some with multiple minors. Our graduate students have concurrent degree opportunities in Interior Architecture and Community and Regional Planning and for cross-disciplinary certificates such as Ecological Design. B.Arch, M.Arch, M.S. and Ph.D. students are invited to take courses for credit in Interior and Landscape Architecture and to participate in research in our labs and institutes.

The ways in which the program encourages students and faculty to learn both inside and outside the classroom through individual and collective opportunities (e.g., field trips, participation in professional societies and organizations, honor societies, and other program-specific or campuswide and community-wide activities).

Program Response:

The Department of Architecture works to engage students in their course material in and out of the classroom. We seek to introduce our students to Eugene, Portland and the eco-regions of the Pacific Northwest through their experience at UO. Studios regularly include field trips, projects in required courses often involve off-campus case studies and site visits, and leaders of student groups are always welcome to announce their events in lecture halls to encourage more student organization participation. Participation in study abroad, exchange programs, and specialized funded studies through the Global Education Oregon Division has been robust pre-COVID in Italy, Denmark, China, Japan, and Gabon, and we anticipate it to be so again in the near future. According to the Dean and VP for Global Engagement, about two thirds of architecture undergrads participate in a credit-based study abroad or international internship during their time at UO. That's well above the campus average of 28%, and the highest rate of any UO major that does not require an overseas experience.

A growing number of our undergraduate students join the <u>Clark Honors College</u> (CHC) at UO, where they engage with other Honors students from across the university. As of AY21-22, 16 architecture students are enrolled in CHC and 4 graduated from CHC in Spring 2021.

Students have many opportunities to take initiative and learn more about their areas of interest through elective courses, specializations, research projects, Masters Certification Programs, and student groups. Those interested in learning how to network, lead events, and strengthen the community within their department, can opt for leadership roles in organizations like the University of Oregon's Chapter of the American Institute of Architecture Students (AIAS), the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), or Holistic Options for Planet Earth Sustainability (HOPES). Faculty are involved as Board and Committee members in many professional organizations, including the Architectural Research Centers Consortium, Building Technology Educators' Society, Society of Building Science Educators, Simulation for Architecture and Urban Design, American Institute of Architects (AIA), Architectural Foundation of Oregon and many others. The department values its long history in producing graduates who become leaders in the profession and academic community, particularly in all areas of advancing environmental sustainability.

Summary Statement of 1 – Context and Mission

This paragraph will be included in the VTR; <u>limit to maximum 250 words.</u>



Program Response:

The University of Oregon Department of Architecture expresses and upholds the values of our school, college, university and region. We are a **research-active department** in a research-active (R1) university, with numerous research institutes, substantial grant funding, and many important publications by our award-winning faculty. Our faculty and students are actively engaged in **shared governance** in the university, college, school, and department, and in participation in professional organizations and conferences within the region, the nation, and globally.

We embody **collaboration and a non-competitive teaching and learning environment**, with pass/no-pass studios, discursive design reviews, and regular group work in which team processes and team leadership are directly taught rather than presumed. Our University and our Department are both committed to **leadership in environmental sustainability**, through research, professional practice, and community engagement. Multiple aspects of sustainability are addressed not only in technical coursework, but in studio teaching and expectations at all levels of the curriculum. And the complex urban environments of Eugene and Portland commit us to working on behalf of **design equity and social justice**: through practices of hiring and mentoring junior faculty; through involving students in travel and in community support; and through teaching inclusive design practices, helping community partners lead the design process to determine, develop, and design solutions to the problems that they themselves have named.

The Department of Architecture is deeply engaged with our university, social and ecological environments, and we are committed to supporting the shared values of our institution, college and department.

2—Shared Values of the Discipline and Profession

The program must report on how it responds to the following values, all of which affect the education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

The University of Oregon Department of Architecture has embraced and integrated the NAAB Shared Values of the Profession throughout its history. Generations of students have graduated and gone on to become successful practitioners, academics, researchers in the built environment as well as becoming leaders in other fields. We assess our success in these shared values through informal means through ongoing feedback from our alumni as well as from constant input from our current students, staff, faculty and professional community. We do not have defined (formal) assessment mechanisms for the shared values, though we describe some of the informal methods below.

We will be seeking specific input from our newly formed Architecture Advisory Board on these shared values on an annual basis moving forward.

Our matrix of assessments (<u>in this folder</u>) is organized with formal assessments (designated by "x"), which will be collected and evaluated quantitatively and informal assessments (designated by "o") which are discussed and evaluated through dialogue and other means. The list of formal assessment mechanisms can also be found here.

Design

Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.

Program Response:

The Department of Architecture values human-centered and trans-species sustainable design that critically engages with the complexity of our current moment across every scale of the built environment while also anticipating the long-term multi-species impact and cultivation potential of our designs. Our faculty and students are holistic thinkers and ethical stewards of architectural practice and our natural and built environments. Our approach to design is intentionally collaborative and inclusive. The required foundation courses in our curricula articulate our values and cultivate them in our students. Over the course of their education, students learn to practice ecological and carbon neutral design, allow environmental impacts of different systems and materials choices to guide design, integrate passive and low-energy building systems to support human occupation, leverage design to reverse climate change, and evaluate material selections through the lenses of safety, life-cycle impacts, and embodied and operational efficiency. The required technical courses that teach students each facet of integrated design often use a hands-on project-based approach as a vehicle for subject area assignments in order to learn how to apply the knowledge learned in an integrated way. Our Design Arts courses integrate human behavioral considerations, space and place-based site and cultural analysis into the core pedagogy and, along with our theory, history, and urban design offerings, ensure that matters of inclusiveness, social equity and diversity are central to students' thinking and design work.

The tenure-related faculty teach in both design studios and subject areas, encouraging integrated design thinking. Our long commitment to and leadership in sustainable design particularly encourage a focus on **environmental stewardship** in our design teaching. Studio content broadly defined is structured by the Design Committee (previously Design Review Committee) for implementation in the introductory design studios for both the B.Arch and M.Arch programs. Beyond the introductory (core) studios, intermediate and advanced level (terminal, comprehensive, capstone) studios are vertical, mixing undergraduate and graduate students, who are encouraged to draw from their own skills and experiences in peer-to-peer teaching. The mixture and exchange between diverse perspectives benefits all projects and contributes to integrated design projects. Intermediate level studios are very open as to content, and cover a broad range of subject areas, with many of them addressing direct community engagement. The advanced level studios focus on design and technical integration, demonstrating the knowledge and skills students have acquired over the course of their degree program. If a student is not achieving the required level of success in a given studio, they may receive a "marginal pass" wherein they go through a "gate review" in which a group of faculty review their work and assess whether they need to retake one or more studios before moving forward in the curriculum.

The non-graded Pass/No Pass studio policy at all levels supports **group collaboration** and **peer critiques** and a <u>studio rubric for final evaluation</u> emphasizes competency in a broad range of skills, from basic design ability to accessibility and user needs, sustainability, and technical integration. These evaluations are coupled with exit interviews with each student, to ensure their understanding of their design skill progress. Students who are found deficient in some categories of design are subject to Gate Reviews before entering the intermediate or advanced level studios. These reviews are conducted by members of the Design Review Committee (now "Design Committee") and past studio instructors. They result in a plan to remediate deficiencies, which may include repeating required studios or other supplementary instruction. As noted in **5.2 Planning and Assessment**, focus groups, surveys and internal discussions have led us to review the content and structure of our design studios, which are subject to continued discussion and review in the Design Committee and Curriculum Committees.

As noted, many of our studios have robust **community engagement** opportunities and virtually all of them include field trips to design precedents in the region or further afield. First Friday of each quarter is reserved for field trips. Many of the intermediate and advanced level studios engage in real projects and real sites, with real clients, climate analysis, and programs. Studio options include study abroad and international exchange studios, others address national and international competitions. The <u>Sustainable Cities Year Program</u> (SCYP) is one example which students and faculty collaborate across disciplines to work directly with one Oregon community each year. Some studio instructors are <u>Fellows in Design for Spatial Justice</u>, who, in teaching



from a diversity of lived experience and research expertise, encourage students to address marginalized communities, equitable engagement processes, and how to integrate social justice into their work. Studios also require research into site and human contexts and involve an extensive use of precedent studies—case studies of exemplary buildings that demonstrate the integration of conceptual, analytical, technical thinking in a completed architectural project. Final reviews often include "Oregon Reviews" - rotating one-on-one formats to encourage deep conversations, in addition to more traditional jury-style reviews that include faculty, design practitioners, and community partners.

One aspect of our program that also supports design quality is the fact that we are on the quarter system. As compared to semester system schools, quarter system schools have significantly more individual studios (ten studios in the B.Arch and M.Arch 1 curricula). This enables students to iterate on the design process and experience more design perspectives through varying faculty. In addition, students can take many more electives and have the opportunity to iteratively integrate the non-studio content into studios. Our students' design capacity is assessed in every studio by faculty from our program as well as from faculty from other institutions and practitioners.

Our faculty are engaged with practice, research and scholarship but we also have a high percentage of faculty (10 of 21 TTF) who are registered architects and are embedded in the profession. Two of our current faculty have been recognized as Fellows of the AIA (Gillem and Kwok). We also have ongoing part-time instruction from award-winning, cutting-edge firms in Portland, Seattle, San Francisco and other design centers.

UO Architecture alumni are design leaders at firms across the world. Portland, Oregon is one of the major design centers of the U.S. and many Portland firms are led by UO alumni who bring their skills in design thinking and sustainability to bear on the critical design issues facing the world today.

Annual <u>career fairs</u>, <u>mentoring</u> through our alumni network, the practicum course, the lecture series and faculty and student-led conferences allow many opportunities for students to connect with multiple career paths in architecture. We have an active <u>lectures series</u> in Eugene and Portland. Our graduates have consistently had impressive <u>ARE Passing rates</u> (spanning from 61%-81% in 2020, all above national averages) and the vast majority of them go on to become practitioners who are valued for their integrated approach to design with an emphasis on human behavioral considerations and sustainability in all its forms. The department tracks the ARE passing rates of our graduates annually as a benchmark for our program's achievement in educating successful architecture professionals.

Design is at the core of our education, and we are committed to ensuring that our students are prepared to be influential leaders in whatever aspects of the design professions that they enter as our alumni. We will be seeking input from our Architecture Advisory Group (formed in summer 2021) on the current success of our students as designers. We will work with this group with input from other professionals and alumni to ensure that we continue to prepare our students to be design leaders.

Environmental Stewardship and Professional Responsibility

Architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.

Program Response:

The Department of Architecture's longstanding attention to environmental awareness and responsibility spawns from its earliest roots, with Ellis F. Lawrence, campus architect and cofounder and first dean of the University of Oregon's School of Architecture and Allied Arts (now College of Design) who signaled a shift away from the traditional Beaux Arts style of architectural education to a more progressive and practical approach. **Our educational philosophy is**



dedicated to advancing the understanding, value, and quality of visual culture and the built, natural, and social environments through excellent and distinctive teaching, research, and creative endeavors. We focus on preparing designers as future professionals who are exposed to and have the ability to engage in design integration, design synthesis, building integration, and sustainability goals (as embodied by the AIA Committee on the Environment (COTE) Top Ten Competition / Framework for Design Excellence, and environmental stewardship values). This is critical to the continuing relevance, influence, and value of architecture as a profession that serves society.

Our faculty have been **leaders in sustainable design** since Professor Emeritus John Reynolds joined the department in 1967. Most recently, the 2019 Design Intelligence rankings identified the UO undergraduate program as 4th and graduate program as 7th in the US for "Sustainable Built Environments/Adaptive Design/Resilient Design" while the undergraduate program ranked 4th and graduate program ranked 10th in the US for Healthy Built Environments (Design Intelligence rankings 2019). University of Oregon Architecture faculty are global leaders in designing healthy, sustainable environments. They employ cutting-edge techniques to understand inhabitant preferences, harvest environmental data, and forecast building performance. They bring research innovations into their teaching and guide students in generating holistic design solutions (Sustainable Buildings). As noted above in 1. Context and Mission, we have maintained our leadership by expanding into new cross-disciplinary areas with new and expanded research institutes and initiatives led by our faculty that have benefitted our students through expanded elective course offerings and research opportunities for both B.Arch and M.Arch students and Specializations and Certificates for M.Arch students.

Much of our coursework focuses on human health and wellbeing, as well as the wellbeing of our planet. These courses teach students how to provide thermal and visual comfort while reducing direct energy costs and indirect environmental costs. They prioritize passive environmental control systems and provide students the skills to evaluate the environmental impact of different design solutions. We ensure that our students understand how their decisions affect the carbon footprint of their designs while explaining their ethical responsibility to choose the lower-impact materials and systems.

The importance of **environmental stewardship permeates our entire curriculum**. It is introduced in the beginning studios and continues through terminal studios. These studios are integrated with required technical courses. Environmental Control Systems, Building Construction, and Human Context are offered to undergraduates in their 2nd year and graduates in their 1st year, allowing students time to take advanced technical electives such as high-performance buildings, buildings and health, daylighting, electric lighting, virtual lighting design, passive heating and cooling, and passive house design. Structures courses, which stress the importance of material efficiency, are taken by undergraduates in their 3rd year and graduates in their 2nd year. Our building enclosure / envelope course, which offers detailing to passive house standards, is carried into advanced studios. Cross-campus collaboration between practitioner faculty John Rowell and Martin Houston is further strengthening the Department's building enclosure coursework and connecting the students to a wealth of exemplary project examples in the construction-rich Portland area. Assessment metrics for these courses are used to measure students' understanding of these areas.

Our faculty are **national leaders in building science**. For example, best-selling author Alison Kwok has been judging and planning AIA COTE Top Ten Competition for Students. She and Don Corner wrote a book on Passive House Detailing; Ihab Elzeyadi has guided multiple teams of Solar Decathlon Design Competition winners; Kevin Van Den Wymelenberg is an authority on lighting metrics and indoor microbiomes; Siobhan Rockcastle has chaired the <u>Simulation for Architecture (SimAUD) Design</u> conference and received the <u>Architectural Research Centers Consortium 2021 New Researcher Award</u>; and Judith Sheine is a leader in the emerging area of mass timber design.

Our investment in **spatial justice education** is a critical complement to these efforts and reflects the Department's position that social and environmental sustainability go hand in hand, and that

there is no climate action without social justice. Work in human contexts, place, culture, and human settlement patterns by faculty such as Nico Larco, Howard Davis, Peter Keyes, and Mark Gillem, Gerald Gast's work on architecture's role in education, and Jenny Young's work in the social and behavioral aspects of design, architectural programming, and the form of small towns all reinforce the ethics and methods of environmental stewardship.

Our **certification programs** and **research facilities** support students in their pursuit of sustainable design alongside their coursework. Master of Architecture students are required to declare a professional focus through study clusters, specializations (technology, housing, interior architecture, urban architecture and urban design, historic preservation), and certificates (ecological design and technical teaching). We are moving toward a model in which each student in both the B.Arch and M.Arch programs will engage in at least one intermediate studio that will address integrated design, one of the goals of our Strategic Plan, as measured by, for example, the AIA COTE Top Ten standards of sustainable design excellence.

Environmental stewardship is ubiquitous not only in the department, but also within the School of Architecture and Environment, with its cross-disciplinary courses and research with Interior Architecture, Landscape and Historic Preservation. Interdisciplinary interaction is fostered by Architecture Professor Erin Moore, who is a core faculty member of the Environmental Studies (ENVS) program and ENVS Assistant Professor Alexandra Rempel, who teaches cross-listed courses to Architecture students. A number of sustainable design groups and organizations include: Holistic Opportunities for Planet Earth Sustainability (HOPES), an annual conference to discuss the relationship between ecology and various design disciplines; a Ph.D. program focusing on sustainable architecture and integrated design; the M.S. in Architecture with multiple areas of focus and specialization including mass timber design; and a University of Oregon American Society of Heating Refrigeration and Air-Conditioning Engineers (ASHRAE) Student Branch, an award-winning student group committed to offering tours, workshops, and case studies with HVAC professionals. Further, many of our students are engaged with faculty research through the multiple faculty-led laboratories and institutes led by Architecture faculty including: Donofrio, Duff, Elzeyadi, Hahn, Kwok, Rockcastle, Van Den Wymelenberg, and others.

The Institute for Health in the Built Environment (IHBE) is a major vehicle for engaging students in cutting-edge research with real-world applications. Since its inception in 2018, the IHBE has employed over 60 architecture students, at least 39 of whom have worked on projects associated with the Institute's Energy Studies in Buildings Laboratory (ESBL) in Portland. Through the Institute's labs, undergraduate and graduate students have opportunities to work directly on guided research with faculty mentors, get hands-on experience with new technology for environmental and material testing, and co-author research papers. Students are also engaged in organizing and facilitating the IHBE Industry Consortium's annual Build Health conference event that brings together stakeholders in industry, government, and academia to dramatically reduce energy consumption and improve human health and innovate design practice.

We have taken environmental stewardship and the professional responsibility of our profession to be at the core of our program for decades and we continue to address the critical issues of climate change throughout our program and our curriculum. This has never been more important and will become increasingly critical as our society seeks to address the role of buildings and design in addressing our need to reduce carbon and greenhouse gas emissions and produce healthier, more comfortable places, that can simultaneously support indoor gathering in the new era of airborne infectious disease.

Equity, Diversity, and Inclusion

Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.



Program Response:

The School of Architecture & Environment and the Department of Architecture are working to build a faculty cohort that offers **diverse perspectives that are enriched by lived experience** and its intersection with design and research. By including a broad range of voices in our academic discourse, we are positioning the school and department to take on the challenges of social and environmental justice in design. All of the departments within the School of Architecture & Environment broadly support this goal, and believe it is essential to bring in new voices for full representation to have the capacity to take on the breadth and depth of architectural issues. Our opportunities for new tenure-track hires have been limited in recent years, but we are excited to have two tenure-track lines for fall 2022 with searches kicking off in fall 2021.

To overcome the limitations on tenure-related hires and simultaneously begin to transform our faculty, the School of Architecture & Environment has launched the Design for Spatial Justice initiative and supported a coordinated Diversity Action Plan within the College of Design. Over the past two years, the Design for Spatial Justice program has brought in nine visiting faculty with five more DSJI Fellows in AY21-22 from a diverse range of backgrounds to contribute to the teaching and scholarship of the School of Architecture & Environment. These positions last anywhere from one to five academic terms and have contributed to core teaching, and the development of new seminars, intermediate and terminal design studios, and public lectures and symposia that address topics related to social and environmental justice. These Fellows are selected for their innovative work, their capacity to participate in remedying past exclusions in architectural education and practice, and their capacity to contribute to design education from lived experience. Some have extensive academic experience while others are coming directly from practice. Fellows enrich the school's community engagement work in studio and positively impact the experience of students from underrepresented groups. There is a donor impact report on the DSJI Fellows program here and more about the DSJI Fellows in PC.8.

A survey of students, faculty and staff in 2020 to assess the impact of the DSJI Fellows on our department and school revealed that their impact was widely felt and appreciated and that the students strongly supported continuing this program (see DSJI report). In two years, we observed a 30% increase in graduate applications from students in underrepresented groups, with thirteen students who chose to start the graduate program in 2020 indicating the DSJI as a primary factor. One major sign of the success of this program is that the initiative has been copied at other universities nationwide such as University of Michigan, Carleton University and University of British Columbia. A report on the DSJI Fellows program was produced in SP21.

This ongoing work is also being advanced in the College of Design by the new Deans' Equity and Inclusion Initiative, a partnership and faculty fellowship program involving founding institutions such as Oregon, Tulane, the University of New Mexico, the University of Virginia, Cornell, the University of Michigan, the University of Southern California, Yale, and Harvard. The shared mission is to support "a community of early career faculty from a diversity of backgrounds and experiences, with attention to BIPOC and other under-represented faculty, in order to challenge, expand, and enrich the planning, design, construction, and stewardship of the built environment." Fellows are provided with intellectual freedom to develop new ideas and relationships that build a critical future for architecture pedagogy. UO DSJI Fellow for AY21-22 Sami Chohan was chosen as one of the inaugural Fellows for the Deans' Equity and Inclusion Initiative.

The community standards within SAE, the College of Design, and the University of Oregon all strive towards a shared goal: **improving equity, diversity, and inclusion in our student and faculty populations and their experiences**. To uphold our community standards, we use the IDEAL Framework: Inclusion, Diversity, Evaluation, Achievement, and Leadership. To adhere to this framework, we must create an environment that respects and welcomes all, use equitable recruitment and retainment strategies, self-assess our progress regularly, ensure that our policies help all students achieve their personal best, and coach leadership to facilitate inclusive



environments. Read more about the university commitment to DEI at the <u>Division of Equity and</u> Inclusion website.

The College of Design spent the last three years focusing heavily on defining our commitment to Diversity, Equity and Inclusion (click here for CoD DEI page). Gerard Sandoval from PPPM was the College of Design Fellow for Diversity from 2018-2021. Under his leadership, in collaboration with SAE Director Erin Moore (2018-2021), the College created an updated 2020-23 Diversity Action Plan with input from community members across the college. The plan provides 25 tactics for the next three years, as well as three university tactics. We plan to increase the diversity of our community of students, faculty, and, notably, lecturers and design and art studio reviewers; hold workshops around implicit bias for faculty in general, and for search committees, scholarship and award committees in particular; hold workshops for syllabi tune-ups; and improve advising for new students and faculty. Some of the programs proposed can be accommodated with existing funds, but many will require new sources of funding. In 2017 surveys and feedback posters revealed several facilities concerns in the College that have been addressed: gender-neutral bathrooms, changing tables, and a lactation room. As our school continually evolves, we work to accommodate students with all ranges of needs. Our goal is to facilitate access and inclusion of students with disabilities into the university environment and include provisions for student access and engagement, universal/inclusive design initiatives, technology access and usability. Compliance and Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are minimum expectations.

In support of its commitment to ensuring equal opportunity in employment, the university maintains an Affirmative Action Plan (AAP) with specific and result oriented procedures. The UO Office of Affirmative Action and Equal Opportunity (OAAEO) is responsible for working with all members of the UO community to ensure that the university is meeting the letter and spirit of its legal obligations related to affirmative action, equal opportunity and nondiscrimination, and to support the university's commitment to diversity. The UO Equal Opportunity, Non-Discrimination, and Affirmative Action Policy Statement is as follows:

The University of Oregon affirms and actively promotes the right of all individuals to equal opportunity in education and employment without regard to any protected basis, including race, color, sex, national origin, age, religion, marital status, disability, veteran status, sexual orientation, gender identity and gender expression or any other consideration not directly and substantively related to effective performance.

All faculty and staff must take Workplace Harassment and Discrimination Prevention Training. Implicit Bias training is required for all those on Faculty Search Committees and all Graduate Employees. Faculty need to summarize commitments and contributions to Equity and Inclusion for personnel reviews every 3 years and for non-tenure-related faculty promotions. In 2018-19, the university initiated a <u>pay equity study</u> which discovered and ameliorated very minor discrepancies.

Admissions is a crucial part of our Diversity Action Plan. The admissions process for students entering the department's accredited programs promotes a diverse student body by considering multiple measurements of student performance in addition to transcripts of academic work and standardized test scores. The Department has also removed the Graduate Record Examination (GRE) requirement for M.Arch applicants, with test score reporting made optional. To remove barriers for BIPOC applications, the Department revised the SAT and ACT score requirement and the portfolio requirement from required to optional.

The Department participates in the university's **minority recruitment programs** and works closely with the <u>Graduate School</u> to secure matching funds for recruiting and to identify students eligible for the <u>Promising Scholars Program</u> – an award aimed to recruit highly qualified incoming graduate students from diverse backgrounds who add to the university's academic and scholarly excellence. Funds are also available to recruit international graduate applicants.

The Department participates in the <u>National Name Exchange</u> program (specifically aimed at recruiting racial and ethnic minority groups traditionally underrepresented in graduate education).



The NNE is a consortium of universities that annually collect and exchange the names of their talented students from racial and ethnic minority groups traditionally underrepresented in graduate education. The NNE student database consists of student information voluntarily shared by the students who wish to pursue graduate education. The students are in their sophomore, junior, or senior year of undergraduate education.

The Department also works with the <u>Division of Global Engagement</u> with <u>Global Corners Awards</u> and <u>ISSS scholarships for student funding</u>. The Global Corners award provides tuition support to new and continuing international students whose recruitment and retention advance the UO's strategic interests in internationalizing the campus and maintaining a globally diverse student population.

Funds are available to **recruit international and diverse graduate** applicants from a variety of sources with departmental recruiting scholarships as well as in collaboration with the UO Graduate School, the UO Exchange program, the International Student & Scholar Services, and the <u>Fulbright Scholar program</u>.

The Department assists in the **retention** of current students from diverse backgrounds by supporting their recommendation requests for Endowed Scholarships through International Student & Scholar Services, often receiving full funding for the remainder of their program. International students who demonstrate financial need and exceptional merit may apply for the Endowed Scholarships. Endowed Scholarships are from generous donors intended to support specific students. There is a single application for all endowed scholarships. Each application will be considered for every scholarship the applicant is eligible for. Endowed funds can vary greatly from year to year with the average scholarship ranging from \$1,000 - \$15,000. Student employees in our office have also requested and received these scholarships with the help of staff who served as their direct supervisors.

Our faculty and staff always seek to support students in need. Recently, a faculty and staff member was successful in establishing a new Nepali Student Scholarship for a BIPOC student in need. This scholarship awards a maximum of \$30,000 in tuition annually to one top student from Nepal. The Nepali Student Scholarship is awarded to a student in a field of study that enables the student to return home and contribute to the reconstruction needs of Nepal. The award is intended to help educate future leaders who can make positive differences in their home country. This was covered in the UO news.

We work closely with <u>UO Admissions</u> and the <u>UO Graduate School</u> and <u>UO DEI</u> units to ensure quality and accuracy in our communication with the public.

Supporting faculty and students from underrepresented minorities is critical not only for recruitment, but for retention and the social sustainability of our program. The College, School, and Department are working to build a culture of equity, diversity, and inclusion so that all of its members are truly welcomed and supported through representation, mentor networks, and subject area learning and research.

Following the racial justice protests and amplification of the Black Lives Matter movement in 2020, the <u>Departmental faculty issued a statement</u> affirming our **commitment to anti-racism** that included a range of pledges and agenda items toward improving the culture of our program, our hiring practices, our curriculum, and our syllabi material and case study examples, building on our curricular efforts to reinforce the teaching of global modern architectural history. The department asked the faculty to report back on their pledges to assess how much had been accomplished in terms of the integration of new course materials that represented a broader cultural framework, and will continue to assess course syllabi and supplementary material on this issue annually.

This statement also called on the University of Oregon to make good on demands issued by the University of Oregon Black Student Task Force (2015-2017) to address longstanding monuments to settler colonialism on campus and to grapple with the legacy of the state of Oregon's founding in Black exclusion in addition to ongoing inequities. This commitment also led to an anti-racism training session during the SAE faculty fall retreat in 2020.



More recently, we also fielded a diverse student and faculty cohort to attend the annual <u>Design Futures Student Leadership Forum</u>, hosted in 2021 by the University of Michigan, to engage with a large network of students and faculty from across the country for advanced workshops on spatial justice, anti-racism, and the development of robust and meaningful community engagement practices. We anticipate UO will continue to be an institutional sponsor of this Forum going forward.

Along with department activities, architecture students initiated a new student group in 2015, STANDD (Supporting the Advancement of Diversity in Design), a gender and equity interest group focused on collaboration, leadership and mentoring, that sponsors lectures, events and workshop with department support. STANDD now has chapters in Washington and Colorado and partners with other student groups in the department, including the AIAS, HOPES, Freedom by Design and Portland Design Student Union. This group was largely inactive during the pandemic, but the department is working to revive it.

We hope that our continuing efforts to build and support a diverse knowledge base and body of faculty and students will ensure that the next generation of leaders in the profession will be far more representative of the communities we live in and serve.

Knowledge and Innovation

Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

Program Response:

The Department of Architecture offers programs that help students develop innovative design responses to the rapidly changing global environment. Our instructors and course content directly acknowledge the tumultuous state of the environment, the ever-changing nature of global cultures and material economies, and the increasing speed of technological innovation. We actively prepare our students for an uncertain future and encourage them to design buildings and places that could be re-purposed for activities they may not anticipate. Our instructors also engage with global events as they occur. For example, during the coronavirus pandemic, several courses changed their lectures to include new concepts for "office" space and future considerations for residential design. Studios have also recently focused on spatial responses to the changing nature of work, both in ground-up design and in the adaptive reuse of vacant commercial structures.

As the global temperature rises, wildfires, hurricanes, tsunamis, floods, and droughts will increase in frequency and severity. For us, it is critical to teach students how to prepare buildings and prepare communities for likely **natural disasters**. We understand that the buildings of the future need to, at minimum, catch up to the current trends. Fireproofing, wind-proofing, waterproofing, lighting, and temperature regulation are necessary considerations in every design, now more than ever. Coursework and studios in urban architecture and design further reinforce the need for the provision of supportive and resilient infrastructures of inhabitation at multiple scales, engaging housing, new mobility, and material conservation in anticipation of resource pressures and climate-induced migration.

Our **design studios** engage students in real environmental issues and opportunities to serve their communities. Many of our studios participate in national and international competitions such as the Solar Decathlon Design Competition and the ACSA/AIA COTE Top 10 design competition. Our faculty have led design teams to win first place and Grand Jury prizes in the Solar Decathlon Design competition for the last two years (Elzeyadi, High Performance Net-Zero Studio), and ACSA/AIA Cote Top 10 in 2015, 2016, 2018 & 2019 cycles (Muller, Elzeyadi, Leddy/Maytum).

Our **Advanced Technical Electives** provide opportunities for students to engage with faculty in specific technical research areas. One example is the course <u>ARCH 407/507 Design the Unseen:</u>

Research Investigating Health + Energy in Building Design taught by Mark Fretz. In this course, students learn to holistically integrate health and energy in the built environment through innovative and unconventional partnerships with architecture firms who are pairing with the students to address specific research problems. Designers must be able to find evidence, validate and apply it, collaborate internally and across disciplines, and continually learn through investigation of built projects using scientific tools that visualize the unseen. For this seminar, students will learn through lecture, discussion, hands-on investigation, and collaboration with local design firms to research relevant projects that integrate health and energy and present findings to the design community to better inform future built projects."

We offer opportunities to focus on innovation through our **specializations**, **certificates** and **additional study opportunities**. This includes the interdisciplinary graduate Certificate in Ecological Design, directed by Mark Donofrio (previously by Chris Enright), and the Ph.D. in Architecture with a focus on sustainable design, directed by Alison Kwok and Mark Gillem. The Ph.D. program provides Ph.D. students with teaching and research fellowship support and these highly qualified graduate students, many of whom are licensed architects, assist faculty with research and contribute teaching that benefits undergraduate students.

Our students study with some of the most **innovative researchers** in the country. Since the late 1960s, UO Architecture faculty have published extensively on sustainable design subjects and assumed leadership roles related to sustainability, both within the university, nationally and internationally. They are among the nation's most productive researchers and authors in architectural sustainability. Recent examples include the founding of several centers, labs and institutes such as the Urbanism Next and the Sustainable Cities Initiative by Nico Larco with collaboration from the Department of Planning, Public Policy and Management; the Institute for Health in the Built Environment by Kevin Van Den Wymelenberg, Siobhan Rockcastle and Mark Fretz; and the TallWood Design Institute, a collaboration between the University of Oregon and Oregon State University, led by Judith Sheine. These labs are the product of robust collaboration with external institutions, professional, commercial, and non-profit allies. Rockcastle was recognized with the Architectural Research Centers Consortium's 2021 New Researcher Award for innovation in human-centric environmental research. A guide to SAE faculty research can be found here.

In addition to sustainability, our faculty research and publish on cultural identity, placemaking, community engagement, housing, technology and many other research areas.

The work our faculty does goes well beyond the classroom. Our instructors are also practicing architects, researchers, and authors of scholarly works. Key publications include: Alison Kwok, co-author of the Green Studio Handbook and Mechanical and Electrical Equipment for Buildings; Don Corner, Alison Kwok and Jan Fillinger's Passive House Details: Solutions for High-Performance Design; Rob Thallon, author of Graphic Guide to Frame Construction and Fundamentals of Residential Construction, Howard Davis, author of Working Cities: Architecture, Place and Production, Kevin Van Den Wymelenberg, co-author of Daylight Design in the Pacific Northwest and Daylighting and Integrated Lighting Design (with Christopher Meek), and Michael Zaretsky, author of Precedents in Zero Energy Design. The Department also advances critical work on housing and urban design as with Site Design for Multifamily Housing: Creating Livable, Connected Neighborhoods by Nico Larco, Kristin Kelsey, and Amanda West; Larco's The Sustainable Urban Design Handbook; and with Peter Keyes' research which has played a formative role in shaping the State of Oregon's innovative housing policies, such as House Bill 2001 which effectively eliminates exclusive single-family zoning throughout most cities in the state and promotes the emergence of new "missing middle" housing options for greater affordability.

As mentioned in Section 1, the Provost's initiatives include Innovation and we have several faculty and projects that are directly addressing this initiative. We have at least **twenty inventions** including <u>Taskshade LLC</u> that have been registered with the <u>UO Innovation Portal</u>.

New, **cutting-edge research facilities**, such as the High-Performance Environments (HiPE) Lab and the Façade Integrated Testing facility (FIT), and the Environmental Comfort Simulator and the upcoming acoustic testing chamber developed by IHBE, provide UO and external collaborators with unique research and testing opportunities. These research labs and activities are directly connected to specialized technology seminars and every student in the B.Arch and M.Arch programs is required to take at least one of these advanced technology electives to fulfill degree requirements.

Students learn digital visualization and analysis techniques in required coursework. Introductory design communication courses (ARCH 202, 222, 610 and 4/523) instruct students in software skills, with reinforcement in the core design studios (Adobe tools for photo-manipulation, illustration and layout; AutoCad drawing and Rhino/Grasshopper parametric modeling. All students receive shop orientation in their first studio and use the laser cutter (i.e., for a scale piece of furniture or light filtering screen). Life-cycle assessment (Athena or OneClick LCA) is incorporated into ARCH 4/570 Building Construction and energy modeling is taught in 4/591 ECS I (Sefaira, perhaps changing to Climate Studio). Required Structures courses ARCH 4/561 and 4/562 use Dlubal rFEM finite element analysis software to compare and refine structural designs.

Students can opt for Advanced Technology courses that incorporate lighting, energy, structural analysis, or VR/AR with tools such as Lumion, Enscape, Radiance, Climate Studio, IESVE. For example, in Nancy Cheng's co-taught Timber Tectonics in the Digital Age studio, students can collaborate with Oregon State University's Wood Science and Engineering students in designing, analyzing and detailing a timber structure using Grasshopper and Karamba. Philip Speranza's students learn to gather urban livability data using sensors and cloud-based information, using mapping to develop site-specific design responses. Additional courses in using Arduino sensors and GIS mapping, R data visualization are available through the Landscape Architecture department and build VR worlds with the Unreal Engine through the UO Portland School of Journalism and Communication.

Faculty are engaged as well in ongoing work in the **digital humanities** that brings history alive through advanced mapping and interactive online applications, as with Jim Tice's <u>GIS Forma Urbis Romae Project</u>: <u>Creating a Layered History of Rome</u> and Daisy O'lice Williams's <u>Paul Revere Williams Career Mapper</u>, a web-based data visualization tool created for researching the career of one of America's most prolific architects and the first African-American member of the AIA. And in response to the pandemic, a team of University of Oregon professors, including Kevin Van Den Wymelenberg, conducted research to create innovative design responses to combat the proliferation of the coronavirus. Additionally, many of our professors act as thesis advisors for architecture students who are also in the Clark Honors College. Our faculty are also founding members of the <u>Society of Building Science Educators</u> (SBSE) and the <u>Building Technology Educators' Society</u> (BTES) and actively engage students in the activities of those groups, including the presentation of collaborative research papers.

Knowledge and innovation are also furthered in our **design theory** and **media offerings**, and in many **specialized public programs**. Seminars for new Track 2 M.Arch students taught recently by Mark Gillem, Alison Kwok, and Justin Fowler introduce issues in contemporary architecture, sustainable urbanism, and climate action while also training students in methods for collaborative research and public presentation. Media for Design Development courses such as Daisy O'lice Williams's "Digital Collage Techniques" or Philip Speranza's "Granularity of Time in Urban Design," along with advanced technology courses like Siobhan Rockcastle's "Building Simulation & Visualization" also build student capacity for narrative innovation and multi-sensory storytelling that are crucial for communicating with peers, clients, and communities. Cutting-edge innovative dynamic façade technologies are topics explored in Ihab Elzeyadi's High-Performance Envelopes Seminar with prototype testing and simulations. And, in the last year, other coursework has been supplemented by the "Advanced Design Workshop" programming and mini-course series facilitated by Justin Fowler that was conceived in response to student and professional/alumni requests to provide Oregon students with more training in design experimentation, and greater exposure to innovative design practices further afield. These workshops combined lectures from

distinguished and emerging practitioners with more intimate workshops on experimental methods of visualization. Recent guests include Sean Connelly (After Oceanic), Perry Kulper (University of Michigan), Ivi Diamantopoulou and Jaffer Kolb (New Affiliates), Jennifer Ly and James Leng (Figure), and Daniel Meyers (+&> plus & greater than). These workshops contribute to students' understanding that drawing, gaming, animation, simulation, video, and virtual reality all serve as viable tools for the future of the profession.

The department engages with **contemporary architectural discourse** through a robust program of public quest lectures in architecture and allied disciplines curated by the Department and SAE. These events present a wide range of expertise and perspectives from practitioners based all over the world. Recent quests include Anupama Kundoo (Berlin/Pondicherry, India), Hiroto Kobayashi and Naomi Maki (Kobayashi Maki Design Workshop, Tokyo), Marlon Blackwell (Fayetteville, Arkansas), Georgeen Theodore (Interboro Partners, New York), Willow Lung-Amam (University of Maryland), Alison B. Hirsch (University of Southern California), Clayton Taylor (West of West, Portland/Los Angeles), and Florian Idenburg (SO-IL, New York). The diversity of perspectives is also reinforced through programming that has come out of the Design for Spatial Justice Initiative such as a roundtable discussion on design and Black community development convened by Craig Wilkins, Kayin Talton Davis, and Cleo Davis with Gabrielle Bullock (Perkins & Will, Los Angeles) and Lauren Hood (Detroit), and local community activists such as AJ McCreary (Equitable Giving Circle) and Winta Yohannes (Albina Vision Trust). The Department also cosponsors events with local organizations in Portland to bring in guest lecturers such as Julie Eizenberg (Koning Eizenberg) and Lisa Iwamoto (IwamotoScott), and with Portland State University to address urgent urban issues of shared concern, including a recent event: "Portland in Conversation: The Infrastructure of the Public City - Housing, Los Angeles and Portland" with Elizabeth Timme (LA-Más) and Anyeley Hallová (Adre).

Our focus on leadership in sustainable design is included in our **Strategic Plan** and led to the more recent focus on identifying "Centers of Excellence" in our programs. The goal of creating increased opportunities for faculty research has been partially realized in the creation of new research institutes and labs, funded in part by grants and contracts. Our work to identify "Centers of Excellence" has focused our requests for searches for tenure-track faculty in these areas, which has met with some success, with the recent approval of a search for a faculty member in mass timber design, and our new strategic planning process will incorporate this work to inform planning for faculty hires in the future. As detailed above in our response to Environmental Stewardship and Professional Responsibility, we track the numbers of students involved in faculty research each year, through paid positions and for-credit studies, to ascertain how many of our students are taking on these opportunities for advancing Knowledge and Innovation.

The creation of new knowledge and focus on innovation are embedded throughout our program and we continually seek to prepare our students through both coursework and faculty engagement.

Leadership, Collaboration, and Community Engagement

Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

Program Response:

Our students go deeply into both technical and humanistic issues of our discipline and they iteratively engage this broad, human-centered and trans-species, sustainability-driven approach to design. Our program prepares our students to be not just designers, but **engaged leaders in their personal and professional communities**. In a spring 2021 meeting with Department Head Michael Zaretsky and one of the principals of <u>ZGF</u> (a UO grad from the 80's) described our alumni as the students who looked comprehensively at all the issues of design and were most likely to become leaders in the long run, as compared to other schools.

We appreciate the fact that our architecture students must know how to lead and be led by their colleagues, those in architecture, in allied fields and in non-professional communities. We ask students to take initiative in their course work, especially group projects, and encourage them to seek leadership opportunities in extracurricular activities. Student groups like the American Institute of Architecture Students (AIAS) and the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) and the Ecological Design Center (which organizes the annual HOPES conference) allow students to take on yearlong leadership roles. We have an active Freedom By Design group that directly engages community partners with projects throughout Eugene and Portland. We also have many students involved in the Architects in Schools program which "bridges design to schools across Oregon." These groups organize events, reach out to the larger student body to recruit more members, hold regular meetings, and hold annual elections. With the founding of SAE in 2017, opportunities for interdisciplinary collaboration inside and outside of the curriculum have grown.

Our curriculum facilitates collaboration through group projects, both in our non-graded Pass/No Pass design studios and in our subject area courses. In introductory design studios, students work in teams on research assignments and in intermediate and advanced studios, students collaborate on research and frequently work in teams on complex design projects. Similarly, in the subject area courses, students are frequently required to work in teams. What is unique within our program is that our faculty provide training in effective group work techniques. For example, in Environmental Control Systems I, students not only form groups for their case study but are required to write and use a team contract outlining the roles and responsibilities of team members. By explicitly planning out their group dynamic and working to come to an agreement about each member's tasks, students learn how to circumvent common problems with group projects. In Context of the Architectural Profession, students learn how to connect their in-class group work to what they can expect in the office. The lectures in this course dive into topics like team chemistry, collective decision-making, the importance of communication, trust, and the team environment vs. hierarchical structure. By knowing what to expect and how to work as a part of a professional team, students will be able to effectively collaborate and engage in professional settings. Human dynamics are a significant part of architecture, which is why our entire curriculum teaches students how to work with one another, not just how to solve common problems alone. Team projects are also required in ARCH 4/540 Human Context site analyses, ARCH 4/592 ECS II lighting analysis and luminaire design and ARCH 4/561 and 4/562 Structures design and analysis projects.

Students can engage with their communities through student organizations, but not all students will allocate their time in this manner. So, our required course work integrates **community engagement** and demonstrates examples of practicing architects engaging with their communities. Required case studies and abbreviated post-occupancy evaluations help students engage with spaces' inhabitants and understand the roles buildings play in their communities. In recent years we have offered from 18 – 27 combined studios and seminars that directly address community engagement including a required Housing Specialization course on Community Design (see list here).

The latest iteration of one of our Portland Spatial Justice projects paired Visiting Fellow Craig Wilkins with local artists and activists Kayin Talton Davis and Cleo Davis for a studio on justice education, cultural heritage, and wealth generation in Portland's historically Black Albina neighborhood. Here, each student worked directly with one of three project partners who live and operate in the neighborhood, producing architectural designs and project financing packages that supported the real needs and aspirations of the community partners. This work was aided by the local architecture and urban design firm, El Dorado, as part of their work with the reparative Albina Vision project in the neighborhood. In what we see as a model for our ongoing and future engagement work, the studio was a productive synthesis of architectural speculation and difficult conversations around anti-racism, activism, advocacy, and financial creativity.

<u>OregonBILDS (Building Integrated Livable Designs Sustainably)</u> is a design-build studio program at UO that draws on the interdisciplinary skills of both students and faculty to offer exceptional

design-build and community engagement, collaboration and leadership opportunities. Working as a cohesive team, the organization partners with the community to design and construct integrated, sustainable, and affordable housing. They have typically designed and built one low-income house per year. This program, academically based in the Department of Architecture, is open for enrollment by students from architecture, landscape architecture, interior architecture and other disciplines within the college and university. It is a dynamic collaboration of classroom instruction and practical, real-world application of design, construction, and community involvement.

OregonBILDS connects design students to each other and to building professionals, material vendors, city officials, public utilities and community service agencies. Our projects are laboratories for student learning; they provide exploratory opportunities to understand the application of energy efficient design, the integration of building technology, and the relationship between interior spaces and the landscape.

Faculty and students also collaborate on **research projects**, where both leadership and the need for working in teams is demonstrated in research projects in which there is a Principal Investigator working with a team. Both our B.Arch and M.Arch students have opportunities to engage with faculty on these projects. The University keeps metrics on the number of students engaged in research activities, and one of our strategic goals is to increase funding for research to allow more faculty and student participation in these projects. As noted above, the department also tracks the numbers of students involved in these collaborative projects. The department also tracks the number of studio and seminar classes that engage in community engagement work, to ensure robust offerings for students.

There are a number of opportunities for students to **connect to the profession**. Our <u>College of Design Career Services</u> Office creates events and opportunities to connect students with practitioners. <u>Career Fairs</u> are held once a year in Eugene with an average of fifty firms participating with over 150 students typically participating. They also organize "Mentoring Circles," connecting our students with professionals; this was particularly critical this year, when students were working remotely and very much in need of professional encouragement and advice in their more distant learning situation. In 2021, 107 professionals, 85 alumni and 151 architecture students participated in the Mentoring Circles. Approximately ¼ of our architecture students seek career advising each year. Career Services also offered workshops and panel discussions with professionals including: "Inspired Not Tired: What Keeps My Career Fresh," "Real Talk: Hiring Trends During Covid-19," and "Real Talk: Art & Design Portfolios." A full list of Career Services activities is found here.

The AIAS organizes a one-day visit to regional professional offices each year. Students are able to connect with a large variety of professionals through all of these activities to see possible career paths and leadership opportunities in the profession. The Student Services Office tracks the number of firms participating in Career Fairs and the number of students participating each year, as one measure of student engagement with the profession. Additionally, research labs and centers, including ESBL, BioBE, and IHBE engage with design practitioners on design-driven practice.

Associate Professor Zaretsky has previously led humanitarian design, public interest design courses, and community-engaged design/build programs. His work on community engagement has been published in the <u>Public Interest Design Education Guidebook</u> by Abendroth and Bell and other journals and books. Given his new role as Department Head, there will be an increased focus on community engagement being integrated across the curriculum.

Lifelong Learning

Architects value educational breadth and depth, including a thorough understanding of the discipline's body of knowledge, histories and theories, and architecture's role in cultural, social, environmental, economic, and built contexts. The practice of architecture demands lifelong learning, which is a shared responsibility between academic and practice settings.



Program Response:

Architectural education at the University of Oregon is conducted within a **professional ecosystem** of practitioners, alumni, and partners from allied fields who both engage with students on a regular basis and make use of our academic resources and programming efforts to further their lifelong paths of inquiry. Our faculty respond directly to student interests by facilitating **independent study** and supporting courses initiated and developed by students. These options allow students the opportunity to identify specific research goals, augmenting required coursework with intensive study into special problems. For Masters students, these studies often align with—and can be counted as elective credits toward—an area of **professional specialization** including: Architectural Technology, Housing, Interior Architecture, Historic Preservation, and Urban Architecture and Urban Design. At the undergraduate level, we require 16 credits of upper division general electives from subjects outside of architecture, promoting the growth of well-rounded students.

UO maintains a tradition of peer teaching and teamwork in project development, both in studio and non-studio settings. The mixture of graduate and undergraduate student levels in many of our courses and studios encourages student interaction, peer review, workshopping, and the development of healthy interpersonal skills and habits that ensure team projects are carried out in an environment of mutual respect and support. This way of working also builds understanding and empathy for a diverse range of perspectives and lived experiences that strengthen bonds across peer groups, which we hope will persist as lifelong professional connections. Facilitating peer teaching between students is another way we work to develop these habits of lifelong learning. Much of our professional curriculum involves the active engagement of GEs (graduate teaching fellows) and undergraduate teaching assistants. For the department's graduate students interested in pursuing teaching careers in building technology, the Technical Teaching in Architecture Certificate—a program directed by Alison Kwok—provides both teaching experience and mentoring from the department's technology faculty. A significant number of students who have chosen this path have gone on to become faculty teaching in technical subject areas in architecture schools across the U.S. Also, the "media coaches" program initiated by Daisy O'lice Williams, gives students individual help with learning new media, and gives the coaches the opportunity to develop teaching skills. See PC.7 Learning and Teaching Culture for more detail.

Active collaboration and involvement in the **school's organizational and programming life** is another key vehicle for developing lifelong leadership and project management skills. Students often participate in departmental committees and engage in working sessions on subjects such as equity and inclusion in studio culture. Students in the architecture department also have access to the <u>230+ active student groups</u> in the <u>Association of Students at the University of Oregon</u> (ASUO). Student activities can be found through the <u>Engage website</u>. More specifically, architecture students take the lead in groups such as <u>AIAS</u>, the <u>Design Student Union</u>, and <u>HOPES</u>. With the latter, students plan, organize, and budget an annual conference across the Eugene and Portland campuses, engaging faculty, community members, and visiting scholars and practitioners to discuss the relationship between ecology and various design disciplines, and how this connection can produce sustainable solutions to contemporary problems. Past conference subjects have included environmental literacy, food sustainability issues, product innovation, and design for spatial justice with guests such as Shigeru Ban, Sim Van der Ryn, Lola Sheppard, Sean Ahlquist, Neri Oxman, Carlo Ratti, Marcia McNally, Bryan C. Lee, and Ron Rael.

In major international gatherings organized and hosted by UO architecture faculty such as the annual Reynolds Symposium and Urbanism Next Conference, we explore subjects ranging from innovative design pedagogy for climate action to the future of urban mobility and technology. Each of these events connects scholars and professionals with students, many of whom also work at the events or assist in their organization. Lunch talks, a keynote lecture/discussion series, School of Architecture & Environment alumni events, and special programming initiatives like "Portland Practices" and events during Design Portland (formerly, Portland Design Week) also bring students together with key figures in our field, and with local organizations and local

chapters of organizations such as the Diversity in Design, The Architecture Lobby, the AIA, and the AIA Committee on Equity, Diversity, and Inclusion. Examples of events are found here.

Studio and classroom settings remain the core site of our engagement with the practices of lifelong learning. Our educational mission is grounded in community and professional connection, and our coursework reflects that at every step. Many studios in both the intermediate and advanced levels are taught in conjunction with community partners such as local nonprofits, developers, and public agencies such as TriMet (Tri-County Metropolitan Transportation District of Oregon) and Home Forward, or industry partners, including mass timber manufacturers and design and construction professionals affiliated with the TallWood Design Institute.

Our faculty are leaders within institutes and programs that address **relationship between academia, research and community** such as the <u>Sustainable Cities Institute</u> (SCI) and the <u>Sustainable City Year Program</u> (SCYP). Through year-long partnerships, the Sustainable City Year Program helps communities solve the problems of today and lay the groundwork for a sustainable, livable future—all while helping students prepare for the workforce through applied learning. Our involvement with the SCYP through the SCI also facilitates collaborative projects and connections, supporting faculty teaching efforts and often student travel. This work ensures that projects and studio reviews engage the participation of architects and non-architects and prepare students for a future of community and client engagement processes.

Practitioners—many of whom are part of our generous network of alumni—serve on reviews, host job shadows, firm visits, portfolio reviews, and internships, and are regular guest speakers in the classroom. Leaders from firms such as Pivot Architecture and ZGF have taught and lectured in our Context of the Architectural Profession courses, and architects from LEVER have contributed to our advanced building technology coursework as in a recent mass timber seminar. Connection here is also facilitated through initiatives such as the recent "Mentoring Circles" program which was a collaboration across Architecture and Interior Architecture that paired professional alumni with current students for monthly group conversation on professional development topics and networking through the pandemic. Over 84 practitioners signed up to participate in the circles.

The Portland Program also engages several **practitioners as recurring faculty** in studio design and design coursework and leverages its position in the heart of the Pacific Northwest's premier design city to maintain close working relationships with the professional community. Studios are often supported by intensive workshops in technology and architectural representation delivered by members of our professional network. Additionally, studios conducted by practicing faculty—from Holst Architecture, Bora Architecture and Interiors, West of West, Opsis Architecture, Waechter Architecture, Metaamo, Hennebery Eddy, etc.—often hold **workshops and reviews** in their office spaces and/or solicit input and engagement from co-workers and consultants with their firms. Further, in advanced technology classes such as Design the Unseen from Mark Fretz of the Institute for Health in the Built Environment, practitioners from firms such as SERA, FFA, Gensler, LEVER, Hacker, and SRG take on active instructional and mentorship roles in student research projects on a range of environmental technologies and building performance issues. Recent UO success in the COTE Top Ten for Students competition has also promoted such contributions, providing students with the opportunity to travel and represent their studio work.

We have the highest percentage of undergraduate students at UO (around 50-75%, depending upon the year) participating in **study abroad programs**. We have been running successful programs in Vicenza and Rome, Italy, Japan, China, and Barcelona, Spain for many years. In addition, our students have traveled with other UO programs and other university programs to locations across the globe. When paired with our portfolio of study abroad programs that instill an appreciation for history and cross-cultural understanding, and connect students with resources and alumni networks based abroad, the pedagogical, programmatic, and immersion activities outlined above demonstrate our fervent commitment to lifelong inquiry, curiosity, and continuing education.



The department provides many opportunities for interdisciplinary education. Students are encouraged to take one intermediate level studio in either Interior or Landscape Architecture and there are joint courses with Historic Preservation and with OSU's Department of Wood Science and Engineering. Our introductory design and media courses have long been joined with Interior Architecture and are now being coordinated with Landscape Architecture. Creating more interdisciplinary experiences was a goal that came out of our Strategic Planning process, and we have recently initiated two concurrent Master's degrees, with Interior Architecture and City and Regional Planning, and expanded the interdisciplinary research in our institutes and labs, which provide learning opportunities for many of our students. Our future strategic planning process will include developing interdisciplinary master and Ph.D. degrees with Oregon State University (OSU) in Wood Science and Engineering and in Architectural Engineering, which are already in preliminary discussion.

As noted above, our program embeds a curiosity for knowledge and learning within our students. We see this in the high passing rate of the ARE exam amongst our graduates, the majority of whom go on to become licensed professionals after passing these exams. The ARE itself represents a commitment to lifelong learning and licensed architects are required to take Continuing Education courses annually to maintain their licenses. The peer-to-peer teaching and collaborative focus of our program creates lifelong learners. All of the diverse initiatives described here are intended to allow students multiple venues to discover their interest in lifelong learning and exercise their curiosity.

3—Program and Student Criteria

These criteria seek to evaluate the outcomes of architecture programs and student work within their unique institutional, regional, national, international, and professional contexts, while encouraging innovative approaches to architecture education and professional preparation

Please refer to the <u>Program and Student Criteria Matrix</u> for an overview of the courses discussed in this section of the APR.

Assessments for the Program Criteria and Student Criteria are described in each section. The majority of assessment mechanisms were developed in spring 2021. As a result, there are few results that are discussed within the APR. We will be evaluating the assessments for all PC and SC through AY21-22 and adjusting as needed to verify the assessments provide predictive input on courses and program activities. We will then develop specific plans for continuous improvement moving forward.

In spring 2021, we created a Graduating Student Self-Assessment Survey that included the eight Program Criteria and the six Student Criteria from the NAAB 2020 Conditions. The rubric was as follows:

Unable to Assess	0	
Unsatisfactory	1	range 0-1.25
Marginal	2	range 1.26-2.25
Satisfactory	3	range 2.26-3.25
Strong	4	range 3.26-4

Sixty three (63) of 101 graduating students (undergrad and grad) completed the survey (63%). The full survey results are available for the NAAB Visiting Team. The results are described under Assessment for each PC and SC.

3.1 Program Criteria (PC)

A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.



PC.1 Career Paths

—How the program ensures that students understand the paths to becoming licensed as an architect in the United States and the range of available career opportunities that utilize the discipline's skills and knowledge.

Program Response:

At UO, we are deeply committed to preparing students to understand the opportunities that are available for those educated in architecture and to be successful whether they pursue practice, teaching, research, or scholarship. Through internships, interactions with alumni mentors, presentations and lectures by practitioners, the practicum course, AIAS events and engagement with the UO <u>Campus Planning and Facilities Management</u>, as well as our faculty who are registered architects, researchers, scholars and firm leaders, our students are regularly engaged with many career paths within architecture. While there are many ways in which our students are introduced to the career paths within the discipline, the primary course where this is covered is ARCH <u>417/517</u>. There are also several ways in which the <u>College of Design (COD) Career Services</u> organizes opportunities for students to engage with and learn about career options through workshops, classes and engagement events with professionals. These are covered in Section 5.4.4 Student Support Services.

ASSESSMENT - PC.1

PC.1 is assessed in multiple ways. The primary assessment mechanism is the ARCH 417/517 Context of the Architectural Profession Final Project, consisting of a cover letter and resume, along with a case study of a firm (typically the one addressed in the cover letter), and a personal business plan. The firm case study is an opportunity for them to research a firm's culture, portfolio of projects, design philosophy, and the opportunities for a professional position. The personal business plan is structured to encourage students to synthesize all aspects of professional careers, to propose a path for themselves, a timeline, and the steps they need to take to achieve their goals. They are strongly encouraged to cite reading and lecture sources to inform their personal plan. Students have multiple opportunities during the term to get feedback on how they are presenting their own qualities, skills, and experience for a professional position. The four-part term project is evaluated by the teaching team using a detailed <u>rubric</u> for each part. The benchmark is for 75% of undergraduates to achieve 70% or better, and for 75% of graduate students to receive 80% or better.

Additionally, we track Architecture student engagement with <u>DSGN Career Services</u> and participation in the SAE <u>Career Fair</u>. The <u>409/609</u> Practicum course is another potential mechanism for assessment, though the course is currently optional and being reconsidered before starting again post-Covid. One other informal assessment mechanism is the student participation in <u>AIAS</u>, which remains quite high, even through the pandemic.

PATHS TO BECOMING LICENSED AS AN ARCHITECT IN THE UNITED STATES

ARCH 417/517 Context of the Architectural Profession is the primary course for covering content about career paths and licensure in Architecture. In recent years, the course has been taught both in Eugene and Portland, though the content of the syllabus has been similar across both campuses. However, we are transitioning towards a hybrid version which will bring together the benefits that have been learned by teaching the course in both locations. The Eugene version of the course is quite large (approximately 100 students) and includes the students in Interior Architecture. Since our last accreditation, this course has been redeveloped to fully support the large cohort by adding additional instructional faculty to the team and incorporating multiple vantage points from the field, as described below. In Portland, the course has been taught in recent years (until 2020) by a team of architects from the Portland-based firm ZGF. This course covered the content with a group of professionals from a large firm that covers diverse types of practice. Both of these models have been successful and in 2020, we began plans to combine these two courses into one hybrid version that will engage local practitioners as well as NCARB leaders and others who have been part of the Eugene-based course.



The Eugene-based course (and the new hybrid course) dedicates at least one full class and the corresponding week's discussion section to understanding the value of licensure and the specific paths and resources to become licensed. Martin Smith, Assistant Vice President of Education + Experience at NCARB has participated in the class via Zoom each year. He provides an overview of how to establish an NCARB record as a student, the AXP process, the ARE, and discusses some of the unique state-by-state requirements for licensure. Separate discussion sections follow up on students' questions about recording AXP hours and exploring the comprehensive NCARB AXP Guidelines. Our Department Architect Licensing Advisor has facilitated visits by NCARB staff to provide student information sessions. In-class instruction is reinforced by AIAS panels and events, which include student discussions with diverse panels of architects.

In addition to the focused sessions on licensure, the class exposes students to the work settings relevant to completing the AXP, and the diverse opportunities to satisfy the requirements. The class specifically exposes students to the six AXP Areas & Tasks, from Practice Management to Construction & Evaluation. We engage practitioners to speak about specific areas of practice, and seek to introduce students, within the large lecture format, to the actual professional interactions and teamwork required in contemporary practice. An example is our in-class Owner Architect Contract (OAC) meeting. We invite a UO campus construction project team to conduct their one-hour OAC meeting live around a table in the lecture hall, follow their agenda, and discuss the project openly. We follow up with a debrief of process, content, and the professional roles represented in what is often a large and diverse project team.

RANGE OF AVAILABLE CAREER OPPORTUNITIES THAT UTILIZE THE DISCIPLINE'S SKILLS AND KNOWLEDGE

The term project for ARCH 417/517 Context of the Architectural Profession explores career opportunities, the preparation required, and the career planning and development required to pursue professional opportunities. The class begins with an introduction by COD Student Services to the job search and the methods and support students have available within the COD. A "Recent Grad Panel" discussion brings perspectives from alumni 1-3 years out of the program to bring fresh context and insight to beginning the career path. The term project requires close coordination with COD Student Services staff who meet with students in small groups to develop their career interest and corresponding cover letter and resume. Students have an opportunity to meet and network with professionals during Visiting Firm Week (typically in February), and get feedback on their draft cover letters, resumes, and portfolios.

One of the benefits of the well-supported large class format is the breadth of career perspectives and experience present in the five to six-person teaching team itself (one-two Architecture instructors, one Interior Architecture instructor and three GE's), and the external professional perspectives we are able to bring to the class. The teaching team includes a firm founder and owner, senior project architect, an interior architecture professional, and several graduate employees with diverse current firm experience at the AXP/early licensure stage. Through oneon-one office hours, discussion sections, and an open team-based lecture format, the teaching team itself provides a deep resource to explore career opportunities. We dedicate one week to a "Choose your Path" discussion session where the teaching team offers an array of specific career insights, for example: "Designing Branded Environments," "Pro-bono Services in Developing Countries," "Building Your Own Research." Our guests have included leading architects, planners, contractors, developers, owners representatives, and professional coaches. We began experimenting with interactive video conferences in 2013 and have leveraged this to bring a national context to our discussion, even including panel discussions among several professionals on screen interacting with the class. The class also benefits from the regular contributions of Joel Andersen, President of Andersen Construction; Kevin Cavanaugh, Guerilla Development; Lee Wagner, Attorney at Stewart, Sokol & Larkin.

UNDERSTANDING ARCHITECTURE AS A PROFESSION

Context of the Architectural Profession offers students an opportunity to learn about the myriad of roles that are required within the profession. Most years, one of the instructors of the course attends a NCARB national meeting on licensure to remain current on NCARB professional



knowledge. Our current Architect Licensing Advisor, Karen Williams, is very engaged with NCARB and is a contributor to the NCARB/ACSA <u>PROPEL Professional Practice Education</u> Library.

Within ARCH <u>417/517</u>, the lecture *Licensure and Professionalism* introduces students to what it means to be a professional, the licensure process, and the requirements in architecture. It outlines the following:

- The definition of a professional
- The fiduciary responsibility of an architect to put a client's best interests first, to exercise discretion and to protect the health safety and welfare of the general public
- Goal setting and defining "why you want to become an architect"
- What the path to licensure looks like the requirements of education, experience and examination - and the resources available to help along the way.
- The history and introduction of the architectural collateral organizations
- The history of state requirements in licensure
- The importance of mentors and peers
- Specific architecture licensure requirements in the state of Oregon
- Continuing education and lifelong learning

CAREER ADVISING

The College of Design Student Services provides career advising to both undergraduate and graduate students to explore and research career options, develop strategies to search for internships and jobs, develop search and presentation tools such as resume, cover letter, portfolio and interview skills.

DSGN Career Courses (i.e. DSGN <u>408/508</u>) are offered every term, both on-line and face-to-face, focused on career exploration, job and internship search strategies, portfolio development, and exploring design careers. These courses are available to all College of Design students. As part of the effort to connect students with careers and professionals we host:

- Annual Recruitment Fair over 50 firms in attendance recruiting for internships and jobs
- Information sessions and office hours by individual firms throughout the year
- Panels that focus on career paths of professionals after they graduate including:
 - Design Thinking in Small Communities: A Thread That Connects and Transcends: Interdisciplinary Panel discussing the future of design collaboration
 - Portfolio Jam: Panel of Professionals Sharing Career Path Experience and Tips for Preparing Applications

The <u>Architecture in the Schools</u> (AIS) Information Session is for current students who wish to participate. They match volunteer architects with public school teachers to enrich the learning experience of children. With the aim of reinforcing core academic skills, AIS teaches children how to exercise their analytical and creative skills through the architectural design process. AIS also fosters a heightened civic consciousness, bridging the gap between what is learned in school and everyday life.

College of Design Student Services staff also provide the following Student Group Mentoring and Leadership Development support:

- Offer leadership training and Myers-Briggs Type Indicator (MBTI) assessment to student group leaders
- Foster related emerging student groups and interdisciplinary engagement such as bimonthly student leaders' lunch

For Portland students in several disciplines, Sarah Kutten, Director of Student Services in Portland, provides Career advising along with directing students to a wide range of health, mental health, academic and co-curricular resources. This includes help with résumés and cover letters and job search groups. The Portland Architecture courses and special events commonly include practicing design, planning and building professionals as guest lecturers, reviewers and mentors; providing a natural networking environment.



MENTORING

In addition to serving current students, the College of Design Students Services also provides career resources and advising to recent grads and works in collaboration with the <u>University of Oregon Alumni Association</u> through the Career Professionals Consortium to engage alumni in mentoring roles for current students. In Fall 2020, the Architecture department partnered with the College of Design Student Services to organize virtual <u>Mentoring Sessions</u> to connect students, recent graduates, and professionals around areas of interest. These provide the chance for students to meet architects and interior designers in groups of 4 to 8 individuals in an organized program with opportunities for further networking connections.

PRACTICUMS AND INTERNSHIPS

For students without previous professional experience, the Architecture department has long offered the ARCH 409/609 Practicum: Off-Campus Experience course, in which a professional mentor provides an educational introduction to practice within an office. The mentors are guided in using the National Council of Architectural Registration Boards (NCARB) Architectural Experience Program (AxP) Guideline categories by a part-time instructor. Periodic check-ins and end-of term reports ensure the quality of the experience and that the students are taught about working in an office, not treated as unpaid labor. The Practicum course is useful for international students who are unable to access architectural firms due to visa restrictions. This course is currently under review by the department head, architecture faculty and the Architecture Advisory Group. It will be offered again in winter 2022.

Students and grads with professional skills are encouraged to find part-time jobs and internships through the UO Career Center's Handshake system, as well as on-campus employment resources offered by the Graduate School. Student and professional experiences and career tips are documented on UO Career Blog.

In the past eight years, the Department of Architecture has offered competitive summer internships at firms including:

- ArcPlus (formerly) Xian Dai Architectural Group in Shanghai, now via the Globalworks Internship program of the Global Education Oregon (since 2011)
- MICA Architects in London, formerly Rick Mather Architects.
- Eco-ID Architects in Singapore
- AEDAS
- Kengo Kuma Architects
- DLR Group, Portland, OR
- PIVOT Architecture, Eugene, OR
- Energy Trust of Oregon's Net Zero Energy Leaders internships at Portland, OR firms: Ankrom Moisan, GBD, Green Hammer, BRIC Architecture, Salazar Architects, Carleton Hart, Hennebery Eddy, Holst.

SELF-ASSESSMENT - PC.1

Our program introduces our students to Architecture **Career Paths** predominantly in the Context of the Architectural Profession course and the Career Advising Center. We have also had several students gain experience of firms through the Practicum course as well as internships that students find in Eugene, Portland and other cities. However, in the Graduating student self-assessment survey (SP21) this received an average of **3.08 out of 4**. This, and other informal inputs, have brought to our attention that we need to focus on increasing our students' knowledge of career paths in architecture moving forward. In the coming year, we will be working with our faculty, our professional community and our career advising center to increase our students' knowledge of Architecture Career Paths.



PC.2 Design

—How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

Program Response:

Our curriculum places the **design studio** at the center of architectural education, which promotes the incremental development of essential skills and knowledge and works towards an integrated design with a consideration of structural, ecological and human factors. All of our studios are offered on a Pass / Marginal Pass / No Pass grading system to encourage students to stretch beyond their comfort zone to test new ideas and approaches. This system also reduces competition between students, rather it encourages students to help one another, working together to develop strong designs. The design curriculum is divided into three strata: introductory studios; intermediate, vertical studios; and advanced terminal project or capstone studios. All levels of studio conclude with an individual meeting between student and instructor, and with a one-page evaluation of the student's performance during the term.

The introductory core studios use a sequence of design problems that build in scale and complexity. The introductory studios differ for the B.Arch and M.Arch Track 1 and Track 2 curricula. For the B.Arch, the core studios include ARCH 283, 284, 383 and 384. For the M.Arch Track 1 students, the core studios include ARCH 680, 681 and 682. The M.Arch Track 2 students take ARCH 683 before joining the intermediate studios.

After this structured introduction, students join the intermediate studio sequence (ARCH 484/584), where they can pursue their own interests by selecting from an array of topical studios. These studios are also known as the "vertical studios" because from this point forward, the B.Arch and M.Arch students are mixed in all studios. This enables students with different levels of experience to contribute to a peer teaching environment. The content of these studios varies significantly providing many options to students each term. Typically four to six studios are offered concurrently. Some are taught by practitioners, some by design faculty, some with a focus on urban design or furniture.

Some vertical studios address technical projects while others address more conceptual projects. Some of these studios center around national or international competitions. For example, in Winter 2020 and 2021, Ihab Elzeyadi led Solar Decathlon studios, which selected one out of five projects to represent the university. Both years, the team went on to win the competition with a net zero elementary school design. All students whose projects were not selected were encouraged to submit their works to the COTE Top Ten. Other studios work on such projects as the "Housing Bootcamp Studio", in which students examine creative solutions to current issues of affordability, density, sustainability, and new and emerging lifestyles.

In 2019, the Architecture faculty approved a proposal to integrate the <u>Building Integration in Vertical Studios</u> sequence - a series of technical criteria which must be covered throughout the intermediate studio sequence. This is still being fully integrated, but this initiative will better prepare students for the final, comprehensive studio sequence.

The studio sequence is concluded with a two-term, comprehensive "terminal" project studio (ARCH <u>485/585</u> and <u>486/586</u>). The first term of this sequence is for program, site analysis, and technical development leading to a schematic design and the second is for design development and communication of the final project. This is an advanced, building integrated, comprehensive design project that is completed by each student individually.

UNDERGRADUATE CORE DESIGN SEQUENCE

The undergraduate design sequence begins with basic design exercises, and scales up to a multi-story building by the 4th studio. As students take more design courses and studios, their assigned projects become more complex and require more detailed architectural knowledge. In



this respect, the design sequence includes the entire curriculum, though it mainly hinges on the design studios. Materials from undergraduate design studios can be found here.

ARCH 283 | 1st STUDIO: ELEMENTS OF ARCHITECTURE (PAVILION)

The first studio focuses on basic design principles and spatial composition in response to natural elements (topography, sunlight, water, and atmosphere). Here students learn how to define space with basic architectural elements (a wall, column, overhead plane, carved space, and features in the site). Students must also consider sensory and material qualities of their designs. This design studio includes several short problems, some of which require collaborative work, which culminate in a simple pavilion that is integrated with the landscape.

ARCH 284 | 2nd STUDIO: HUMAN CONTEXT (BATHHOUSE)

The second studio centers around cross-cultural rituals and requires students to pick case studies of different bathing rituals and present their findings to the rest of the studio. The goal is to broaden their understanding of architectural significance and increased awareness of non-western cultures.

The design project is a multi-sensory bathhouse that carefully considers the internal spatial sequence and asks students to create an inclusive journey for all users. Students are asked to consider light and shadow, material qualities (heavy/light), vegetation (where applicable), and contrast of experiential features between rooms.

ARCH 383 | 3rd STUDIO: CIVIC DESIGN (LIBRARY)

The third introductory studio focuses on the design of a modest civic building in a Portland neighborhood with a strong identity. The relationships between interior and exterior public spaces are an important consideration. The students are asked to incorporate information from required courses outside studio, spatial composition and building construction. Students must consider the physical site, daylighting, passive heating, and natural ventilation. Considerations of universal access and egress are important to a public building in an urban neighborhood.

ARCH 384 | 4th STUDIO: BUILDING IN THE CITY (CULINARY INSTITUTE)

The final core studio again locates the site in the city. Graphic presentation, critical thought, and speaking and writing abilities are understood as key elements of student development in basic design. Studio assignments in this course are cumulative, build in complexity, and are intended to accelerate the student's growth as a designer. Students are expected to work in a reiterative fashion and make conceptually coherent decisions throughout the design process based upon precedent, the interaction between formal ordering systems and activity support, building construction systems, environmental control systems, and life safety and accessibility needs. One of the primary goals of the second-year design studios is to enable students to develop strong working processes and methods that will allow them to be prepared for and successful in more advanced studios and beyond.

GRADUATE CORE DESIGN SEQUENCE

As in the undergraduate design studio sequence, the graduate studio sequence begins with short focused design exercises and culminates in a multi-story urban building. Graduate design studio materials can be found through this link.

ARCH 680 | 1st STUDIO: ELEMENTS OF ARCHITECTURE (PAVILION)

The first graduate design studio begins with explorations of interactions between built elements and natural phenomena of water, air, earth and sunlight. Students learn the principles of ecological design and symbiotic relationship between buildings and the environment in small, focused exercises that address solar geometry, orientation, site geology, water-shed conservation, and natural ventilation principles. By the end of the first term, students have designed a small pavilion to feature an agricultural product of Oregon. The pavilion demonstrates ecological principles of building orientation, water conservation, ventilation, and solar geometry.



ARCH 681 | 2nd STUDIO: ARCHITECTURE OF COMMUNITY (WOODWORKING SCHOOL)

The second studio in the graduate sequence is a school of woodcraft located in a semi-industrial neighborhood. A study of this urban site is an important part of this studio. Students develop schemes that integrate ideas from their concurrent courses in spatial composition and building construction. Their final project for building construction is a detailed section of their design project. They are introduced to egress and ADA requirements.

ARCH 682 | 3rd STUDIO: ARCHITECTURE IN THE CITY (CULTURAL CENTER)

The third studio in the introductory graduate sequence emphasizes the development of a clear method of thinking and working toward creative building solutions that are integrative of activity, space, structure, materials assembly, and site. The focus is on issues of spatial ordering and place response, while accommodating human activity and supporting programmatic need in buildings with spatial and material character. Students learn to develop an urban building in response to the existing built context and incorporate issues of solar shading, daylighting, egress, vertical and horizontal circulation, and appropriate structural systems.

ARCH 683 | INTRODUCTORY GRADUATE DESIGN FOR TRACK 2

The M.Arch Track 2 students have one introductory studio before entering the intermediate studio sequence. This studio addresses the role of design to expand perception and response to issues in architectural design, as well as design as an exploration of fundamental theoretical ideas. Studio projects require comprehensiveness and integrative study as well as a thorough introduction to sustainable design and passive/low-energy architecture.

GRAD AND UNDERGRAD INTERMEDIATE TO ADVANCED DESIGN SEQUENCE

ARCH 484/584 | INTERMEDIATE ARCHITECTURE DESIGN STUDIOS

We believe that agency and choice in the educational experience is fundamental to the intellectual development and self-actualization of our design students. During the 3rd and 4th years of the undergraduate program, and the 4th through 8th terms of the graduate program, students can choose from an array of design studios. These topical studios vary in project type, site location and schedule. Visiting instructors and regular faculty members often bring their particular focus to the studio giving students exposure to the breadth of the profession, and a chance to delve deeply into a particular aspect of architecture. Projects in these studios are frequently drawn from design competitions as well as projects on the boards of regional practitioners.

ARCH 485/585-486/586 | TERMINAL PROJECT ARCHITECTURE DESIGN STUDIOS (CAPSTONE)

The final two-term studio sequence is the time where students synthesize what they have learned in previous studios and subject area courses. It is also a time when they can focus on issues of importance to each of them. The projects for these studios differ, but all have a common level of size and complexity. The credit for these studios is greater by 2 units than the introductory and intermediate studios. The expectation is that students take more responsibility for developing the program briefs, conducting site studies, investigating precedents and learning about the codes and other regulations that impact design. The second term of the sequence is design development. Issues covered include structure, construction, access and egress, and environmental issues. Faculty utilize a check list of Studio Criteria that must be addressed through the terminal studio sequence.

ASSESSMENT - PC.2

We are assessing the success of PC.2 through a comprehensive review of studio evaluations. Since all UO Architecture studios are Pass / Marginal Pass / No Pass, we are assessing the number of students who are passing each studio (not including marginal pass). The benchmark is that at least 80% of undergraduate students and 90% of graduate students are passing any given studio. We will also evaluate the studio rubrics which were implemented in the Terminal Studios for internal and external reviewers.



One of the roles of our new Architecture Advisory Group of professionals will be to provide input on the quality of the design capacity of our students.

We are also informally assessing the following courses as seminar and lecture courses that address the design process:

Undergraduate:

ARCH <u>201</u> Intro to Arch ARCH <u>202</u> Design Skills ARCH <u>450</u> Spatial Composition

Graduate:

ARCH 611 Graduate Design Process (Track 1)

ARCH 550 Spatial Composition

SELF-ASSESSMENT - PC.2

In AY20-21, of the total student population, 9 of 543 students received marginal passes during (1.65%) and 8 of 543 received no pass (1.47%). However, when we look more closely, 7 of 84 students in ARCH 284 (8.3%). This makes sense as this is where B.Arch students tend to discover whether they are cut out for architecture or not. We also had 3 of 60 students in ARCH 584 (5%) who received No Pass. This suggests we need to look more closely at why this is occurring.

In the SP21 graduating student self-assessment survey, the average for **Design** was **3.37 of 4**. This was the third highest rating after Ecological Design and Responsibility and Social Equity and Inclusion. However, we have also heard, informally, from a few practitioners that there is some concern that design quality has decreased amongst our students in recent years. In AY21-22, we will be closely evaluating the level and quality of Design of our students. We will be reviewing the studio evaluations, as described above, though we will also be seeking input from our Architecture Advisory Group and our expanded professional community, our alumni, our students and our faculty. The capacity to design is a core value of our program and we need to be certain that amidst all of the other factors that we are addressing within our curriculum, we are continuing to produce students who are skilled designers.

PC.3 Ecological Knowledge and Responsibility

—How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

Program Response:

Addressing the climate emergency and care for the planet are core motivators for our faculty and students. We believe that the fate of the human race depends on how we can create more energy-efficient buildings, as building operations count for 40 to 50% of human carbon emissions. We have structured our curriculum to support learning of the scientific method and evidence-based design which students apply in their design studios. Buildings must be designed, constructed and managed to have significant positive impacts on the health of our planet and our own health. We design for people at the center, so that occupant health and well-being are key values. From an equity standpoint, access to quality environments with light and air are fundamental human rights for every building occupant. All design studios cover basic sustainability principles such as solar siting, natural ventilation and daylighting, and we expect that most student projects address the AIA COTE Framework for Design Excellence.

Our curriculum emphasizes the architect's role in furthering society's ethical responsibility to produce ecologically sustainable environmental design. Ecological design concepts are introduced in the first design studios. These concepts are learned and tested in Environmental Control Systems I and II (ARCH 491/591 and ARCH 492/592) and in the Building Construction



and Enclosure courses (ARCH <u>470/570</u> and ARCH <u>471/571</u>). The subject area of Architectural Contexts: Place and Culture (ARCH <u>430/530</u>), emphasizes both the physical and cultural contexts of architecture and how ecological issues have been, and are being, addressed by societies. Design studios at every level apply this ecological knowledge and emphasize the appropriate response to the environment in its many aspects. Students can choose between several elective courses in this subject area and graduate students have access to the <u>Certificate in Ecological Design</u> - a design-based, interdisciplinary program focused on the development of a practical framework for the integration of the built environment with local and region-specific natural systems.

Our students address Ecological Knowledge and Responsibility in many required and elective courses within the B.Arch and M.Arch curricula. The required courses are described below. Students are also required to take one approved advanced technology course in construction, structures, or environmental control systems (full list below). These Advanced Technology Electives are designed to further the student's knowledge and skills in sustainable and ecological design.

ASSESSMENT - PC.3

We assess success in ecological knowledge and responsibility informally through many areas throughout our curriculum. However, we specifically assess student performance in ARCH 491/591: Environmental Control Systems I and ARCH 492/592: Environmental Control Systems II. In each course, we assess student grades on group projects as well as on the midterm and final exams. Our benchmark for success is 75% of undergraduate students achieving 70% or better on the projects, midterm and final exam and 75% of graduate students achieving 80% or better on the projects, midterm and final exam.

DESIGNING TO MITIGATE CLIMATE CHANGE RESPONSIBILITY

ARCH 491/591 | ENVIRONMENTAL CONTROL SYSTEMS I

This course focuses on building design strategies that are first passive (architectural) solutions. including environmental design topics of buildings and communities with regard to energy use, climate responsive design in non-western cultures, thermal comfort, cognizant codes and standards, renewable energy, measurement and verification, active (mechanical/electrical) systems, and the tools needed to understand an ecological approach to design. It is ethically imperative that every architect have a sufficient understanding of building design as it relates to carbon emissions to address climate change. Environmental Control Systems I introduces students to standards and guidelines that apply to buildings as well as fundamental principles of energy use and efficiency, indoor air quality, thermal comfort, and passive design.

Lectures explore principles, concepts, and related ASHRAE Standards that are used by various fields of AEC in the delivery and construction of buildings and the guidelines used in certification programs for green buildings. The lectures introduce students to the following topics, concepts, and strategies:

- Thermal comfort: students are introduced to basic variables of dry bulb, relative humidity, air velocity, mean radiant temperature and personal variables such as metabolism and clothing values, and the expectations of ASHRAE standards for thermal conditions.
- Passive Solar Heating Systems: students are introduced to basic variables of climate, design temperature, heat loss, thermal mass, solar potential, solar geometry, orientation and design strategies that use no purchased energy for heating.
- Passive Cooling: students are introduced to basic variables of climate, design temperature, heat gains, heat sinks, strategies: cross- and stack- ventilation, evaporative cool towers, earth shelter, earth tubes, roof ponds, night ventilation of thermal mass and design strategies that use no purchased energy for cooling.
- HVAC Systems and Indoor Air Quality: students are introduced to proper ventilation rates and patterns of air flow, carbon dioxide guidelines for occupancy, VOCs and off-gassing,



- guidelines for particulates and optimum filtration for health and respiration and the expectations from ASHRAE for proper ventilation and acceptable indoor air quality.
- Net Zero Carbon: students are taught how to calculate operational energy and carbon
 emissions, how renewable energy will replace fossil fuels, metrics such as energy utilization
 index (EUI), and expectations for energy-efficiency in the design and construction of new
 buildings and their systems using the ASHRAE energy standard for buildings

Concepts are assessed by weekly quizzes, project assignments, and final exams. Lab sections involve reinforcement of concepts and principles through hands-on activity and application, such as in-class worksheets for calculations directly applicable for studio, observation and measurement using state-of-the-art equipment and tools from the Baker and NetZed Laboratories, building scavenger hunts to find HVAC equipment and delivery systems, a balance point game where teams compete with purchased materials to raise the temperature of a box; and finally a design charrette at the end of the term to apply the strategies learned.

ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

This course focuses on the design of buildings that are responsive to the environment and integrate natural energies in the design of high indoor environmental quality in spaces that celebrate the senses. The course introduces students to the fundamental knowledge related to the design of spaces that provide indoor comfort for human performance and health in the areas of daylighting, electrical lighting, acoustics, fire safety, egress, vertical circulation, as well as recycling water and waste for buildings. All these topics are conceived from an environmental stewardship perspective that considers the health of occupants and the health of the planet. Energy and carbon-conscious design solutions are introduced with the specific knowledge to apply them in the design of high indoor environmental quality spaces. The course is delivered using an interactive lecture format with supplemental design labs, in which students engage in independent and team project-based research and application of knowledge. Students are assessed using a variety of approaches in individual and group activities during lectures, ECS2_design lab, homework, projects, mid-term exam, and final exam. Research and team collaboration activities are elements of evaluation and assessment of student achievements in the course. Peer teaching between students is an essential part of the class.

The course is structured around the following concepts and activities:

- Human-centric indoor environmental quality, lighting quantities, lighting qualities, and glare assessment
- Daylighting feasibility, aperture design types, and details
- Electric Lighting sources and lighting power budgets
- Luminaire types and design
- Electric Lighting layouts and calculations
- Acoustical quantity and quality and field studies
- Fire safety systems, egress systems and control.
- Net-Zero water, waste recycling, piping, delivery and control

The term project of ECS2, is a collaborative team project (3-4 student teams), which is broken down into four hands-on projects for evaluating and re-designing a famous building (well documented via web resources), a building/space on campus or a public building in Eugene. The term project applies the scientific method by tasking student teams to conduct a research investigation driven by developing a problem statement, hypothesis or research questions related to the sensory and building performance aspects of a given space. The team develops a data collection procedure to support the hypothesis proposed, developing solutions and alternatives, testing them using an experimental approach, and analyzing the results into an evidence-based re-design proposal.

Students work in teams throughout ECS2. They are assessed on how they split the tasks among group members and collaborate based on a group work contract to achieve the desired goals.



The four phases of the term project use a layered approach of a design process that applies each of the environmental systems studied in this course as follows:

- (1) The first phase starts by choosing an existing space and evaluate its sensory experience and spatial conditions developing questions or hypotheses of its day/electric lighting, acoustics, and water use/harvesting qualities as well as how it could be improved to function better;
- (2) For the second phase, the team focuses on daylighting as a design strategy to enhance the quality of the space. The team evaluates the existing daylighting conditions of the space and hypothesize about its efficacy. This is followed by a re-design of the daylighting system of the space and testing it using daylighting models;
- (3) the third phase focuses on the electric lighting layer of the space and how it complements and works with daylighting as an integrated lighting system. For this phase, the team designs a new custom-made luminaire, tests its performance, calculates, and re-designs the electric lighting system and proposes a new layout for the luminaires in the space;
- (4) following that, the team conducts a post-occupancy evaluation of the acoustical conditions of the existing space, including interviews and perceptions of its occupants' sound qualities. The team tests and calculates the quantities related to reverberation time and proposes alternative materials for the re-design of the acoustical qualities of the space.

For the final submission of the term project, the team produces a final schematic design with specifications for the re-design of the space. The final design reflects on the four previous investigations and integrates them into a final re-design proposal for the space. As part of the final project submission, the team also integrates issues that were explored in the labs related to fire safety, water, waste, and plumbing to produce an integrated design for the space. All four phases are documented in the final report and poster presentation that highlight the results of the four research/design investigations and presented to the class during the final examination period. The ECS2 project grading rubric highlights how students are assessed on research and innovation in ECS2.

ECO-KNOWLEDGE AND RESPONSIBILITY IN OTHER COURSES

ARCH 430/530 | ARCHITECTURAL CONTEXT

Architectural Context explores the historical, economic, cultural, environmental, and ecological context of the built environment. Students consider not only the relationship between the user and the building, but also how the building affects systems on a larger scale. Buildings can act as habitats for local species, site designs can avoid existing waterways to preserve their ecosystems, and carefully selected materials can lessen a building's impact on the global environment. This course teaches future designers how important it is to design sustainable buildings.

ARCH 470/570 | BUILDING CONSTRUCTION

Building Construction, also discussed in SC.1, SC.3 and SC.4 provides an overview of building construction systems, from light wood framing to masonry. The primary purpose of this course is to introduce students to the basic elements of a structural system, though students are also introduced to the environmental impacts of each material. The goal is to enable them to understand the environmental impacts of decisions they will make regarding construction systems.

ARCH 471/571 | BUILDING ENCLOSURE

Building Enclosure, also discussed in SC.4, teaches students how to design a building envelope that helps maintain the desired interior environment. Lectures and the required texts, namely *Passive House Details: Solutions for High-Performance Design*, encourage environmentally sustainable design solutions. In the first project, students are asked to design a mountain home that aligns with passive house standards. Students learn the environmental impact of different



materials so they can make informed decisions. Above all, students are taught to control the environment with the envelope as much as possible to avoid compensating with unnecessary use of active environmental control systems.

STUDIOS

ARCH 283 | ARCHITECTURAL DESIGN I

Beginning with our introductory studios, our students are taught how to design sustainably while they learn about basic design tools. Architectural Design I explores Bauhaus alongside the idea of harmonizing with earth, wind, and fire. From the start, we teach students that designing with nature is the key to successful building design. The best design compositions are not only visually aligned with nature, but also functionally aligned due to low embodied energy and a low carbon footprint.

ARCH 384 | ARCHITECTURAL DESIGN IV

In the final introductory B.Arch studio, students are expected to heavily integrate their site analysis into their final designs. Students are encouraged to use passive heating and cooling strategies. They are also expected to design with sun angles in mind and take advantage of daylight to provide as much illumination as possible, without heavily compromising the thermal integrity of the building.

ARCH 681 & ARCH 682 | INTRODUCTORY GRADUATE DESIGN

In our introductory graduate studio sequence for M.Arch Track I students, our students are taught to integrate energy-conscious and sustainable design strategies in a phased approach. The studio sequence introduces elements of solar geometry, orientation, and massing and their impact on passive heating and cooling, shading, and daylighting. These systems are a natural follow-up to their introduction to design with elements of nature in terms of earth, sun, wind, and water that are part of their ARCH 680 exercises. Students learn through an iterative approach of design/testing/assessments that the best design compositions are not only visually stimulating but also performative and comfortable through passive architectural solutions that are low in their embodied and consumption energy.

ARCH 683 | INTRODUCTORY GRADUATE DESIGN FOR TRACK 2

As our introductory graduate studio for M.Arch Track II students, the studio projects explore and develop innovative designs to promote the highest standards of human health in the indoor built environment and use an integrated design approach to accomplish this in a manner that simultaneously improves overall environmental quality. The expectation for this studio is to submit fully developed submission to the AIA/ACSA COTE Top 10 Student Competition, therefore addressing all aspects of the Framework for Design Excellence. To support integrated design, we teach non-linear design approaches, favoring cyclical processes. Students shift scales from macro to micro and back to macro. The design effort is expected to be supported by evidence from simulations (energy, thermal, daylighting, circadian), selected readings and secondary research, discussion, field trips and building and landscape systems input from subject-matter expert guest speakers.

ARCH 485/585 & ARCH 486/586 | TERMINAL STUDIO

In ARCH 485/585 Advanced Architectural Design I and ARCH 4/586 Advanced Architectural Design II B.Arch and M.Arch students are expected to demonstrate their knowledge of ecological principles and to integrate their consideration into their design process and products. Site analysis, including climate, topography, sunlight, and special biological conditions of flora and fauna, is performed for each project and the findings inform specific project siting, choice of structural and environmental systems and materials in order to make the buildings adaptive to their environments, energy efficient, and resilient, i.e. sustainable. The Department's focus on sustainability is reflected in the rubric for assessment of student performance in these studios, in which students must achieve at least a satisfactory performance level in Sustainable Design to be awarded a passing grade.



ARCH 484/584 | INTERMEDIATE DESIGN STUDIO

In the intermediate vertical design studio, students apply the knowledge gained from introductory courses in sustainable design and building constructions in their projects. Typically, students take these studios after completing Arch 4/530, 4/570, 4/591, and 4/592. In these studios, they expand on their knowledge of sustainable place-making and learn to apply more integrated concepts and test them using BIM and Environmental Systems Simulations. Examples of research-oriented 4/584: Museum of Climate Change (Rockcastle), Solar Decathlon Studio (Elzeyadi), Net-Zero Schools (Elzeyadi), COTE Top-Ten Competition Studio (Hahn). Many of our studio projects from these studios (e.g. Solar Decathlon Studio) have won first prize and Grand Jury prizes in the last Solar Decathlon Cycles for 2020 & 2021.

APPLICABLE ADVANCED TECHNICAL ELECTIVES

- ARCH 4/510 High Performance Buildings (Elzeyadi)
- ARCH 4/510: Passive House Design and Details (Kwok)
- ARCH 4/510: Building Health (Van Den Wymelenberg)
- ARCH 4/510: Aalto's Daylighting (Cartwright)
- ARCH 4/510: Natural Building Systems (Hahn)
- ARCH 4/507: High Performance Dynamic Façades (Elzeyadi)
- IARC 4/592: Electric Lighting (Rockcastle)
- ARCH 4/595: Daylighting (Van Den Wymelenberg)
- ARCH 4/594M: Passive Heating Seminar (Rempel)
- ARCH 4/593M: Passive Cooling (Rempel)
- ARCH 620: Research Methods in Sustainable Design (Kwok)
- ARCH 633: History and Theory of Sustainability (multiple: Elzeyadi, Gillem, Kwok)
- ARCH 678: Advanced Research Methods in Sustainable Design (Rockcastle)

ARCH 607 | CONTEMPORARY ISSUES IN ARCHITECTURE (M.Arch Track 2 Seminar)

This graduate seminar (also mentioned in PC.4) calls upon students to engage in theoretical and historical ideas that shape materials, buildings, and urban form synergized with patterns of environmental, social, healthy, technical, and economic perspectives in sustainable design, as well as a critical formulation of definitions of sustainability. The course draws upon models, frameworks, tools, metrics, and participatory techniques (e.g. charrettes, impactful oral presentations supported by graphics, debates, and writing) to quantify and qualify these models. In-class time is generally be devoted to actions rather than being lecture-based. The course is intended to provide a framework for students to develop individual and collaborative practices to question assumptions and establish values for their work. This course has initiated potential research agendas for the students in the M.Arch Track 2 program. The foundation of this course is be guided by readings, presentations, use of tools and calculators, and metrics using the AIA COTE Framework for Design Excellence ten principles and accompanying questions to inform progress toward a zero-carbon, equitable, resilient, and healthy built environment – intended to support future design work in studio and practice. Invited colleagues also present their research and scholarship to students in this course.

RESEARCH CENTERS FOCUSING ON ECOLOGICAL KNOWLEDGE AND RESPONSIBILITY

Our faculty lead several centers, labs and institutes and labs that address ecological knowledge and responsibility. Hundreds of our students have worked in these centers, institutes and labs and bring their hands-on knowledge to their academic and professional career.

- Baker Lighting Lab
- Biology of the Built Environment (BIOBE)
- Energy Studies Buildings Laboratory (ESBL)
- High Performance Environments Laboratory (HiPE)
- Façade Integrated Testing Facility (FIT)
- Institute for Health in the Built Environment (IHBE)



NetZED Laboratory

SELF-ASSESSMENT - PC.3

We are deeply committed to ensuring that our students graduate with unparalleled levels of understanding and integration of **Ecological Knowledge and Responsibility**. We seek to constantly increase the currency of our ecological content to best prepare our students to address the critical roles that all designers have in forming our built environment with a focus on the environmental and ecological impacts of all design decisions. In the Graduating Student Self-Assessment Survey, this received the second highest rating (3.57 of 4) (after Social Equity and Inclusion). In addition to all of the factors listed above, this is validation that our students also feel they are graduating prepared to address Ecological Knowledge and Responsibility.

PC.4 History and Theory

—How the program ensures that students understand the histories and theories of architecture and urbanism, framed by diverse social, cultural, economic, and political forces, nationally and globally.

Program Response:

History and theory are critical parts of our curricula and are included in most courses, not only in specific courses on architectural history. Architectural history courses are primarily offered by faculty in the Department of History of Art and Architecture (ARH). All B.Arch. students are required to take ARH 314 History of World Architecture I (Pre-history to 1400) and ARH 315 History of World Architecture II (1400 to the present), along with two additional architectural history courses from a set of approved ARH electives. ARH 314 and ARH 315 include both Western and non-Western material. All M.Arch. students take a minimum of three architecture history courses that expose them to ancient, Renaissance, and modern architecture traditions, with at least one that specifically covers non-Western traditions. Courses that combine art and architecture must have at least half of the content addressing architecture to count towards the requirement. Students may also opt to take courses in allied disciplines, such as selecting from a two-term Landscape Architecture History sequence, or History of Interior Architecture.

The three courses of the Design Arts sequence introduce students to architectural principles and theory within the context of thematic principles (in contrast to traditional historical teaching which is covered in other courses). *ARCH* 450/550 *Spatial Composition* focuses on the relationship of spatial principles to architectural organization and meaning, *ARCH* 440/540 *Human Context of Design* focuses on addressing individual and group user needs, and *ARCH* 430/530 *Architectural Contexts* focuses on cultural and place-based factors. These courses all incorporate contemporary social concerns and transcultural examples in an historical and theoretical context.

B.Arch students begin their academic career with ARCH <u>201</u> Introduction to Architecture which introduces basic principles of architecture.

M.Arch Track 1 students take *ARCH* 610 *Global Modern Architecture* in their initial summer term. This course looks critically at the themes of modernism and identity in global architecture. It was developed as a response to the 2103 NAAB VTR. This course prepares our students to approach architecture from non-western, cross-cultural perspectives. In our next curricular update (AY21-22), we will consider making this a required course for all B.Arch and M.Arch students.

M.Arch Track 2 students' transcript is assessed by the Director of Graduate Studies to evaluate which history and theory courses have and have not been completed. They are then required to take any missing courses.

ASSESSMENT - PC.4

Given the broad areas of content that are included in History and Theory, PC.4 is assessed with final course grades. PC.4 is assessed within the B.Arch curriculum based on students' final grade in ARCH <u>201</u>, ARH <u>314</u> and ARH <u>315</u> as well as the final grades from the three courses in the



Design Arts Sequence: ARCH <u>430</u>: Architectural Contexts: Place and Culture, ARCH <u>440</u>: Human Contexts of Design, and ARCH <u>450</u>: Spatial Composition.

PC.4 is assessed within the M.Arch Track 1 curriculum based on students' final grade in ARCH 610: Global Modern Architecture as well as the final grades from the three courses in the Design Arts Sequence: ARCH 530: Architectural Contexts: Place and Culture, ARCH 540: Human Contexts of Design, and ARCH 550: Spatial Composition.

Many Track 2 students get credit for History and Theory courses, but most take some Design Arts courses. PC.4 is assessed within the M.Arch Track 2 curriculum based on students' final grade in the three courses in the Design Arts Sequence: ARCH 530: Architectural Contexts: Place and Culture, ARCH 540: Human Contexts of Design, and ARCH 550: Spatial Composition.

The benchmark for all courses is 75% of undergraduate students achieving 70% or better and 75% of graduate students achieving 80% or better.

Information on courses is provided below. To address concerns about coverage of non-Western traditions noted in the 2013 NAAB VTR, *ARH* <u>314</u> and <u>315</u>, and *ARCH* <u>610</u> have all been updated to include non-Western topics.

ARH 314 | HISTORY OF WORLD ARCHITECTURE I

The History of World Architecture I explores building practices around the world dating from pre 3000 BC to 1400 CE. One of the primary goals of ARH 314 is to teach students how to recognize the effects culture has on architecture, thus understanding why architecture varies across space and time.

ARH 315 | HISTORY OF WORLD ARCHITECTURE II

History of World Architecture II picks up where ARH <u>314</u> leaves off and explores architectural practices from the 15th century to the modern era. This course has evolved over time to incorporate an increasing number of non-Western architectural styles. This includes the evolution of architecture in Sub-Saharan Africa, Pre-Contact America, Islam in West and Central Asia, Ming China, and Edo Japan.

ARCH 610 | GLOBAL MODERN ARCHITECTURE

This introductory course looks critically at the themes of modernism and identity in global architecture. Identity is defined as the characteristics which distinguish one entity from another. The course considers how architecture embodies the identities of individuals, organizations, regions and nations and critiques how these identities play out in a 'modern' and 'globalized' world. The course explores how issues of identity are related to culture, climate, technology and available materials, how ethnic and cultural traditions interface in a 'globalized' world and how architects have addressed themes of Identity in their work. Beginning with definitions and a timeline, students examine the distinguishing characteristics of architectures that embody modernism and some of the theories that framed them. The focus is on mid-nineteenth through twenty first century with an emphasis on culture and meaning, locally and globally.

(Note that the course number 610 is temporary and a permanent course number will be assigned in AY21-22).

DESIGN ARTS

The three course Design Arts sequence includes: *ARCH* <u>430/530</u> *Architectural Contexts: Place and Culture, ARCH* <u>440/540</u> *Human Contexts of Design, and ARCH* <u>450/550</u> *Spatial Composition.* This sequence provides a comprehensive understanding of the contexts within which buildings are designed, built and exist. The courses use historic and contemporary examples, linking architectural history with the design studio. Required for all professional-degree students, and supplementing the architectural-history requirements, these courses help provide a strong theoretical basis to our professional degrees.

ARCH 430/530 | ARCHITECTURAL CONTEXTS



Architectural Contexts: Place and Culture is taught in the first year of the M.Arch. Track 1 curriculum or the second year of the B.Arch. curriculum. This course is separate from but related to the history of architecture. Architectural Contexts covers the social, economic, and political forces that affect architecture. The course material covers urban design, how landscape affects building design, vernacular building, and how buildings are anchored in cities, landscapes, and cultures. It includes several lectures and readings that introduce students to issues of diversity and worldwide building traditions, including vernacular architecture, modernism in non-Western settings, and urban form/urban history that uses examples from Asia, the Middle East and generally the "global south."

Students are assessed through midterm and final exams, as well as short projects that are discussed and evaluated at weekly section meetings that supplement the lectures.

ARCH 440/540 | HUMAN CONTEXT OF DESIGN

Human Context of Design addresses the ways buildings and landscapes of our built environment affect humans' lives amidst a diverse range of users. This course focuses on how the built environment influences human behavior and critically analyzes how these concepts are applied by designers. The lectures include thorough case studies of functional building types in terms of the psychological, social, cultural, and functional expectations that people have for places. Case studies are based on actual places that students visit and analyze. The primary project for this course asks students to select a space of their choosing and analyze how people use that space, and the development of principles for its re-design and improvement. The course includes a lecture on universal design as well as examples from a wide variety of places and cultures.

ARCH 450/550 | SPATIAL COMPOSITION

Spatial composition explores compositional principles in design building typology, and how historical and modern examples demonstrate these typologies and principles. The required projects explore spatial definition within a field, the analysis of spaces, the transformation of a plan into a three-dimensional form, and designing facades. Examples are taken from a wide range of buildings in the history of architecture up to the present and include both Western and non-Western examples.

All students are required to also take two Architectural History elective courses. Some of the course offerings include:

ARCHITECTURAL HISTORY ELECTIVE COURSES

- ARCH 4/507: Mapping Rome
- ARCH 4/557: The Facade
- ARCH 4/558: Types and Typologies: The Urban Building
- ARH 316: Medieval Building Practices
- ARH 325: Islamic Art and Architecture
- ARH 399: Art, Architecture & Identity in 20th century Latin America
- ARH 399: Cities in the Western Imagination
- ARH 4/510: Italian Renaissance Villa
- ARH 4/565: American Architecture II
- ARH 4/507: Architecture in the Expanded Field

SELF-ASSESSMENT - PC.4

History and Theory are integrated into our program through the courses described above as well as through the ongoing input of faculty and visiting speakers and reviewers who engage students in issues that relate to the complex histories and theories of architecture. We have striven to respond to the 2013 VTR that identified the lack of sufficient engagement with nonwestern perspectives. We have added content to the required Art History courses and created a new Global Modern Architecture course. This has been very successful and we will explore whether this course could be incorporated throughout the other degree programs. In AY21-22, we will have a faculty search for an Assistant Professor in Spatial Theory and Placemaking. This



faculty member will focus on non-western perspectives and will help us integrate contemporary issues of history and theory throughout our curriculum.

In our AY21-22 curricular review, we will be exploring many aspects of **History and Theory** within our curriculum. In the Graduating Student Self-Assessment Survey, History and Theory received one of the lower averages (**3.02 of 4**). We will be exploring how effectively our curriculum and program is addressing History and Theory. Our incoming faculty member will help us expand our teaching, integration, and forms of assessment for History and Theory in our program and curriculum.

PC.5 Research and Innovation

—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

Program Response:

From the UO Research page:

We're a member of the <u>Association of American Universities</u> (AAU), meaning we're one of the top 34 public research universities in the nation. We're one of two AAU members in the Pacific Northwest, and the only one in Oregon.

Research is one of the things that makes us who we are. We value the curiosity that drives Ducks to seek solutions to big problems, little problems, and problems that everyone thinks are already solved. With many projects to choose from, our students get access to internships and research opportunities. In fact, 80.5 percent of our undergraduate students participate in some form of research.

PREPARING STUDENTS TO ENGAGE IN ARCHITECTURAL RESEARCH

The University of Oregon is a Carnegie R1 (Very High Research Activity) university with an extremely active research faculty within the Department of Architecture. The University of Oregon (UO) was awarded \$152.4 million in grants, contracts and competitive awards in FY20, an increase of 20.9 percent from the previous year (from UO Research). The Department of Architecture has 7 of faculty who have received \$3.7 million in external research funding in the last four fiscal years (AY18-21). There are nine active Centers, Labs and Institutes in the College of Design that are led by Architecture faculty. Between 2012 and 2021, research funding awarded to Architecture faculty increased from \$500,000 to \$2,520,145. In 2021, our faculty received funding for 23 research projects. In addition, many of our faculty are highly acclaimed, published authors. Our faculty published well-cited and received articles in high-impact scientific and architectural journals (see list here). Many of the leading books in the field of sustainability are written by our faculty. We also have robust M.S. and Ph.D. programs that engages future scholars in the highest levels of research leading to both conference publications/presentations and journal articles. As a result, all of our students have numerous courses with research-active faculty.

Within our program and curriculum, students are required to take several courses that prepare them to engage and participate in architectural research and evaluate innovations within the field of architecture. All students are introduced to social science research methods in *ARCH* 440/540 *Human Context of Design* and this is reinforced in many other courses. In addition, there are numerous, advanced research opportunities available for our undergraduate and graduate students working with faculty or independently. This section documents how required course work, elective coursework, and related research opportunities prepare students for success in the profession and beyond.

Our faculty research and teaching involves both quantitative and qualitative research. All students are required to complete ARCH 491/591 (Environmental Control Systems I; ECS I), ARCH 492/592 (Environmental Control Systems II; ECS II), ARCH 440/540 (Human Context of Design), and 4 credits of Advanced Technical Electives. In both ECS I & II, students' complete assignments in laboratory and field settings on emerging technologies and approaches to



evaluating human comfort and perception using quantitative and qualitative research methods with a focus on how these factors impact energy systems, multi-comfort, and human health within the built environment at multiple scales. In *ARCH* 440/540 Human Context of Design students are required to integrate both qualitative and quantitative research methods to directly engage building occupants, staff, and stakeholders about the health and comfort of indoor spaces through case study investigations. In the Advanced Technical Elective seminars, students work with faculty on current research topics including both technological and process innovations in the field of architecture. Recent topics include: building for health, daylighting design, building simulation, high-performance dynamic façade design, lighting design in virtual reality, digital fabrication, human-centric building performance, and advanced structural systems. Many of our undergraduate and graduate students also actively engage in funded research projects through our faculty-directed centers, labs and institutes, including the Energy Studies in Buildings Laboratory, High Performance Environments Lab, Façade Integrated Technologies Full-Scale Testing Facility, Baker Lighting Lab, Institute for Health in the Built Environment, Urbanism Next, and TallWood Design Institute.

STUDENT ENGAGEMENT IN RESEARCH

Over the past eight years, our Department has seen a dramatic increase in externally funded research, as noted above. These projects are often staffed by both undergraduate and graduate students who are involved in data collection, analysis, and participation in publications and conference presentations. Over this period hundreds of students have worked in our many research labs on funded projects. In a 2018 survey of undergraduate architecture students, 18% of respondents stated that they were involved in research with a faculty member. Notable examples include:

- Human factors lighting and virtual reality research funded by Pacific Northwest National Lab (Rockcastle)
- Indoor microbiology and air quality research funded by the Alfred P. Sloan Foundation, National Institute of Environmental Health & Safety, National Science Foundation (Van Den Wymelenberg)
- Acoustical assemble design performance and testing facility Business Oregon, US Forest Service (VDW, Shiene)
- Mass timber in healthcare and affordable housing, US Forest Service, US Department of Agriculture (VDW, Fretz, Shiene)
- Energy efficiency design and workforce education (VDW)
- Urban design implications of autonomous vehicle research funded by the National Science Foundation (Larco)
- Mass timber performance and life cycle analysis funded by the US Department of Agriculture (Kwok & Sheine)
- Impacts of high-performance work environments on occupant's multi-comfort and health funded by Saint-Gobain Corporation (Elzeyadi)
- Net-Zero schools process and impacts funded by the Energy Trust of Oregon and Department of Energy (Elzeyadi).

The results of this research are routinely brought back to the student body at large through core and elective coursework in large lectures, seminars, and studios. This is in keeping with our dedication to research-informed and evidence-based design teaching. In addition between AY16-20, 413 students enrolled in research-related courses (see list here).

Over the last five years (fall 2016 to spring 2021), 44 graduate students in the department of architecture have held graduate employee positions working with faculty. Of these, 16 were Ph.D. students who were guaranteed terms of research support with faculty. However, 4 of those Ph.D. students independently obtained research positions with affiliated research units as well.

RESEARCH-RELATED OUTREACH & ENGAGEMENT

Students also have opportunities to participate or help organize research-based community engagement events including: Reynolds' Symposium, SAE lecture series, <u>Sustainable Cities Year</u>



<u>Program</u> (SCYP), Urbanism Next, IHBE Build Health Consortium calls and annual conference, TallWood Design Institute industry meet-ups, Net-Zero Schools Lecture Series (DOE & Energy Trust of Oregon) and several others.

ASSESSMENT - PC.5

While research and innovation are taught and engaged throughout our curriculum, we are assessing PC.5 in three courses:

- ARCH 440/540 Human Context of Design
- ARCH 491/591 Environmental Control Systems I
- ARCH 492/592 Environmental Control Systems II

The assessment mechanisms are described below.

ARCH 440/540 | HUMAN CONTEXT OF DESIGN

In this course, students learn about the role of architecture in achieving health, safety, and inclusivity for their occupants. Through lectures, readings, exams, and a term-long project, students research an existing program type and present their understanding of human contexts through an in-depth case-study analysis of a built project in Oregon. The selection of projects is encouraged across a range of building types: educational, health services, service-based, assisted living, community-based, governmental, etc. so that students may learn from each other as well as from their own project. In this course, students learn about research methodology and Institutional Review Board (IRB) procedures through lectures and section meetings to conduct a mixed-mode case-study on their selected built program and project. Students are required to integrate qualitative research methods like interviews, behavior observation, and focus groups with quantitative methods such as surveys and field measurements to directly engage building occupants, staff, and stakeholders in their case study analysis. New technologies are regularly introduced to support innovative research methods, such as web-based survey tools and simulation.

A thorough description of PC.5 Assessments for ARCH 440/540 can be found here.

ARCH 491/591 ENVIRONMENTAL CONTROL SYSTEMS I

In Environmental Control Systems I, students learn to make design decisions that integrate climate, site, and environmental contexts to create passive, low energy, and healthy environments with regard to energy use, climate responsive design in non-western cultures, thermal comfort, cognizant codes and standards, renewable energy, measurement and verification, and the tools needed to understand an ecological approach to design. Through lectures, readings, experiential lab activities, quizzes, and a 5-week building performance case study of an actual building, students are able to examine the consequences of design. Collaborative student teams are required to select a building that evaluates the impact of design in a real building and/or innovative material performance; topics include energy use, shading performance, thermal comfort, indoor air quality, air flow design. In addition to selecting building project, students develop research questions, an hypothesis, appropriate methodology (quantitative or qualitative) using innovative tools, equipment, and/or software, analyze data, and provide an abstract and summary of findings in a conference-style format and research poster.

The assessment mechanisms in Environmental Control Systems I, described further in SC.4 and SC.5, consist of requiring students to engage in research questions to test and evaluate the consequence of existing design in order to inform their future designs through weekly lectures and quizzes on quantitative, qualitative methods, Lab section activities, and 5-week building performance case study project to consider measurable environmental impacts of design in a real building and/or innovative material performance, using state-of the art equipment which is evaluated by the teaching team using a detailed rubric. The benchmark is for 75% of undergraduates to achieve 70% or better, and for 75% of graduate students to receive 80% or better.

A thorough description of PC.5 Assessments for ARCH 491/591 can be found here.



ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

Environmental Control Systems II is a required course that teaches students to integrate the sensory aspects of the environment in the architectural creation of spaces. The course is delivered using an interactive lecture format with supplemental design labs, in which students engage in independent and team project-based research and application of knowledge. The course focus on the fundamental knowledge related to the design of spaces that celebrates our senses and provide indoor comfort for human performance and health in the areas of daylighting, electrical lighting, acoustics, fire safety, as well as recycling water and waste for buildings. All these topics are conceived from an environmental stewardship perspective. Students are assessed using a variety of approaches in individual and group activities during lectures, ecs2_design lab, homework, projects, mid-term exam, and final exam. Research and team collaboration activities are seen as elements of evaluation and assessment of student achievements in the course. Peer teaching between students is an essential part of the class. Assessments will be done through interactive lecture content to support learning, weekly ECS2 design lab, projects and exam questions.

A thorough description of PC.5 Assessments for ARCH 4/592 can be found here.

ADDITIONAL RESEARCH-RELATED COURSES

ARCH 471/571 | BUILDING ENCLOSURE

Building Enclosure offers a comprehensive design methodology for high performance cladding systems at the residential, commercial and institutional scales. This includes emerging principles of building science related to solar control and hygro-thermal performance. Lecture presentations model for students the systematic investigations of materials and systems that they will be expected to make as professionals: sources, means of refinement, fabrication and assembly, significant historic precedents, state of the art applications, and directions for the future. Detailing projects require that the students develop "product knowledge" for the assigned systems and apply them to an integrated design solution. They are expected to carry on with this methodology in their subsequent studio work.

ARCH 484/584 | VERTICAL STUDIOS

All students are required to take 4-5 vertical studios (Arch 4/584) that include an emphasis by faculty related to current events, innovations in the field, and/or faculty research. These often include community engagement and include guest experts with deep disciplinary knowledge. For example, in Winter 2019, students in Sheine/Van Den Wymelenberg studio designed a new 350,000 SF courthouse for Clackamas County that included industry experts in structural engineering, mass timber, hydrological landscape design, passive comfort systems, and energy generation.

In Rockcastle's 2018 Winter studio, students designed a 50,000 SF Museum of Climate Science for research and exhibition in the McKenzie River Watershed. Students researched regional climate phenomenon through the lens of agricultural, tourism, and resource industries and were supported by industry experts in climate change, hydrology, resource management, and electricity generation. Final projects were distributed across a middle and upper watershed site, with proposals that included a tower with air-filtration skin for fire resilience and a multi-level hatchery the integrates flooding as an intentional act of landscape design.

ARCH 4xx/5xx | ADVANCED TECHNICAL ELECTIVES

All students are required to take a 4-credit Advanced Technical Elective. In these research-based seminars faculty make assignments related to their current research.

• In 2020 students in *ARCH 410/510* elective *Building Health* explored the environmental impacts on human health in the context of three crises, affordable housing, climate change, and human health. These students developed a concept of small modular housing that is manufactured off-site, is designed to be completely off-grid (water, sewer, energy), and can be rapidly deployed and redeployed.

NVB

- In 2021 students in ARCH 410/510 elective Building Health explored the environmental impacts on human health in the context of three converging crises, COVID-19, climate change, and community inequalities. These students studied precedents in architecture through the lens of each of these crises, explored interdependencies of the three crises, and worked to identify existing or emerging synergistic solutions. For their final project students worked in teams to develop a proposed book chapter for compendium on healthy buildings focused on a topic of their choice from the syllabus (light, view, materials, microbes, acoustics, thermal) and were expected to contextualize all three converging crises and recommend synergistic design solutions.
- In 2021 students in ARCH 410/510 elective Daylighting learned to develop high quality
 daylighting designs through a series of sketching assignments over the quarter, a series
 of four one week experiments, and a final design or research project. Emphasis was
 placed on iterative daylighting design exploration through rapid experimental approaches
 including sketching with a variety of media, physical modelling, digital modelling,
 photography, and mixed media approaches.
- In ARCH 407/507 Design the Unseen: Research Investigating Health + Energy in Building Design taught by Mark Fretz, students learn to holistically integrate health and energy in the built environment through innovative and unconventional partnerships with architecture firms who are pairing with the students to address specific research problems. Designers must be able to find evidence, validate and apply it, collaborate internally and across disciplines, and continually learn through investigation of built projects using scientific tools that visualize the unseen.

ARCH 407/507 | DIGITAL PRACTICE - Fall 2018 & Fall 2016

The adoption and maturation of digital tools, technologies and techniques among architects, engineers, fabricators and builders is dramatically altering the practice of architecture as well as the discipline's relationship to the tools used to practice. New digital capacities are restructuring the organization and hierarchy of design from autonomous processes to collective workflows. The historical role of the designer as an author, a sole creator, is being replaced with data driven design workflows deeply embedded in a collective digital communication infrastructure. This is creating a number of pressures on the discipline of architecture to reorganize around the opportunities, and risks, of these changes. One of these changes involves defining the role that design itself might play in this shifting process. It is based on the premise that any significant change in the architectural, engineering and construction (AEC) industry will come through a disruptive shift in the culture of the industry driven by the next generation of architects. In Fall 2016 and 2018 students in ARCH 4/507 Digital Practice explored rethinking these new potentials in architectural practice. This course offered students an opportunity to speculate about the nature of digital practice. Through readings, lectures and discussion, students were exposed to the most current thinking on the structure of the building industry with an emphasis on the role that digital communication tools are having in its reorganization. Students were encouraged to think creatively and critically about future options to architectural practice and its relationship to industry - in essence, how to design a digital practice. Students were exposed to various tools for design and production and apply these tools and techniques through a series of small designresearch projects.

ARCH 407/507 | PERFORMATIVE PROTOTYPING: MOBILITY - SP 2018

The changes caused by political, economic, and ecological events continues to show the relevance of portable architecture that satisfies the basic human need for shelter. Designing to accommodate mobility results in a fundamental change in the relationship between Site, that thing we think of a permanent and unmoving, and the other primary systems (Structure, Skin, Services, Space, and Stuff) that define our architecture. In Spring 2018 students in *ARCH 4/507 Performative Prototyping: Mobility* examined the development of portable, transportable, demountable and temporary architecture from prehistory to present day. This examination of the historical foundations of transportable architecture and the impact that technology has had on the development of the systems which support it offered insights into potential solutions to satisfy the



needs of contemporary and future society. This research-intensive advanced technical elective focused on the technical issues involved in the design of ecologically powerful solutions that foster an architecture of mobility. Students worked in teams, as well as individually, to research, design and make prototypes for the primary systems of architecture that considers the requirement of mobility as a guiding principle.

ARCH 407/507 | PERFORMATIVE PROTOTYPING: WOOD CONNECTIONS - SP 2016 Over the past two or three decades, timber engineering and construction has experienced significant and transformative advances, setting wood products up for a comeback to be competitive in building types that have become primarily the domain of steel and concrete. These advances include new engineered wood products, including solid panel products such as crosslaminated timber (CLT), computer numerically controlled (CNC) fabrication, versatile highefficiency timber connectors, and progress in fire protection engineering. With technical progress and increased demand for wood products comes greater economic opportunities. In Spring 2016, students in ARCH 4/507 Performative Prototyping: Wood Connections had the opportunity for the investigation, analysis and discussion of traditional and modern mass timber connections, including their design and application. This was a research intensive advanced technical elective in which students worked in teams to catalog the historical development of traditional heavy timber connections in different regions of the world. Students explored more recent developments that have resulted in more contemporary connection solutions. The research and analysis provided the basis for group design projects resulting in the development of proposed novel connection details. Particular focus was on the structural performance of the mass timber connections, but students also explored issues of constructability, sustainable manufacturing processes as well as aesthetic qualities.

ARCH 407/507 | PERFORMATIVE PROTOTYPING: PRECAST CONCRETE – SP 2015 In Spring 2015 students in *ARCH 4/507 Performative Prototyping: Precast Concrete* explored the performative potential of reinforced concrete. Students were involved in an extensive investigation into the historical foundations of concrete in architecture, the trajectories which led to the 'rediscovery' of concrete in the modern era as well as the current potential as a prefabricated building element through the process of pre-casting. Students utilized a series of prototyping techniques to explore the breath of performative potentials of reinforced concrete. These techniques included digital modeling, finite element analysis, 3D printing, CNC milling of casting formwork, and physical testing of structural elements. Students also explored the potential of topological optimization techniques to assist in form-finding process during the development of various novel precast concrete elements. Students in the course collaborated with engineers and fabricators at Knife River Prestress in Harrisburg OR to develop large scale precast concrete prototypes.

ARCH 407/507 | FABRIC ARCHITECTURE - FALL 2015

In Fall 2015 students in *ARCH 4/507 Fabric Architecture* explored how fabric structures are used in the design of contemporary architecture that results in structures that are respectful and responsive of the surrounding ecology. Students investigated the use of fabric in architecture through lectures, discussions, case studies, research readings and small design projects. This work led to full-scale demonstration projects utilizing a tensile fabric structure. Teamwork and collaboration was encouraged in the design and construction of full-scale demonstration projects. Students used a variety of methods to design, communicate and test their design intentions including form-finding, digital modeling and full-scale prototype mock-ups. Students benefited from working with Kendall Blake, a local sail maker who was expanding his business to include architectural structures. This collaboration was invaluable as students designed and constructed their full-scale prototypes.

SELF-ASSESSMENT - PC.5

Research and innovation can be found in required and elective courses throughout our curriculum as well as throughout our faculty research and the many centers, labs and institutes



they run. Our faculty and students are leading cutting-edge research for our faculty and students as well as for the university and the region. We have strong research partnerships with Oregon State University and we intend to build on these in the future. We are committed to continuing to lead research in sustainability, health, urban design, daylighting, digital technology, social aspects of placemaking and other areas that are critical to the future of our discipline. One area we intend to expand in the coming years is our research and facilities in digital technology. Several faculty are currently working on this initiative.

In the Graduating Student Self-Assessment Survey, the average for Research and Innovation was **3.03 of 4**. We will engage our award-winning researchers to shape how Research and Innovation could be integrated more thoroughly into every student's experience and how we will evaluate that experience.

PC.6 Leadership and Collaboration

—How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

Program Response:

Developing an understanding of approaches to leadership and collaboration occur throughout the education and experience of all Architecture students at the University of Oregon. They are introduced to these skills in *ARCH* 440/540 *Human Context of Design* and these skills are reinforced through the extensive group projects that are integral to our core studios, and throughout the technical courses that our students take. Group work skills are taught in many courses and are assessed in *ARCH* 4/591 ECS I. Leadership is the focus of *ARCH* 417/517 *Context of the Architectural Profession*, where differing forms of leadership throughout the profession are studied. In our courses, collaboration skills are not just expected, they are taught and mentored.

"Leadership" is taught and modeled throughout the University of Oregon. Our alumni are in leadership roles at architecture firms throughout the Northwest and across the globe. One of the primary ways that students learn about leadership is through the organization and leadership of the extensive numbers of student groups in which our students participate. Student organizations include HOPES which began in 1995 and is completely run by UO students. They have put on conferences with internationally renowned speakers every year, including during COVID. While leadership is integral to many experiences, the practice of leadership is explicitly taught during ARCH 417/517 Context of the Architectural Profession, which has lectures and assessment that addresses forms of leadership in architecture.

"Collaboration" is a core value for our program. Our studios are all Pass/No Pass for several reasons, but one primary reason is to remove competition from the student experience within the design studio. Our students are not only asked to participate in group work, but they are taught collaborative work skills. And collaborative learning is integrated throughout the curriculum. Core studios all include collaborative projects. In addition, collaborative research and learning continues throughout aspects of many of the intermediate studios and for research that occurs during Terminal studios. Both core Design Arts and Building Technology courses have assignments that require all students to work in groups. However, in many of these courses, there are specific collaborative work skills that are taught within the curriculum (such as ECS1 and ECS2). The assignments can reach greater degrees of complexity through students delegating and coordinating individual tasks. In many of these assignments, students are assessed on their capacity to work as a group.

ASSESSMENT - PC.6

We assess PC.6 in ARCH <u>440/540</u> Human Context of Design, ARCH <u>491/591</u> Environmental Control Systems I and ARCH <u>417/517</u> Context of the Architectural Profession through specific exam questions and projects in both courses, described below.



ARCH 440/540 | HUMAN CONTEXT OF DESIGN

This course explores the architect's leadership role, and their relationships with stakeholders from the client to the neighborhood communities. Lectures on this topic address interviewing techniques for developing a building program and universal design principles.

This course includes, but goes beyond, designing and building in the United States, It includes incorporating non-Western cultures to teach students about design globally. Ph.D. students discuss their fieldwork abroad in different cultures (Asia, India, Central America), which helps students understand how architects could be effective in other global contexts. In lectures, students learn practices of inclusive participation that can bring diverse groups of people towards a single vision.

Students break into small groups to work with community members through conducting a case study of a place and/or a post-occupancy evaluation. The final outcomes include a written report, a graphic poster and a verbal presentation, and projects are displayed in an exhibit that is shared with the rest of the school (and with the community partners).

The design of this course is detailed under the description for PC.8.

In addition to learning through engaging and educational lectures, the course projects help students apply the course concepts in hands-on settings. Group work, leadership and collaboration are at the center of the Human Context of Design. For example, in teams from 2-4, students work together to organize their research study of a place, carry out literature searches, observations and interviews, analyze data and develop hypotheses for better designs for selected places. Group work is introduced in the first page of the assignment and evaluated by the students at the end. Students confidentially evaluate their own and their teammates' effectiveness in the group, and articulate ways their group process could be stronger.

The final project for this course requires students to work in small groups to complete a complex research project that culminates in a detailed final report and summary poster. This requires application of principles of collaboration to complete and helps students apply the concepts within the course. The major student project is a team project of 2-4 students in which teams do case studies of places (literature search, observation, interviews and surveys, data analysis, pattern development) and post-occupancy evaluations require examination of user demographics, diverse needs, and aspirations. In 2021, students developed competition programs, for which they investigated the past and present manifestations of the place type and proposed the context for explorations for its future as more equitable, more inclusive, more ecological. The projects show evidence that the students worked collaboratively to carry out the research, analyze the data, and propose hypotheses as patterns for improving new designs. Students are introduced to the principles of effective group work at the beginning of the project. There is a confidential check-in midway about how the group work is doing. At the end, students evaluate their own and each other's effectiveness in the group and articulate ways their group process could be stronger.

ARCH 491/591 | ENVIRONMENTAL CONTROL SYSTEMS I

In ECS I, students are led through the first three (of four) projects as individual assignments to build confidence and skills on building performance, heat transfer calculations, and design worksheets. Lab activities are conducted in groups where students learn through hands-on activities and peer-to-peer review/critique to apply and reinforce principles/concepts. For the 4-work case study students team up in groups of 2-3 which has shown to be successful in terms of work balance, communication, and scheduling. The teams complete a "Team Collaboration Agreement," a document that serves as the guidelines and ground rules to help the project team work most productively together over the course of the project. It is intended to manage expectations, set standards of excellence, and establish guidelines on communication. The TCA is a living document and may be updated as the need arises throughout the project. Any updates will be discussed with and ratified by the project team members. The case study project guides the team to choose a relevant topic (e.g. thermal comfort, energy consumption, material use, shading comparisons, air tightness, proposals of renewables, etc.) in a real space/building,



develop a hypothesis and an appropriate methodology using equipment/sensors to collect data to validate or disprove the hypothesis. Case studies are peer-reviewed by the teaching team, exemplars are selected for Case Study Hall of Fame and honorable mention awards, certificates given, and an on-demand case study book published for dissemination.

ARCH 417/517 | CONTEXT OF THE ARCHITECTURAL PROFESSION

This course introduces students to different ways architects lead and collaborate with others in the profession. Lectures explore leadership, teamwork, and the structure of team dynamics. This course also highlights the importance of communication, relationships, and trust.

This course introduces students to key stakeholders throughout the life of a project, and the responsibilities of the architect, owner, contractor, consultants, and sub-contractors in each project phase. This includes different project delivery types, their advantages or disadvantages, typical project schedules, and the roles of each stakeholder. Course lectures explore client leadership, not just the architect's leadership. Lectures cover the importance of research, how an architect works with a client, how architects help clients align their aspirations with their budget, and how the architect acts as the owner's agent during construction. Students learn about the architect's relationship with the owner, contractor, and construction crew. Most importantly, students learn the crucial nature of coordinating documents. This course explains why specs, mock-ups, and substitutions affect the quality of the end result and how important it is to be clear and direct with documentation. Creating and enforcing specifications is a part of an architects' leadership role in building design.

In 2018, ARCH 417/517 Portland introduced a lecture entitled, "How to Build a High Performing Team During the Design Phase." The lecture explores concepts of leadership in multidisciplinary teams and how to set up the structure to help a team perform at a high level. It introduced students to the following concepts:

- · Setting up rules of engagement
- Team chemistry
- Collective decision-making
- The importance of communication, relationships and trust
- Google's Project Aristotle and the important aspect of psychological safety in teams
- Setting up and "drafting" a team requires definition of what work is required
- Lencioni's "5 Dysfunctions of a Team"
- Team environment vs. hierarchical structure
- Working through challenges

A thorough description of PC.6 Assessments can be found here.

ADDITIONAL COURSES THAT ADDRESS PC.6

ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

In ECS II, all students work in teams on a term-long case study project to analyze the lighting, acoustics, water and waste, and fire egress/suppression systems in an existing space. They use a number of tools and techniques to measure and quantify performance of the various systems, suggest re-design retrofits scenarios, and test them. For example, they perform daylighting and glare measurements in the existing space and use a daylighting model with aperture or window treatment variations to test and quantify the improved performance of the different alternatives. In the next project, they critique electric lighting in the same space using the knowledge and principles of the course. The students then design and test a custom-made luminaire, and a lighting layout redesign to evaluate the lighting distribution, quantity and quality of light in the space and its impact on energy conservation. The students also evaluate the acoustical qualities of the space and re-design the materials to improve reverberation time. Finally, they develop a water use scenario and water budget aiming for a net-zero water performance of the space. In addition, they evaluate the fire egress systems and propose suitable ones in case they are



inadequate. Typically, students work in teams of three to four students and their group work is assessed as part of the project.

ARCH 680 | INTRODUCTORY GRAD DESIGN

In the Introductory M.Arch Track 1 studio, students engage in group work and group design projects in week 2 of the term as well as research activities and precedent analysis throughout the term. We offer a weekly collaboration and leadership workshop that combines a lecture, weekly activity, and breakout group sessions. The workshops and lectures were developed and administered by the Holden Center. In addition, this web page was developed as a resource to help students with collaboration and leadership.

SELF-ASSESSMENT - PC.6

We have **Leadership and Collaboration** activities, education and mentorship interspersed throughout our curriculum. However, we are seeking to create a consistent introductory experience for our student populations. Our M.Arch Track 1 students have a specific set of skill-building in collaboration which we intend to expand to our B.Arch and M.Arch Track 2 populations. In the Graduating Student Self-Assessment Survey, the average for this question was **2.95 of 4** with a notable difference between undergrad (2.86) and grad (3.16) responses. This suggests that while we are having success preparing our graduate students in this capacity, we need to more to prepare our undergraduate students to be effective, collaborative leaders.

PC.7 Learning and Teaching Culture

—How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

The University of Oregon, the College of Design and the Department of Architecture all embrace a pervasive culture of teaching and learning. We are a department that demonstrates considerable care, attention, and innovation in teaching and, at both the department and university levels, are aligning our policies—how we evaluate and reward good teaching—and structures—for example, how we organize mentoring (see recent article), the issues we use meeting time to discuss—to reflect that care and attention. Several decisions have been made within our program to encourage non-hierarchical, open-learning situations in which everyone involved is considered a peer, from whom we all have much to learn. Several of our Architecture faculty have been recognized and awarded for their exemplary teaching, including Alison Kwok (ACSA Distinguished Professor and Design Intelligence Most Admired Educator award), Howard Davis (ACSA Distinguished Professor) and Judith Sheine (ACSA Distinguished Professor). The quality of teaching is the result of a culture that encourages teaching and learning in all contexts. We have embedded opportunities for teaching for many graduate students through Graduate Employee (GE) positions. We also have a Ph.D. program in which all students become instructors within our program.

We offer a Technical Teaching Certificate Program in Architecture which focuses on curricular ideas and teaching methods to convey design and technical subjects in architecture. The program is designed for graduate students interested in teaching during their architectural careers, either in the academy, in the profession, or both. The Certificate (24-credits) can be acquired as students pursue a Master of Architecture, Master of Science, Master of Interior Architecture degree programs. Recognizing the need for training to produce qualified design teachers, the Technical Teaching Certificate program was started in 1997 by Emeritus Professors John Reynolds and Edward Allen and is supported by the Ed Allen Technical Teaching endowment. Since 2002, 40 students have received certificates, holding steady at about two certificates per year. The certificate is supported by a 1 or 2-credit class for graduate students, ARCH 661 Technical Teaching in Architecture, offered in the fall and winter with enrollment at 15-25 per term. Though 2020-2021 (remote) enrollment dropped because of remote learning and increased credit load for required courses reduced elective opportunities.

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Many leaders in the field of Sustainable Design have either studied or taught at the University of Oregon. When Ed Mazria (Architecture 2030) won the 2021 AIA Gold Award, he mentioned the impact of his time teaching at the UO in the early 1970's. University of Oregon alums teach around the world in architecture design programs. More than 95 alums are sustainability leaders within their departments and are recognized in their fields of research related to environmental design. In just the last 5 years, nine of our PhD students are now assistant professors in programs. (Excel spreadsheet, last updated in August 2021).

The University of Oregon offers opportunities to support effective teaching, which UO defines as professional, inclusive, engaged, and research-informed. For example, in the past three years Architecture faculty have participated in:

- <u>Teaching Engagement Program</u> workshops and consultations
- <u>Center on Diversity and Community</u> (CODAC) sponsors workshops, writing circles (for faculty and grad students) and other events.
- a week-long UO Summer Teaching Institute devoted to course re-design
- the Online Course Initiative to develop high-quality fully online versions of impactful undergraduate courses
- topical innovator groups—"Communities Accelerating the Impact of Teaching—that create important teaching resources and recommendations for the entire teaching community
- a College of Design writing retreat at the coast in September 2019

The College of Design has initiated a faculty mentoring program in Fall 2021 that includes support for teaching and research. In the early days of the COVID pandemic, Architecture faculty moved quickly to establish an in-house series of workshops and discussions on remote teaching—our faculty saw that remote learning was actually a chance to practice the skills of remote work that are relevant in many careers in the field and to re-frame the transition from what students might be missing to what they could practice and gain. Tom Hahn shared reflections here.

One major university initiative that sets the context for teaching in Architecture is UO's nationally recognized work to change how teaching is evaluated: in short, UO has changed to a multisource, criteria-based system, moving away from over-reliance on numerical rankings that UO and national research indicates is inflected by bias against women and instructors of color. As part of this university-wide move toward the most up-to-date, inclusive and research-based teaching methods, the Department of Architecture uses the Student Experience Surveys in all of its undergraduate and graduate classes, using this data to both to reflect on and improve course content as well as to provide instructors with concrete pathways to improvement in the classroom. These surveys ask for students to respond to concrete teaching practices (instructor communication, clarity of instructions, accessibility, etc) linked to a university-wide "professional, inclusive, engaged, and research-informed" definition of teaching quality that individual units can customize. In spring 2021, administration of the Student Experience Survey, students identified the quality of course materials, instructors' feedback, the balance of challenge with instructor support, and the relevance of our courses as the most beneficial practices that supported their learning. When asked to identify what practices most needed improvement to support their leaning, students most frequently selected "none of the above." (The second most commonly selected item was course organization, which gives us an opportunity to talk as a department about what students are perceiving.) The Department of Architecture uses the Student Experience Surveys in all of its undergraduate and graduate classes, both to reflect upon and improve course content as well as to provide instructors with concrete pathways to improvement in the classroom.

The UO Senate also approved an <u>Instructor Reflection</u> which was deployed in fall 2019. This tool provides an opportunity for instructors to archive what went well and what might be improved in the future as well as how their teaching aligns with UO's definition of teaching excellence.

Architecture faculty members Alison Kwok, Nancy Cheng, Jim Givens, Tom Hahn, and Daisy O'lice Williams are distinguished members of the UO Provost's Teaching Academy. This



leadership body meets quarterly to elevate UO's teaching mission. Members are recipients of teaching, advising, and research mentorship awards; faculty who've participated in UO's premier teaching development activities; and fellows in topical teaching and curricular innovation CAIT groups.

UO encourages faculty to continually improve their skills and capacities as educators. The Office of the Provost offers many opportunities to improve teaching which our faculty are involved with. Michael Zaretsky, Nancy Cheng, and Daisy O'lice Williams were selected for the UO Leadership Academy which provides organizational management, professional development and networking opportunities. Cheng and Williams have participated in Writing Circles which are provided for faculty to work on research and scholarship in cross-disciplinary groups. Faculty have also participated in the UO Summer Teaching Institutes. Many faculty seek out these opportunities.

Several architecture faculty members have received <u>University Distinguished Teaching Awards</u>: Howard Davis (2011), Alison Kwok (2016); <u>2020 Campus Sustainability Award /Excellence in Teaching</u>: Tom Hahn; Innovation: Nico Larco.

We also offer numerous opportunities for our students to learn effective teaching methods. We have several peer-to-peer teaching programs including in ECS1 where undergraduate teaching assistants are nominated and recruited for support positions in experiential lab sections. Students are provided 3-day training with course instructors, GEs, and visiting faculty from other schools. Students volunteer or are take independent study credit (ARCH 409 Prac Univ Teaching). Over the past 20 years, more than 140 undergraduates have participated in the ECS1 training course. Click here for info on the ECS1 teacher training.

The Teaching Engagement Program offers graduate students the <u>Graduate Teaching Initiative</u> (GTI), a structured and rigorous instruction around teaching and learning. In the GTI students are exposed to research-driven best practices for engaging students, attend a host of teaching workshops, receive one-on-one mentoring by the Teaching Engagement Program staff, and develop their own teaching portfolio. Those who complete the core requirements earn a Certificate of Completion and may, if they develop a special project that makes a substantial and original contribution to UO's teaching community, earn an Advanced Certificate of Completion.

ASSESSMENT - PC.7

There are many areas of our program and curriculum where a positive teaching and learning culture is taught, encouraged and developed. However, we are assessing this in two recent surveys that have been implemented by the University – the UO Student Experience Surveys and the Instructor Evaluation Reflections. These offer students and faculty an opportunity to provide meaningful feedback on the quality and experience of teaching and learning. These were started in 2020 so we have only begun to receive results. In addition, these were suspended for some terms during COVID, and delivered remotely last year, which makes it difficult to interpret results. We will develop a benchmark once we have some additional years of data. We will also be updating the Learning Culture Policy, described below.

LEARNING CULTURE POLICY

The following descriptions come from a Learning Culture Policy document that was initiated in 2012 and then under revision in early 2020 when the pandemic hit. The Learning Culture Policy document used to be part of our student handbook and it was available online. It was created from feedback from students, alumni and professionals for the 2012 APR with updates intermittently since then. In Fall 2019, the Department Head held meetings with different cohorts of students summarized in notes for the NAAB Visiting Team. The faculty held a meeting focused on Student Care (01/14/20) that led to a spreadsheet of ideas which will lead into our updated document. One very positive change is that issues about advising from 2012 have disappeared. This process subsided during Covid, though we intend to re-engage this process in AY21-22.

Studios at the Core of the Curriculum



The design studio serves as the primary means of integrating all design issues—social, behavioral, cultural, environmental, contextual, technological, theoretical, economic, political, and professional—necessary for meaningful architecture. Studios are taught by all instructors with diverse expertise so that students can develop a more comprehensive view of practice. Studio projects become common ground for open discussion where all members of the studio community are invited to offer constructive criticism and exchange opinions, knowledge, techniques, and experiences.

To support peer teaching and encourage a spirit of sharing, studio performance is evaluated on a pass/no pass basis only. This eliminates competition for grades and promotes a culture of mutual support and collaboration. Studio instructors conduct individual exit interviews with students and document their evaluations of each student's performance in written assessments using our studio evaluation rubric that addresses both process and product with emphasis on the growth and development of student designers. Exit interviews are opportunities to review the student's progress in the design studio sequence and develop an individualized strategy for addressing any weaknesses identified. Students also have the opportunity to provide midterm and end of the term feedback through the new UO 2020 implementation of the new teaching quality standards and conditions. Through this evaluation process, we promote honest communication while working to improve the success of future studios and the success of individual students and faculty members.

Recommended Design Studio Practices

Working in the Studio

Students work in studios during studio meeting times and, when possible, at other times, to take advantage of informal academic, extracurricular, and social interactions that foster collaboration and strengthen the department's learning community. We strive to create studio environments where participants respect the property of individuals and the university and maintain a professional work environment that supports the creative pursuits of all studio members.

Collaborative Design

Studios include collaborative activities that prepare graduates for professional teamwork.

Involvement with Others

Outside professionals, experts from other disciplines, and community or client representatives are valuable partners in studio design investigations. Students are encouraged and allowed to take a design studio in an allied discipline. Faculty members are encouraged to team-teach with colleagues in other disciplines at the university or at other institutions.

Integrating the Real and the Ideal

Studio investigations that draw from the conditions of particular sites and the needs of people who occupy them help us understand diverse constituencies and places in all their richness. The department encourages studios that engage students in learning from real communities and in meeting their needs.

Interactive Reviews

Reviews are learning experiences that involve as an open, two-way dialogue between students and reviewers with diverse expertise and perspectives. Students should be well prepared for their own review and ready to present at the time and place assigned. It is important for students to attend the entire review session and observe or participate in the reviews of peers. Reviewers offer helpful, constructive comments that address the learning objectives of the studio. Professional conduct that is respectful and supportive is expected from all participants.

Studio instructors are encouraged to use a variety of review formats, selecting those that best serve the educational needs of their students. Faculty utilize multiple review formats including the "Oregon review" which resembles a public poster session, where students simultaneously exhibit their work while invited reviewers meet with individual students or student teams at pre-arranged appointment times. Review discussions take place concurrently, and students usually have more than one discussion scheduled. Between their scheduled appointments, students visit the exhibits



of other studios, participate in one another's reviews, engage in informal discussions about projects, and present their work to visiting friends and faculty. Oregon reviews aim to provide constructive feedback using a less stressful, more supportive format.

Experimentation with Design Methods

We encourage students and faculty to embrace speculative, innovative approaches to learning and teaching that explore new and experimental design methods and media that prepare students for the future of architectural design practice.

Student Teaching

Teaching is one of the best ways to learn. Graduate teaching employees and teaching assistants are important members of our learning community who relate well to their peers and serve as role models for academic success. Additionally, our endowed Technical Teaching Certificate program supports students who might want to teach in practice or as a career. We encourage all students to teach one another and expect every teacher, whether faculty or student, to receive the same respect and professional courtesy. Peer-to-peer teaching and learning occurs in most of our courses through collaborative, group work; in lab sections, and workshops related to courses.

Challenging Every Student to Pursue Excellence

Learning activities are designed to challenge every student at an appropriate level so as to support individual student strengths and help remedy weaknesses. Excellence is the goal for every endeavor.

Personal Responsibility for Success

Every student admitted to the program has the opportunity to succeed, and, if successful, a guaranteed place in the program until graduation. There are no internal application processes designed to reduce the number of students graduating or limit any student's access to program completion. Success is a personal responsibility. Students succeed when they meet all performance objectives in studios and courses, maintain a portfolio of design work, and take an active role in their own development as future architects by responding to the feedback they receive from their instructors.

Time Management and Reasonable Workloads

Reasonable workloads, appropriate to the credit hours assigned to studios and courses, are essential. In addition, instructors in all courses and studios, regardless of emphasis, address time management skills that will help students complete assignments effectively and efficiently. Basic time management skills for design are developed in the introductory studios. If meetings outside of scheduled class times are needed, they will be developed collectively with the consent of all members of the affected community and instructors of other courses that may be impacted.

Students are encouraged to prioritize healthy work habits throughout their time in the program so they can do their best academic work while participating in extra-curricular activities and attending to personal responsibilities. Students with outside commitments, such as athletics, part-time employment, or leadership roles in student organizations, need to manage time carefully in order to achieve academic excellence. Students who are having difficulties with time management are encouraged to meet with the School of Architecture and Environment (SAE) advisor or consult with the UO Teaching Engagement Program Center. See section 5.4.3 for more about oncampus Faculty Development opportunities.

SELF-ASSESSMENT - PC.7

In the Graduating Student Self-Assessment Survey, the average response fpr PC.7 was **3.16 of 4.** This is one of the higher responses suggesting that our students do feel that there is a supportive **Learning and Teaching Culture** within our program. However, this is challenging to assess. The Student Experience Surveys and Instructor Evaluation Reflections are relatively new, we will evaluate the results and also assess whether these data will provide a sufficient assessment of Learning and Teaching Culture within our program. We have several opportunities for students to be prepared to become educators, though we have had to reduce the number of graduate teaching positions for budgetary reasons. We intend to develop a process to address



the Statement on Studio Culture annually with input from our students, staff, faculty and administration. As we move forward, we will continue to explore how Learning and Teaching Culture can be further developed within our program.

PC.8 Social Equity and Inclusion

—How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

Program Response:

The University of Oregon department of Architecture has a long-standing focus of teaching about architecture and its relationship to all peoples. Our faculty and students are committed to addressing issues of equity and inclusion and understanding how architecture can foster or hinder these. Our curriculum emphasizes the architect's role in furthering society's ethical responsibility to design for everyone. We address equity concerns in coursework, through faculty diversity efforts (DSJI), through research-based advocacy, and through leadership in regional and national social-justice initiatives.

All students take two required courses in their first or second years, *ARCH* 440/540 The Human Context of Design, and *ARCH* 430/530 Architectural Context that introduce concepts of equity and inclusion, through their lecture content and projects. A third required course, that students take in their last or next to last years, *ARCH* 417/517 Context of the Architectural Profession reinforces and deepens student understanding of these issues, asking students to recognize ethical issues in how they will choose to practice architecture. Students can also choose to enroll in a variety of elective courses such as Inclusive Urbanism and Architecture and Social Equity.

Within the studio sequences, Issues of equity and inclusion are present in some required studio projects like the ARCH <u>284</u>, first year undergraduate studio, that introduces students to non-western architecture and building concepts by using the vehicle of a bath house as the studio project. Students can fulfill their intermediate design studio requirements with vertical studios that focus on social equity, inclusion, and cultural issues. In all studios, faculty and students cast a diverse net for precedents to inform and inspire the studio's work seeking out exemplar architects and projects from around the world.

In 2019, the School of Architecture & Environment launched the "Design for Spatial Justice Initiative" (DSJI). The initiative is designed to begin to acknowledge that professional schools of design and that design pedagogy in North America have historically disproportionately excluded cultural perspectives outside of European and colonial traditions. The initiative is intended to position departments to participate in remedying these exclusions by recruiting visiting faculty who will use teaching to expand understanding of environmental, social, and spatial justice in design, who will engage communities within and outside of the institution in their research and teaching, and whose scholarship is enriched by their lived experience. In broadening both the teaching faculty and the pedagogy, the initiative builds capacity to take intellectual risks and to advance knowledge, and to build a community that fully includes students, designers, and scholars whose excellence depends on the breadth of their experiences and perspectives. The DSJI Fellows have had a profound impact on our faculty, staff and students. The initiative is unique for connecting the lived experience of faculty to their capacity to bring expanded questions and expertise to design education. This is an important distinction from initiatives meant to change just program demographics and from requirements to make pedagogy more multicultural. This initiative demonstrates the critical inseparability of identity and experience.

In the last 2 years of the program, the initiative has made it possible to hire 16 visiting faculty in the School of Architecture & Environment who each taught and carried out scholarship and public programming from one term to two years. These visiting faculty included emerging scholars such as Menna Agha, who is now Assistant Professor at Carleton University and Karen Kubey, who is now Adjunct Associate Professor at Columbia University. These faculty have also included

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established scholars such as Craig Wilkins, a nationally-renowned scholar of African American architecture at University of Michigan, as well as practicing architects such as Nina Martiz and Robert Clark. These faculty have included scholars and practitioners working from intersectional identities and experiences including as Black, Indigenous, Asian, feminist, African, Nepalese-Canadian, and Lebanese scholars and practitioners. Their teaching and scholarship have included topics such as housing justice, housing/homelessness, multi-species design, post-colonial infrastructure, community design partnerships, spatial justice, and Black cultural representation in architecture. Click here for more on the DSJI Fellows program and for a full list of DSJI Fellows.

In addition to advancing their scholarship and offering public programming, Visiting Faculty Fellows in Design for Spatial Justice taught 46 courses from small seminars to large required lecture courses in Architecture, Landscape Architecture and Historic Preservation, with a cumulative enrollment of 426 students over 2 years. In addition to teaching, each Fellow has a research agenda with start-up funds to support their research, they typically give at least one public lecture and some have done exhibits.

In AY 21-22, the Department of Architecture will host three Visiting Faculty Fellows in Design for Spatial Justice who bring teaching from Latinx, Black, queer, and Asian perspectives on topics of justice and feminism in the space of the Mexican-American border, creative space in community and neighborhood design, design computing, and Black representation in architecture.

The Design for Spatial Justice Initiative is supported by philanthropic funds and is intended to build a foundation for tenure-track hiring that builds on the strengths of Visiting Faculty Fellows in Design for Spatial Justice.

The Department of Architecture has a deep commitment to issues of social activism as evidenced in the <u>Departmental response to Black Lives Matter</u> which included individual faculty pledges. Examples of pledges included several faculty committing to make adjustments to syllabi and add course content that would address social inequity and racism.

The Dean of the College of Design is a founding member of the <u>Deans Equity & Inclusive Initiative</u>. Nineteen architecture and design program deans are members and are working collectively to "nurture a diverse population of emerging scholars teaching and researching the built environment to advance socio-ecological and spatial justice, equity, and inclusion." They are "working together to curate a community of early career faculty from a diversity of backgrounds and experiences, with attention to BIPOC and other under-represented faculty, in order to challenge, expand, and enrich the planning, design, construction, and stewardship of the built environment "Given Dean Parr's role as a founding member, the Department of Architecture is actively engaged in addressing this mission. In summer 2021, the Spatial Justice Fellow, Sami Chohan, is one of the six Deans' Equity and Inclusion Fellows.

The recently awarded Mellon grant for the <u>Pacific Northwest Just Futures Institute for Racial and Climate Justice</u> is a groundbreaking center that directly engages our faculty and students. Faculty member Jerolim Mladinov is a participant who will be teaching studios addressing LatinX housing.

The Pacific Northwest (PNW) Just Futures Institute will be a transformational regional platform for racial and climate justice with collaborations among the University of Oregon (Eugene and Portland), the University of Idaho (Moscow), and Whitman College (Walla Walla, WA). We propose research clusters that foster anti-racist futures primarily in rural areas through collaborative research, publications, community engagement, applied courses, pedagogical experiments, digital platforms, and academic incentives to increase access to higher education for historically underrepresented communities, including Indigenous, Latinx, Black, working class, and first-generation students and faculty. Each partner institution offers specific programs and unique perspectives that we will integrate into a set of shared products.

Working closely with the dean's office and college leadership team, the College of Design Dean's Fellow for Diversity plays a significant role in designing and leading strategic initiatives, including

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implementing the College's <u>Diversity Action Plan</u>. The position leads the college's Equity and Inclusion Committee and manages an annual budget of \$5,000 to support diversity and inclusion projects and initiatives. PPPM Professor Gerard Sanvodal held the position from 2018-21.

The College of Design <u>Diversity Action Plan</u> (DAP) was developed in 2017, with input from community members across the College of Design. The <u>Dean's Fellow for Diversity</u> chairs the <u>Equity and Inclusion Committee</u> and leads strategic initiatives, including implementing the Diversity Action Plan. The plan was restructured and updated in the academic year 2019–20 by the EIC. The plan is posted online <u>here</u>. The DAP has the following goals:

Goal 1: Create an inclusive and welcoming environment for all

- Priority 1.1 Evaluate the current equity and inclusion climate.
- Priority 1.2 Incorporate promising practices that eliminate discrimination.

Goal 2: Increase representation of diverse students, faculty, staff, and community partners at all levels of the university

- Priority 2.1 Recruit diverse staff, faculty, and students.
- Priority 2.2 Retain diverse staff, faculty, and students.

Goal 3: Facilitate access to success and recognition for under-represented students, faculty, staff, and alumni

- Priority 3.1 Eradicate existing achievement gaps for students, faculty, and staff
- Priority 3.2 Provide venues for recognizing and highlighting under-represented faculty, student, and staff academic achievements.

Goal 4: Leadership will prioritize and incorporate diversity, equity, and inclusion in plans and actions.

- Priority 4.1 Prepare members of under-represented groups for leadership opportunities in the college.
- Priority 4.2 Utilize philanthropy and other resources to advance the work of diversity, equity, and inclusion.

In 2019, the College of Design launched a program for self-identified underrepresented faculty of color and allies called the <u>Justice and Equity Design Initiative (JEDI)</u>, which supports and highlights research on equity issues within the design disciplines. A <u>JEDI writing and creative</u> <u>practice retreat</u> that focused on creating a supportive network for faculty of color and allies took place in September 2019.

College of Design faculty members spent a weekend at the Oregon Coast for the first Faculty of Color and Allies Writing Retreat. The retreat was a strategy within the Diversity Action Plan (DAP). High among the college's DAP priorities is recruiting and retaining a diverse faculty. The retreat was one of Sandoval's first projects as the Equity and Justice Faculty Fellow, a position where he also oversaw the implementation of the College of Design's DAP. Recognizing diversity and inclusion as a critical priority, the college dedicated resources to creating this fellow position two years ago to provide intellectual leadership and advance change in this area. College of Design Diverse, Equitable, and Inclusive Community information can be found here.

In 2020, the Department of Architecture initiated a DEI Committee. They have focused on three projects – <u>Enhanced Community College Path</u>, <u>UO NOMAS Chapter</u>, and <u>Refugee Community Inclusion</u> project. These are all making progress as of summer 2021.

Our students are outspoken advocates for social equity and inclusion. Our students are active in many student organizations previously described including <u>Students for the Advancement of Diversity in Design</u> (STAnDD) and <u>HOPES</u>. The 2021 HOPES conference which was completely run by UO students was entitled HOPES X.

HOPES X understands that climate justice is not optional and that every step forward must be imbued with this mission. And, in order to sustain life on this planet, we must fight against the social and economic violence faced and created by its inhabitants. **X**,



the theme of this year's event and foundational framework for future HOPES conferences, celebrates the power of the letter to deconstruct binaries, exposing the systemic wounds, momentous action, joy, and imaginative futures that too often fall to the margins upheld by white supremacy, and yet are the cornerstones of shaping space and the built environment.

UO DEI Resources: UO has many resources to address DEI (<u>description here</u>). We are working to strengthen our connections to the following UO resources to more fully integrate DEI globally into all areas of the department and in support of BIPOC students.

The <u>UO Division of Equity and Inclusion</u> engages all Colleges and units to address DEI throughout their units, programs and curricula. Their work includes cultural humility, a continuum of becoming a thriving anti-racist and fully inclusive institution, and <u>IDEAL</u>. IDEAL works collaboratively to strengthen individual capacity and community bonds to advance the academic mission of the university through Inclusion, Diversity, Evaluation, Achievement Leadership.

ASSESSMENT - PC.8

While there are many courses and initiatives that engage and educate our students in social equity and inclusion, we assess success in PC.8 based on how students understand issues of social equity and inclusion through projects and midterm and final exam questions in the *ARCH* 440/540 Human Context of Design course, described more fully below. Our benchmark for success is 75% of undergraduate students achieving 80% or better on the projects, midterm, and final exams and 75% of graduate students achieving 70% or better on the projects, midterm, and final exams.

We will work with the goals identified by the Diversity Action Plan for 2020-23 in collaboration with our Departmental DEI Committee, the College committee and the UO Division of Equity and Inclusion. We will specifically be assessing social equity and inclusion by evaluating the demographics of our faculty, staff and students. We have had a significant increase in the percentage of BIPOC undergraduate students in recent years, but we are seeking to increase the numbers of BIPOC M.Arch students. We do recognize that the percentage of our BIPOC faculty and staff is low in comparison to our U.S. population. Our goal is to increase the percentage of BIPOC faculty, staff and graduate students in Architecture by a minimum of 5% each year with a total of 15% (at least) over three years. We also want to increase the graduation of BIPOC students from our programs by 5% each year for the next three years.

The Design for Spatial Justice program has been extremely successful in its goals by bringing in new perspectives to our program. Our goal is to continue this program for an additional three years.

We also intend to support student groups that are addressing social equity and inclusion issues such as HOPES and STAnDD. We will meet with students each term to identify how we can support student groups that address social equity and inclusion.

ARCH 440/540 | HUMAN CONTEXT OF DESIGN

Human Context of Design, a course required for all graduate and undergraduate students in their first or second years, integrates issues of social equity and inclusion through lectures, readings, and projects. The first introductory lecture poses the question, "Does this place foster social equity?" as a theme for the term.

The first part of the course focuses on environment-behavior principles and research methods. Principles' lectures address environment-behavior concepts in the context of immense human variability in age, gender, cultural background, abilities: what that means for designers and for the process of designing.

A thorough description of PC.8 Assessments for ARCH 440/540 can be found here.

INFORMAL ASSESSMENTS - PC.8



INTRODUCTORY DESIGN STUDIOS

In all introductory studios (ARCH 680 and 682 for Track 1 graduates; ARCH 238 and 284 for undergraduates) instructors introduce basic ideas about making places safe for all people: egress, fire safety and accessibility are introduced with presentations and handouts. By the third introductory graduate studio for Track 1 students, (ARCH 682), the first introductory studio for Track 2 students (ARCH 683), and the fourth introductory undergraduate studio (ARCH 384], students are required to provide in their projects life-safety egress according to the Americans with Disabilities Act.

ARCH 284 | SECOND UNDERGRADUATE INTRODUCTORY STUDIO

The second undergraduate introductory studio, ARCH 284, introduces students to non-western architecture and building concepts by using the vehicle of a bath house as the studio project. Students begin actively researching other cultures in Assignment 2, case studies on crosscultural rituals of bathing. Students are shown and discuss the film Xi Zhao (Shower), which shows how urban renewal changes Chinese bathhouses. The film features a non-nuclear family and person with mental disabilities, which encourages students to consider a broad range of potential clients. As they develop their projects, students study contemporary examples of bath houses around the world.

ARCHITECTURE HISTORY 314 and 315 | HISTORY OF WORLD ARCHITECTURE

The required core architecture history courses required for all undergraduates introduce students to architecture from around the globe. This required course for track 1 graduate students uses an international lens to introduce students to modern and contemporary architecture.

ARCH 430/530 | ARCHITECTURAL CONTEXTS

Architectural Context, a required course of all graduate and undergraduate majors, covers a wide range of issues, from gentrification to climate change. Throughout the course, lectures highlight socioeconomic inequalities and how architecture reflects and perpetuates them. Invited guest speakers, such as international doctoral students Manas Murthy and Subik Shrestha in 2020, share their experiences and broaden the course's cultural perspective. Lectures on cultural diversity include Globalization vs. Regionalism as context, Living Systems and Vernacular Green, Regionalism as System, and Designing Changing North: Building, Context and Meaning.

ARCH 417/517 | CONTEXT OF THE ARCHITECTURAL PROFESSION

Context of the Architectural Profession, a required course for all graduate and undergraduate students in one of their final two years, includes guidelines for equitable design and including the community in the design process. Both the Portland and Eugene courses cover equity and inclusion, along with guidelines for community engagement. The Portland course uses two ZGF projects, the Broadway Corridor Master Plan and Latino Network, to illustrate the importance of community and public engagement in design.

ELECTIVE COURSES

ARCH 484/584 | VERTICAL STUDIOS

Students can fulfill their intermediate design studio requirements with vertical studios that focus on social equity, inclusion, and cultural issues. Many Oregon studios work with community members who act as clients for the student designers. Below are some examples.

Refugee Housing – Regenerative Design | Hajo Neis | Fall 2018, Fall 2020

 Portland-based studio, Students attend the Portland Urban Architecture Research Lab conference about Migration, Refugees and Pattern Languages Studio, student efforts support the research

Regina Coeli Inclusive Neighborhood | Hajo Neis | Summer 2019

 The core course of the Art History and Architecture study abroad program in Rome, focuses on integrating refugees into the urban center

Rebuilding Cornerstones: Toward Spatial Justice for Portland's Black Diaspora | Karen Kubey, Cleo Davis, and Kayin Talton Davis | Fall 2019



 Portland-based studio, worked with the African American students and community members to envision a plaza and an Archive for their cultural heritage. <u>Article here</u>.

On the Edge: A Net-Zero Elementary School | Ihab Elzeyadi | Winter 2020

 Asks students to design an environmentally and socially conscious elementary school on the U.S./Mexico border

Squatter By Design | Menna Agha | Spring 2020

- Goes past the popular perspective on squatting and asks how architects can serve squatters
- Generated a design-build project for a food bank, Food for Lane County, based on the City Is a House, providing public accommodations for all residents.

Visualizing Health Equity | Karen Kubey | Spring 2020

 Eugene students examined the Jade District in Portland, a neighborhood with higher ethnic diversity, poverty, and asthma rates than the surrounding region

IARC 4-584 Center for the Study of Racism in Oregon | James Givens | Winter 2021

ELECTIVE SUBJECT COURSES/SEMINARS

Students can select from many courses that address social issues. In 2016, "Does this place foster social equity?", and Architecture Professors Howard Davis and Brook Muller co-authored a new course with Planning Public Policy and Management Professor (PPPM) Gerardo Sandoval called AAA 321 Inclusive Urbanism. This course was last taught in Fall 2018 by a visiting Architecture professor and will be shepherded by PPPM Professor John Arroyo in 2020-21. Of the Spatial Justice fellows have taught elective seminars, such as Karen Kubey's ARCH 4/507 "Good Neighbors" winter 2020 course that examined the success of affordable housing developments in supporting equitable communities, and courses by Craig Wilkins, offered in Portland.

CO-CURRICULAR ACTIVITIES

STUDY ABROAD OPPORTUNITIES

The Department has a long tradition of encouraging students to study in places with different cultures in order to immerse themselves in places with different perspectives from their own. The Department works with partners in the division of Global Engagement for degree-seeking and non-degree-seeking international exchange programs. The Department has offered programs in Rome and Vicenza in Italy, in Barcelona, Spain and in Vancouver, Canada. Students also have opportunities to travel with other university study abroad programs, such as the Danish International School (DIS) program in Copenhagen. There have been summer programs in Hong Kong, summer internships in China and exchanges with universities in Singapore, Hong Kong, and Stuttgart, Germany.

In addition, an exchange partnership program has been developed between <u>UO Architecture and Meiji University</u> for the UO Portland campus and the Tokyo Meiji Nakano campus. Students participating in the exchange are focused on urban architecture and urban design.

There are currently plans to develop a study abroad program in East Africa with Professor Zaretsky, who has been working with local communities in rural Tanzania since 2008.

FUNDED RESEARCH

Students also have an opportunity to work on faculty research projects such as these listed below, which highlight the impact of the environment on diverse populations with respect to income, background, culture.

From 2015-2018, <u>ESBL</u> completed a \$1M EPA funded project that explored the air quality before and after home weatherization in two cohorts, median income, and low-income cohorts. Disparities in home performance and health outcomes were documented.

From 2017-2019, <u>BioBE</u> completed a \$1M Sloan Foundation funded project that explored, among other investigations, spatial factors and how factors of inequality shape the indoor and outdoor



microbial compositions. For example, it was discovered that more diverse microbial communities were identified in urban areas with greater park and forest space.

Student research assistants and graduate employees of the <u>HiPE</u> lab have engaged with professor Elzeyadi on <u>Net-Zero Schools</u> design guidelines for marginalized and under-represented communities investigating low cost and zero-energy design strategies impact on building and student performance.

STUDENT INITIATIVES

STAnDD: Students for the Advancement of Diversity in Design

Supporting the Advancement of Diversity in Design (STAnDD) is a gender and equity interest group at the University of Oregon.

There have been SAE funded student projects to highlight issues of inclusions and diversity. A 2021 competition entitled "Supporting community during the time of covid." The winner was a project entitled Come Build A Birdhouse which encouraged students to create bird boxes with messages of hope and solidarity on the Tykeson lawn on the UO campus.

SELF-ASSESSMENT - PC.8

Social Equity and Inclusion are topics that underscore everything we are doing and exploring in our program. As our historic focus on sustainability evolved to engage issues of social justice in recent years, we have come to realize how deeply issues of diversity, equity and inclusion are in our program, our university and our society. The relationship between social justice and the built environment is of utmost importance to our faculty, staff and students. However, it is challenging to effectively assess our success in these areas.

Our goals will be addressed in alignment with the College of Design Diversity Action Plan.

The DSJI Fellows program has been extremely successful at bringing in new perspectives to our program, but we need to do much more to increase the diversity of our student, staff and faculty populations. We also need to do more to integrate non-western perspectives throughout our curriculum. Our students have been leaders for us and we will continue to work closely with our student groups to integrate all perspectives.

In the Graduating Student Self-Assessment Survey, the average for this question was our highest result at **3.75 of 4**, suggesting that students feel confident about issues related to social equity and inclusion.

3.2 Student Criteria (SC): Student Learning Objectives and Outcomes

A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

SC.1 Health, Safety and Welfare in the Built Environment

—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

Program Response:

Human health, safety and welfare are pervasive concerns of our curricula and are included in all architecture design studios, and specific courses in structures, environmental control systems, sustainable design courses and classes concerning the human context of design and the professional practice of architecture. We define **health** as the aspects of professional practice that improve the physical, emotional, and social well-being of occupants, users, and any others affected by buildings and sites. We define **safety** as the aspects of professional practice that protect occupants, users, and any others affected by buildings or sites from harm. We define



welfare as the aspects of professional practice that enable equitable access, elevate the human experience, encourage social interaction, and benefit the environment.

All B.Arch and M.Arch Track I and II are required to take Architecture Design Studios (ARCH 484/584), Design Technology courses (ARCH 461/561 Structural Behavior, ARCH 462/562 Structural Design, ARCH 470/570 Building Construction, ARCH 471/571 Building Enclosure, ARCH 491/591 Environmental Control Systems I, and ARCH 492/592 Environmental Control Systems II), Design Arts Courses (ARCH 440/540 Human Context of Design) and Professional Practice (ARCH 417/517 Context of the Architectural Profession). Students may also opt to take courses on passive house design, daylighting in architecture, residential construction detailing, and minimal dwelling.

The required courses listed above allow students to study different scales and applications of principles regarding human health, safety and welfare. ARCH <u>484/584</u> Design Studios focus on principles of structural soundness, fire egress, and human comfort within the design of various programs and scales of environments given in their program briefs. The required Design Technology courses (listed above) require students to understand structural behavior, structural design integration, the need for thermal control via enclosure systems, and the impacts of climate, energy, heating and cooling, water and waste systems, acoustics and lighting as factors in human comfort. ARCH <u>440/540</u>, Human Context of Design, addresses how places can support health and healing and promote safety in the design of neighborhoods, houses, schools, hospitals, and workplaces. A final required course, ARCH <u>417/517</u> Context of the Architectural Profession, introduces the ethics of architectural practice and reinforces and develops in-depth the core concept that the architect's professional primary responsibility is for public health, safety, and welfare.

Human health, safety and welfare concerns are both broad and specific. Our approach is to address their impacts across many courses to most fully integrate their various technical and experiential design considerations.

ASSESSMENT - SC.1

SC.1 is formally assessed through projects and exams in the following courses:

- ARCH 440/540 Human Context Of Design
- ARCH 470/570 Building Construction
- ARCH 491/591 Environmental Control Systems I
- ARCH <u>492/592</u> Environmental Control Systems II

ARCH 440/540 | HUMAN CONTEXT OF DESIGN

This course addresses health (ADA, healthcare, healthy neighborhoods, healthy buildings - sustainable design), safety (ADA, safe streets, etc.) and welfare (sustainability and resilience to address climate change, equity, etc.) through lectures and projects with specific assessments through exams.

Assessment for ARCH 4/540 is done through the case study project, the midterm exam and the final exam.

A thorough description of SC.1 Assessments for ARCH 4/540 can be found here.

ARCH 470/570 | BUILDING CONSTRUCTION

Building Construction covers aspects of health, safety and welfare as described below:

Health

- Introduction to environmental impacts of building materials, especially relative to climate change and its implications for human health
- Introduction to the human health impacts of certain materials, and benefits of others, relative to indoor air toxins for occupants, manufacturing and construction worker exposure, and long-term disposal or recycling implications



• Introduction to preliminary concepts of moisture and vapor movement in building assemblies, and an overview of strategies, techniques and materials to mitigate and mediate that movement, to reduce human exposure to mold and other pathogens in, and reduce moisture degradation of, building assemblies.

This content is delivered primarily in lecture format, and supported in lab assignments and term project development, and evaluated with the final term project documentation and the final exam for the class.

Safety:

- Introduction to primary concepts and principles of construction and building codes, and testing standards, as well as zoning ordinances
- Introduction to specific aspects of the major model codes dealing with occupancy classification, construction type, fire separation and fire ratings
- Introduction to specific aspects of the major model codes dealing with egress routing and path safety including the major components of the egress system, and basic requirements of stairs, railings and glazing in relation to that system

This content is delivered primarily in lecture format, and supported in lab assignments, as well as coordinated design studio work by studio instructors, and evaluated with exams and the final studio projects.

Welfare:

- Introduction to environmental impacts of building materials, with respect to energy-efficiency (R-values), life-cycle analysis of embodied energy and carbon footprint, with emphasis on the implications for climate change and consequent implications for global sustainability
- Introduction to the how the Americans with Disabilities Act (ADA) fits into the broader set of building construction codes and standards
- Presentation of several of the key elements of the ADA that are often involved in site design and overall massing of a building, including ramp and side-slope requirements, textured paving, and parking design, and egress requirements in relation to accessibility.

This content is delivered primarily in lecture format, supported with lab assignments and term project development, as well as coordinated design studio work by studio instructors, and evaluated with the final term project documentation, the exams and the coordinated portions of the final studio projects.

ARCH 491/591 | ENVIRONMENTAL CONTROL SYSTEMS I

Environmental Control Systems 1 introduces students to principles, concepts, and design strategies for passive and active design of energy use and flows to promote health, safety and welfare as described below:

<u>Health</u>: introduction to environmental variables: dry bulb, relative humidity, air velocity, mean radiant temperature; personal variables: metabolism, clothing, minimum and maximum temperature and air flows for human activity and behavior. Minimum ventilation rates, carbon dioxide, occupancy, VOCs, particulate, filtration, climate change. Relevant standards are introduced and shown how the ASHRAE Standard 55: Thermal Environmental Conditions for Human Occupancy and ASHRAE Standard 62: Ventilation for Acceptable Indoor Air Quality and other relevant standards/guidelines are introduced and shown how they are used in practice.

<u>Safety</u>: introduction to preliminary concepts of heat transfer and moisture and vapor movement in building assemblies, and an overview of strategies, techniques and materials to mitigate and mediate that movement, to reduce human exposure to mold and other pathogens in, reduce moisture degradation of building assemblies, increase durability of the envelope and structure; design of vertical and horizontal transportation systems to ensure Relevant building codes (e.g.



ASME A17. 1/CSA B44-2019: Safety Code for Elevators and Escalators), guidelines, and sustainability programs, such as LEED, WELL, Passive House, etc. are introduced by case study.

<u>Welfare</u>: introduction to environmental impacts of building materials, with respect to energy-efficiency (R-values), life-cycle analysis of the operational energy and embodied energy in materials, with emphasis on the implications for climate change and consequent implications for global sustainability and resilience and equity. Passive design strategies are emphasized and know how is taught in lectures (guided worksheets) and hands-on lab sections. References are made to ASHRAE 90.1 Energy Standard for Buildings.

Content is delivered primarily in lectures, supported with lab assignments and case study project development, and evaluated in weekly quizzes and with the final exam.

A thorough description of the ARCH 491/591 Assessments for SC.1 can be found here.

ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

Environmental Control Systems II introduces students to principles of daylight and lighting design, the acoustics of interior spaces, noise management, auditorium design, water and waste systems, fire egress systems in buildings. The course is divided into four integrated segments: architectural daylighting, integrated electric lighting, acoustics, and water/waste, and fire protection systems as strategies for sustainable building.

The course links research findings to design decisions related to the health and performance of occupants. In addition, the course devotes a module on fire egress and fire safety. Lectures and lab exercises focus on passive and active fire and smoke suppression, containment, and occupant egress design guidelines. The course is delivered using an interactive lecture format with supplemental design labs, in which students engage in independent and team project-based research and application of knowledge. Students are assessed using a variety of approaches in individual and group activities during lectures, ECS2_design lab, homework, projects, mid-term exam, and final exam. Research and team collaboration activities are seen as elements of evaluation and assessment of student achievements in the course. Peer teaching between students is an essential part of the class.

The course introduces students to the following concepts and activities as they relate to human health and safety:

- Human-centric indoor environmental quality, circadian lighting, the impact of light and views on occupant's health and well-being
- Acoustical quantity and quality including noise management and control for air-born and structural-borne noises in buildings. This course module covers sound level assessments as well as codes and standards for sound-transmission class (STI) of different architectural assemblies.
- Fire safety systems, egress systems, and control.
- Waste recycling and hygiene as they relate to gray and black water recycling, testing, and uses.

<u>Assessment</u>: Students are assessed on multi-comfort criteria of indoor environmental quality in buildings, impacts of lighting on health and well-being, acoustical design for enhanced occupant's well-being, and fire egress and protection systems. These topics are assessed using in-lecture interactive poll questionnaires, projects submissions, mid-term and final exams. Knowledge gained throughout ECS2 is assessed in the term project, lab activities, homework assignments, and exams.

The term project for ECS 2 is a collaborative team project (3-4 student teams), which is broken down into four hands-on projects for evaluating and re-designing a famous building (well documented via web resources), a building/space on campus or a public building in Eugene. In the term project, students investigate the impact of daylighting, electric lighting, acoustics, fire egression, and fire suppression systems as they relate to occupant's comfort, health, and well-being in an existing space. Students are assessed on (1) how accurately they measure health



and well-being parameters as it relates to environmental controls systems in buildings; (2) their ability to benchmark the performance of these systems against codes and standards of occupant's health, and well-being; and (3) the design suggestions/retrofits proposed and their impacts on improving occupant's safety, health, and wellbeing. The term project focuses on the following aspects of design for health, safety, and wellbeing of occupants:

- 1. Daylighting and electric lighting impacts on visual comfort, circadian light, glare visualization, lighting autonomy, and feasibility calculation and metrics.
- Acoustical noise standards, reverberation time (R_T), and sound transmission class (STC)
 calculations and metrics.
- Fire safety egression, suppression, and smoke control systems design codes and standards verification.

ADDITIONAL COURSES THAT ADDRESS SC.1

INTRODUCTORY DESIGN STUDIOS - INTERMEDIATE - TERMINAL STUDIOS

In all introductory studios (ARCH <u>680</u> and <u>682</u> for Track 1 graduates; ARCH <u>283</u> and <u>284</u> for undergraduates) instructors introduce basic ideas about making places safe for all people: egress, fire safety and accessibility are introduced with presentations and handouts. By the third introductory graduate studio for Track 1 students, (ARCH <u>682</u>), the first introductory studio for Track 2 students (ARCH <u>683</u>), and the fourth introductory undergraduate studio (ARCH <u>384</u>), students are required to provide in their projects life-safety egress according to the Americans with Disabilities Act. Throughout intermediate studios, the need for adequate life-safety egress is repeated and expected to be evident in all projects, so that by the terminal studio, students demonstrate full understanding of major code requirements in their projects' development.

SELF-ASSESSMENT - SC.1

Our faculty, students and staff are all committed to humanistic concerns of **Health, Safety and Welfare in the Built Environment**. As such, we have sought to cover this content in several courses and applied this content in all studios, to some degree. As we integrate our new technical requirements into the vertical (intermediate) studios, we expect to attain a greater level of iteration and integration of this content. In the Graduating Student Self-Assessment Survey, the average for this question was **3.33 of 4**, one of the highest averages in the survey. We will continue to explore how best to integrate this content across the program and curriculum moving forward.

SC.2 Professional Practice

—How the program ensures that students understand professional ethics, the regulatory requirements, the fundamental business processes relevant to architecture practice in the United States, and the forces influencing change in these subjects.

Program Response:

One of the most important obligations of a professional program is to expand students' awareness of professional responsibility, professional ethics, regulatory requirements, and responsible business practices. Within our Department of Architecture, students are introduced to these aspects of our profession through courses as well as ongoing engagement with professionals. The primary delivery of this content occurs in *ARCH* 417/517 *Context of the Architectural Profession*. However, students also have the option to take a Practicum course (described below) though it is currently not being offered as it is being redesigned. In addition, there is ongoing engagement with professionals who participate in midterm and final reviews on both UO campuses, career fairs, lectures and other ongoing events with alumni and professionals.

ARCH 417/517 | CONTEXT OF THE ARCHITECTURAL PROFESSION

Context of the Architectural Profession introduces students to the wide array of topics that make up the professional practice of architecture. This is done through lecture classes, panel discussions, and reading assignments. Understanding is evaluated with in-class activities, group

NAB

projects, and writing assignments. Professional ethics is introduced through a lecture class and case study discussion. Regulatory standards are discussed in lecture classes on the legal context of practice and licensure and professionalism. The fundamentals of business practice are covered by the breadth of the course through lectures on marketing, public relations, project finance, project management, business and finance for architecture firms, managing a firm, entrepreneurship.

A foundational reading and lecture in *ARCH* 417/517 *Context of the Architectural Profession* examines the origin of professions and the unique societal obligation of the professional to protect the health, safety, and welfare of the public. This theme recurs through the course as we explore the implications of this responsibility at different stages of the design process and through the full life of a project. The concept of the standard of care and standard of practice is discussed, how this is interpreted in different situations, and the professional imperative to apply the standard of care as a legal expectation. Ethical obligations and dilemmas are also discussed, such as comparing owner expectations that may be in conflict with societal expectations, and how to evaluate these situations through an ethical framework. The <u>AIA Code of Ethics</u> is discussed and applied through role-playing. In-class quizzes are used to evaluate students' understanding of these principles.

Regulatory requirements are covered in lecture and assigned readings from the AIA Architecture Students Handbook of Professional Practice and are discussed in class and section. The class examines regulation of architecture by states, including Title and Practice Acts, variations in licensure requirements, as well as the role of NCARB and reciprocity between states. Specific topics include use of the term architect, the practice of architecture, the significance of stamping drawings and specifications, professional liability, role of state boards, as well as disciplinary action and the consequences of misconduct. Evaluation is through in-class guizzes.

Business processes relevant to architectural practice are examined throughout ARCH 417/517. The fiduciary role of the architect is emphasized as a foundation of legal and ethical business practice. The arc of topics over the term creates a context for exploring the many facets of business. We begin by examining how architects obtain work and how clients select architects. In the first project students form teams, creating mock "firms" and respond to a request for qualifications. This 5-week project is a vehicle to understand the centrality of teamwork, the structure of teams, the importance of graphic and written communication, the services and phases of work in a project, as well as construction delivery methods, project schedules, project finance, and cost estimating. The RFQ submissions are evaluated in a rough draft form to provide initial coaching and feedback, and the final submissions are reviewed using a detailed rubric. Submissions are ranked and three finalists are selected for mock interviews in front of a selection panel and the entire class. This allows the teaching team to debrief and discuss with the whole class the breadth of topics and to discuss both written and oral communication as key skills in the profession.

Following the RFQ submission the class examines professional fees and uses the RFQ project as a basis for simulated fee negotiation. Fee structures are discussed, including percentage of cost of construction, scope of work, and typical percentages for phases of work. Using an actual fee calculation spreadsheet from a firm, each team develops a fee estimate for the project in discussion section. Lectures and readings focus on overall business fundamentals of income, expenses, direct and indirect costs, overhead, and profit. We introduce cash and accrual accounting methods and explore how the cash cycle works for professional services. One of the goals is to help students understand how to apply their understanding of business to become more effective professionals and how to add value to firms they seek to work for.

Toward the middle of the term, the class explores contractual agreements and introduces students to the various legal structures among owners, architects, subconsultants, and contractors. Traditional owner-architect agreements as well as design-build and Integrated Project Delivery agreements are discussed using the AIA standard contracts. The second assignment is an individual reading and comparison of the AIA B101 versus an example of an owner's contract (Standard UO Contract) to understand the nuances of contract language and



how they represent the parties' interests. This is an individual assignment asking students to identify terms of the agreements and then to discuss interpretation of the two agreements given hypothetical project situations. The written submission is evaluated based on a rubric of possible responses.

To understand the forces affecting practice, we invite guests in a range of disciplines to give insight from their experience. We typically have a guest presentation from a Real Estate and Construction attorney to talk about risk management, disputes, and legal issues in architectural practice. We have had a range of developers from both non-profit and market sectors speak about project development and finance. Each year, Joel Andersen of Andersen Construction gives a presentation on the evolution and current trends in project delivery. Our final guest of the term is typically a nationally known firm leader invited to speak about leadership in the profession.

ASSESSMENT - SC.2

Given that this content is covered throughout the Context of the Architectural Profession course, the assessment for SC.2 is the students' final grade for the course. The benchmark is 75% of undergraduate students receiving 70% or better and 75% of graduate students receiving 80% or better.

In the future, we may add assessment through the Practicum course, described below.

ARCH 409/609 | PRACTICUM

Off Campus Introduction to Professional Office Practice

For several years, UO has offered a Practicum course in which students get introduced to architecture office experience. However, as of fall 2021, the course is being placed on hold until the structure can be revisited with Eugene Architecture firm representatives. It will be taught again beginning in winter 2022. The description below is based on the model that has been taught until Covid occurred in spring 2020.

Before the class is taught again, there will be an internal evaluation of the course with input from professionals, faculty, students and the Architecture Advisory Group to assess how this course should evolve to address contemporary needs of our students and practitioners. In whatever form the course takes, it is a model for introducing students to the profession of Architecture. Given that it is not currently required of all students, we are not directly assessing the course.

The Practicum Experience is a teaching and professional relationship between the student and the office. It is an opportunity to view and participate in the various professional office tasks and to experience the workings and the processes that occurs in a professional office.

There are a number of Eugene architectural and construction company offices that have volunteered to participate in this program. The students select offices from a list provided by the instructor. The instructor assigns students to each office. The office assigns a mentor for each student. The mentor will be someone within the office who has a minimum of two years of office experience. The mentor's role is to oversee the work of the student and to share experiences.

The student is responsible to develop a work schedule with the office that is mutually acceptable for both parties. This schedule must include a minimum of 9 hours/week for undergraduate students and 12 hours/week for graduate students at the "office".

The office will make every effort to expose the student to the following areas of the office practice and this listing should be used by both the mentor and the student as a checklist:

- Programming
- Site analysis
- Schematic design and presentations
- Design development (and the distinction between
- SD and DD) and presentations



- Code research
- Consultant coordination
- Construction documents
- Specifications and General conditions
- Document checking and shop drawing review
- Bidding and contract negotiation
- · Construction phase in the office and on site
- Inspection reports, change orders and documentation
- of RFI's and other paper trails.
- Marketing, public service and RFP's
- Materials and Details research

SELF-ASSESSMENT - SC.2

Our inherent focus on ethical issues and our relationship with the community of architectural practitioners in Portland, Oregon, one of the leading design cities in the nation, provides a strong basis for ensuring that our students are introduced to the complexities of **Professional Practice**. However, in the Graduating Student Self-Assessment Survey, the average score was **2.97 of 4**. This has brought to our attention the fact that some of our students do not feel that they are fully prepared for Professional Practice. This is something we will be addressing moving forward.

We do recognize that students who remain in Eugene throughout their education may not have as much engagement with the profession as those in Portland, due to the numbers of practitioners in each city. As such, we are doing several things to verify all our students are fully aware of the specifics of Professional Practice. We are seeking to increase our input from professionals in the Context of the Architectural Profession course. We are revamping the Practicum to verify that our students and the firms where they intern are all benefiting from the experience. And, we are utilizing hybrid teaching and technology to increase exposure of students in Eugene to lectures occurring in Portland (and vice versa).

As of Fall 2021, ten (10) of our twenty one (21) tenure or tenure-track faculty (TTF) are licensed architects. So, our students are taking many courses with those who are intimately engaged with the profession. As we hire for new positions in the future, we will seek those who can offer additional expertise in Professional Practice.

We have an active Alumni Association of professionals who are engaged with our students through multiple venues. These include mentoring opportunities, lectures within the Context of the Architectural Profession course as well as public lectures where professionals discuss their perspective on practice. We have alumni who are leading firms of all scales and we seek to have a variety of professionals present to our students. We will also be working with our newly formed Architecture Advisory Group to gain insight on how best to prepare our students for Professional Practice.

SC.3 Regulatory Context

—How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project.

Content that addresses SC.3 Regulatory Context is covered in several technical courses and then reinforced throughout many studios. This content is incorporated as part of the Terminal Studios which is assessed in SC.6 Building Integration.

Life Safety is addressed in ARCH <u>462/562</u> Structural Design and ARCH <u>492/592</u> Environmental Control Systems II.



Land Use and Zoning Policy is addressed in ARCH <u>430/530</u>: Architectural Contexts: Place and Culture.

Building Codes are addressed in ARCH 470/570: Building Construction.

LIFE SAFETY

ARCH 462/562 | STRUCTURAL DESIGN

Structural Design, which is also referenced in SC.1, SC.4, and SC.6, introduces students to the fundamental principle of life safety and related regulations that apply to the design of buildings through the study of mechanics and strengths of materials and principles of structural design in steel, concrete and wood. In this course, students gain an understanding of regulatory codes that relate to structural systems. This course builds upon topics covered in *ARCH 4/561 Structural Behavior*.

There are 4 lectures that cover Chapter 16 of the International Building Code and its referenced consensus standard ASCE 7 Minimum Design Loads for Buildings. These lectures introduce students to the methods and factors of safe structural design. This begins with the requirements of strength, stiffness, and stability of building systems. Once these fundamental considerations have been introduced, the course teaches students how to determine and calculate live, dead, and dynamic loads and analyze their effects.

This course covers the complexity of steel and wood design. The course continues with the theory and application of the AISC Specification for the design of steel structures, including the design of steel elements and connections for tension, compression, flexure, and shear.

There are 5 lectures dedicated to the examination and application of the National Design Specification (NDS) for Wood Construction developed by the American Wood Council (AWC). These lectures introduce students to the theory and application of the NDS for the design of wood structures. They also explain how to design wood elements and connections for tension, compression, flexure, and shear. There are also 2 lectures that cover code principles and considerations as they relate to the Planning of Gravity and Lateral Structural Systems.

Students apply the knowledge outlined above through the solving of homework and quiz calculation problems as well as the application of system selection, member proportioning and material design though design projects. Students utilize a variety of analytical techniques for the assessment of their design proposals. The design projects require students to utilize sketching, diagrams, design drawings, models and computer analysis in the application of the core knowledge outlined above.

There is information on egress in SC.6: Building Integration.

ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

Environmental Control Systems II is a required course that teaches students to integrate the sensory aspects of the environment in the architectural creation of spaces. The course is delivered using an interactive lecture format with supplemental design labs, in which students engage in independent and team project-based research and application of knowledge. The course focus on the fundamental knowledge related to the design of spaces that celebrates our senses and provide indoor comfort for human performance and health in the areas of daylighting, electrical lighting, acoustics, fire safety, as well as recycling water and waste for buildings.

Students are assessed on fire egress, protection, suppression systems as well as smoke control strategies. These topics are assessed using in-lecture interactive poll questionnaires, projects submissions, mid-term and final exams.

LAND USE AND REGULATIONS RELATED TO BUILDINGS AND SITES WITHIN THE U.S. ARCH 430/530 | ARCHITECTURAL CONTEXTS: PLACE AND CULTURE

All students are required to take this course, which includes material on the history of American zoning, its impacts on urban form, how it helped perpetuate racial and economic segregation, and



on how zoning ordinances work to regulate land use, site design and the height and bulk of buildings. Lectures include material on new alternatives and modifications to Euclidean zoning including form-based codes, and these issues are also covered in section discussions.

Exam questions for assessment can be found here.

BUILDING CODES

ARCH 470/570 | BUILDING CONSTRUCTION

Students in the ARCH <u>470/570</u> Building Construction class have their first introduction in the program to building codes, ADA standards, zoning ordinances, and testing standards, as well as environmental design rating and assessment programs. This information is conveyed directly through portions of several lectures, and referred to in almost every lecture, as well as through several required readings. They are then asked to recall and make use of that information at various points in the term through quiz questions and exam questions. In future terms, we will be adding requirements to their final term project for the class, around these topics.

Content and Delivery: In portions of three specific lectures during the term, and by regular reference at various points in lectures throughout the term, we raise various aspects of the regulatory Context of the Architectural Profession, and how that relates to the selection of materials and systems of construction in projects. Specifically, we illustrate the differences between "codes", "ordinances" and "standards", while introducing them to the model "I-Codes" (International Codes for the building industry), as well as local zoning/land use ordinances, and types of testing standards provided by governmental organizations such as NIST, and trade organizations such as ASTM, ACI, NFPA. We specifically cover Construction Types, Occupancy Classifications and how they relate to each other with construction materials and systems, and reference those for specific systems during the term. In addition, we introduce students to the various aspects of fire ratings of assemblies and fire-rating "classes" for materials. In addition, we introduce some of the major requirements of the ADA, and building code requirements for stairs, ramps and guard- and hand-rails. Furthermore, we introduce them to "quasi-code" systems such as environmental rating and assessment programs such as LEED, LBC, AIA-COTE, as well as issues and standards around healthy building materials.

During the term, we also have several required readings on topics about codes, ordinances, standards, and the quasi-code systems, from authors such as Edward Allen, Alison Kwok, Francis D.K. Ching, and others.

In future editions of the class, we plan on adding content to at least one lab session related to supporting students assessing and documenting the Construction Type, Occupancy Classification of their concurrent studio project, as well as fire ratings of materials and systems in a portion of that studio project.

Assessment: The primary mode of assessment is through the Midterm and Final Exams. We have several multiple-choice type questions related to codes, ordinances and standards, across the two exams, as well as a few short answer questions, where they need to assess information from tables in the code, relative to a specific situation they are given in the question. Also, during the term, during lectures, we have in the past had impromptu "quiz" questions inserted in lectures related to codes. These are in multiple-choice format, and students are given a very short time to respond to the questions.

In future editions of the class, we plan on adding to requirements, for the final term project of the class, to do a preliminary assessment of their studio project's Construction Type and general Occupancy Classification, & document it versus the criteria for that Type and Classification for height and area, and consequent fire ratings of materials and assemblies, in a portion of their project.



ASSESSMENT - SC.3

Understanding of content related to Life Safety is assessed in ARCH <u>492/592</u> Environmental Control Systems II and ARCH <u>462/562</u> Structural Design through exam questions.

Understanding of Land Use and Zoning Policy is assessed in *ARCH* <u>430/530</u> *Architectural Contexts: Place and Culture* through exam questions.

Understanding of Building Codes are assessed in ARCH <u>470/570</u> Building Construction through the midterm and final exams.

APPLICATION OF REGULATORY CONTEXT

ARCH 484/584 | VERTICAL STUDIOS

All students are required to take 4-5 vertical studios (Arch 4/584) that include an emphasis by faculty related to current events, innovations in the field, and/or faculty research. These studios require site analysis, case studies, and a basic understanding of the building's regulatory restrictions and requirements.

As students take core courses, they are expected to integrate what they learn into their design studios. This means that all students in vertical studios are expected to incorporate at least a basic understanding of structure and building construction, along with egress and zoning regulations.

ARCH 485/585 & 486/586 | TERMINAL STUDIOS

The terminal studios cover permitted land use, including legal requirements for building construction and building zones. Students must conform to height restrictions, setback requirements, egress, construction type restrictions, ADA requirements, and energy code & performance requirements. Because terminal studios are more in depth and span across two quarters, students are expected to detail their final studio project and follow the same regulatory guidelines an actual building would need to conform to.

By the time a student has reached their terminal studio, they will have taken most, if not all, of their core courses. So, they must consider what they've learned in each course and apply that knowledge to their project.

SELF-ASSESSMENT - SC.3

In previous years, much of this content for **Regulatory Context** was covered in Context of the Architectural Profession, but that was changed due to the amount of other content that we need to cover in that course. As a result, the content of Regulatory Context is now covered in several other areas throughout our curricula, as described here. We are confident that we are covering all of the content, but we need to verify that the students are retaining that content.

In the Graduating Student Self-Assessment Survey, this question received an average score – **2.98 of 4**. While this is an acceptable score, we will definitely be exploring why the students feel that they are not as prepared for this content as for other content in the program. Through the upcoming assessment process in AY21-22, we will assess how comprehensively and effectively we are covering this material for our students and consider adjustments to the curriculum and program as needed.

SC.4 Technical Knowledge

—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects.

Program Response:

NVB

Our curriculum is design-driven and is characterized by a reciprocity between design studio and technical coursework. The principal vehicles for the delivery of technical content are three large 4-credit lecture classes, all paired with associated labs, in building construction, environmental control systems, and structures. Design exercises are assigned in the lecture courses and there are technical expectations for design in all three levels of studios (see narrative for SC-6).

The last two introductory studios for both grads (ARCH 682) and undergrads (ARCH 384) are taken in the same year as the first three required building technology courses:

- ARCH <u>470/570</u> Building Construction (Construction of primary building systems)
- ARCH <u>491/591</u> Environmental Control Systems I (Carbon footprint, climate-responsive design, thermal comfort)
- ARCH 492/592 Environmental Control Systems II (Lighting, acoustics, water and waste).

Together, the two ECS courses provide the background for climate-responsive design and the selection and design of environmental control, lighting, acoustic, and service systems.

The relationship between structure, space, and light is introduced in:

- ARCH 461/561 Structural Behavior (history of the development of structural form, methods for the analysis of forces and deformation in structural elements and systems, with an emphasis on whole-building behavior, load paths).
- ARCH 462/562 Structural Design (structural mechanics, environmental and occupancy loads, code requirements in wood, steel, and concrete, and the details of an integrated design process).

The study of materials and their relationships to architectural form and detail are continued in:

- ARCH <u>461/561</u> Structural Behavior (inherent order of structural materials)
- ARCH 462/562 Structural Design (design codes and methods in wood, steel, and concrete).
- ARCH 471/571 Building Enclosure (comprehensive design methodology for traditional and high performance cladding systems at the residential, commercial and institutional scales).

Advanced Technology Seminars: a 4-credit technology elective course is required of all students in which they will delve into more advanced topics of their choosing. Since Fall of 2016, we have filled 1,369 seats with students in Advanced Technology courses in Eugene and Portland. Many of our culminating terminal studios include fall preparation seminars that qualify for Advanced Technology credit. Over that time, technical electives have included: *Aalto's Daylighting, Bio-Parametric Design, Building Integrated Livable Designs Sustainably, Building Health, Campus Comfort and Energy, Celebration of Light, Daylighting, Design and Development of Building Enclosures, Electric Lighting, Ecology of Health, Façade Performance, High Performance Buildings, Housing Prototypes, Humancentric Environments, Industrial Urbanism, Mass Timber Design and other courses developed cooperatively with the TallWood Design Institute, Methods of Sustainable Design, Modeling at All Scales, Natural Building Systems, Net Zero Building Design, Oregon BILDs design-build program, Passive House Design and Detail, Passive Cooling, Passive Heating, Passive Heating and Cooling, Residential Construction, Simulation and Visualization, Timber Tectonics, Urban Water Solutions*

Additionally:

- Advanced M.Arch and M.S. students also have access to courses in the Ph.D. program. Examples include: ARCH 620 Research Methods in Sustainable Design, ARCH 678 Advanced Research Methods in Sustainable Design, ARCH 633 History and Theory of Sustainability
- The Baker Laboratory provides curricular support in the areas of energy and environment.

NVB

- We have one of the most active student chapters of <u>ASHRAE</u> in <u>region XI</u> (Oregon, Washington, Alaska, half of Canada).
- Our graduates form one of the largest cohorts, nationally, who have earned <u>Passive</u> House Institute U.S. Consultant Certification.
- Students (approximately 15-35) are voluntarily engaged in LEED Green Associate training workshops each year, sponsored by the UO ASHRAE student branch.
- The annual HOPES conference, organized by students, addresses the climate crisis and sustainable building response.
- Hundreds of students have worked with the various <u>centers</u>, <u>labs</u> and <u>research institutes</u> which are led by the architecture faculty.

Technical expectations for introductory, intermediate and capstone studios include increasingly explicit responses to climate and human comfort and the development of structural systems and floor, wall, and roof assemblies. For further information regarding application of technical content and building integration in both our large technical classes and design studios, see <u>SC.6</u>.

ESTABLISHED AND EMERGING SYSTEMS, METHODS FOR ACHIEVING DESIGN, ECONOMICS, AND PERFORMANCE OBJECTIVES

ARCH 491/591 | ENVIRONMENTAL CONTROL SYSTEMS I

This course is designed to provide students with foundational information, design strategies, and tools to apply at schematic design level. Passive (architectural) solutions will be emphasized, though active (mechanical/electrical) solutions will also be covered. Major topics related to the environmentally sensitive design of buildings and communities include energy use, codes/standards, climate-responsive design, thermal comfort, applicable codes and standards, HVAC systems, renewable energy, indoor air quality, measurement and verification, vertical transportation, and the tools needed to engage in an ecological and integrated design approach. The projects and activities in this course are carefully choreographed to enhance student understanding and abilities to prepare them to be the future stewards of the built environment. Students learn to apply concepts and principles in section meetings. Additionally, we introduced professional standards and guidelines and the AIA's Framework of Design Excellence. The deliverables for the course are four individual assignments, completion of sections activities, weekly quizzes, and a 4-week building performance case study.

ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

Environmental Control Systems II introduces students to principles of daylight and lighting design, the acoustics of interior spaces, noise management, auditorium design, water and waste systems, fire egress systems in buildings. The course is divided into four integrated segments: architectural daylighting, integrated electric lighting, acoustics, and water/waste, and fire protection systems as strategies for sustainable building.

Students are assessed on multi-comfort criteria of indoor environmental quality in buildings, impacts of lighting on health and well-being, acoustical design for enhanced occupant's well-being, and fire egress and protection systems. These topics are assessed using in-lecture interactive poll questionnaires, projects submissions, mid-term and final exams.

The course links research findings to design decisions related to the health and performance of occupants. In addition, the course devotes a module on fire egress and fire safety. Lectures and lab exercises focus on passive and active fire and smoke suppression, containment, and occupant egress design guidelines. The course is delivered using an interactive lecture format with supplemental design labs, in which students engage in independent and team project-based research and application of knowledge. Students are assessed using a variety of approaches in individual and group activities during lectures, ECS2_design lab, homework, projects, mid-term exam, and final exam. Research and team collaboration activities are seen as elements of



evaluation and assessment of student achievements in the course. Peer teaching between students is an essential part of the class.

TECHNOLOGIES AND ASSEMBLIES OF BUILDING CONSTRUCTION ARCH 470/570 | BUILDING CONSTRUCTION

Building Construction introduces the basic background, concepts and details for a comprehensive cross section of principal construction systems; heavy timber, light-wood and light-steel frame, masonry, concrete, and heavy-steel frame construction systems; and both small-scale and large-scale enclosure and interior construction systems. All are addressed in terms of their components, systems, products and materials, and their related environmental, regulatory, structural, constructional and economic issues and performance. Along the way, students are introduced to a host of alternatives to conventional systems and materials, such as straw-bale and earth, carbon-fiber and 3D-printed materials, and natural and environmental finishes. Students learn about efficiently, schematically selecting and designing with these systems based on specific performance criteria, while becoming familiar with the history, terminology, and technical capabilities (spanning, connecting and construction) of each system. Prior to the 2020 pandemic, this course included field trips to buildings that were in mid-construction; during the pandemic, field trips were replaced by Zoom-screenings of curated videos of various scales and types of construction. Field trips are expected to resume as soon as deemed safe and feasible.

Through lectures, labs, field trips, observations, projects and exams, students study the full range of elements that go into major construction support systems, enclosure systems, and interior construction assemblies, as well as the environmental, code, financial, and timeline implications of material, system, and product selection. Students learn about the often-overlooked details, like the reason for the gap between wood assemblies and the ground, what weepholes do in masonry, how welded versus bolted connections differ in steel, why and how concrete cracks and how to prevent it with proper reinforcement and design. Overall, this course provides a robust foundation for students' subsequent study in the more in-depth technical courses that delve into the physics of building construction, environmental control, enclosure, and structural systems.

ARCH 471/571 | BUILDING ENCLOSURE

Building Enclosure offers a comprehensive design methodology for high performance cladding systems at the residential, commercial and institutional scales. This includes emerging principles of building science related to solar control and hygro-thermal performance. Lecture presentations model for students the systematic investigations of materials and systems that they will be expected to make as professionals: sources, means of refinement, fabrication and assembly, significant historic precedents, state of the art applications, and directions for the future. Detailing projects require that the students develop "product knowledge" for the assigned systems and apply them to an integrated design solution. They are expected to carry on with this methodology in their subsequent studio work. Specific topics include:

- Building Science principles to manage bulk water intrusion, air flow, thermal and radiant energy flow, and water vapor migration through the building envelope, all critical to the health, safety, and welfare of building occupants.
- Structural considerations of facade design to resist gravity, wind, and seismic loads, all critical to occupant safety.
- Role of the building envelope in providing for occupant well-being, including daylighting, natural ventilation, air quality, and thermal comfort.
- Materials and methods of enclosure construction, including negative and positive environmental impacts affecting long term human health and welfare.

ARCH 461/561 | STRUCTURAL BEHAVIOR

Structural Behavior is the first course in the two-term structures sequence. In this and the following course Structural Design, the fundamental objective is to give students control of structure and construction, most importantly to enable them to meaningfully use an understanding of structural systems and structural behavior early in the design process. There are four principal learning objectives:

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- Understand the relationship between structure, material, space, and building form.
- Develop structural intuition and engineering judgment.
- Understand global behavior of real, indeterminate structures.
- Learn the mechanics of an integrated design process and implement it.

The course explicitly establishes the relationship between structure, space, and light; and the fundamental requirements to support, span, and brace to create architectural space and for strength, stiffness, and stability for so buildings and their components don't collapse or deform excessively.

There are four integrated streams of course content:

- 1. Materials, structural systems, force distribution, spatial organization (case studies)
 - The nature of materials and the inherent order materials bring to architecture
 - The palette of structural systems and their spatial implications: history and precedents, what is possible and what is appropriate, emerging technologies
- 2. Global behavior (computer analysis, lab problems)
 - Kinematics: structure deformations and displacements
 - Force Distribution and Load Paths
 - Relative Stiffness
- 3. Structural theory (readings, lectures, worked problems)
 - · Properties Of Materials
 - Tools For Finding the Forces: statics and other hand methods; graphical methods; computer analysis
- 4. Design Problems
 - Putting it all together, using building structure creatively early in the design process (see <u>SC.6</u>).

ARCH 462/562 | STRUCTURAL DESIGN

Structural Design follows the preceding course Structural Behavior and taps into the knowledge base from Building Construction. The fundamental objectives match those in the preceding structures course, but the emphasis of the class moves on to the process of structural design.

There are again four integrated streams of material:

- 1. Precedents and case studies in steel, wood, and concrete
 - Structure as a critical design feature in building design
 - Emerging technology and structural systems
- 2. Environmental and occupancy loads, code methodology, load paths, building failures
 - Gravity loads: dead load, live load
 - Lateral loads: wind, seismic
 - Miscellaneous loads: thermal, impact
- 3. Structural theory (readings, lectures, worked problems)
 - Introduction to mechanics: shape properties, stress and strain, buckling, combined stresses
 - Design methodology and code requirements in steel, wood, and concrete
- 4. Design Problems
 - Integrated design process
 - Detailed design projects in steel and wood (see SC.6).

ASSESSMENT - SC.4

Student deliverables in the sequence of technology courses include homework assignments, participation in lab exercises, exams, and design projects. For the purposes of SC.4, we will assess the midterm and final exam grades of the listed technical courses. In all cases,



benchmark evaluation is 75% of undergraduate students achieving 70% or better and 75% of graduate students achieving 80% or better.

- ARCH 461/561 Structural Behavior
- ARCH 462/562 Structural Design
- ARCH 471/571 Building Enclosure
- ARCH <u>470/570</u> Building Construction
- ARCH 491/591 Environmental Control Systems I
- ARCH <u>492/592</u> Environmental Control Systems II

SELF-ASSESSMENT - SC.4

Our program is well known for preparing our students in current and emerging **Technical Knowledge** and systems of architecture and the built environment. In the Graduating Student Self-Assessment Survey, the average was **3.27 of 4** for Technical Knowledge. However, we will be assessing this comprehensively moving forward to verify that all of our students are achieving acceptable levels of success in this complex content. As we combine courses in Eugene and Portland into hybrid teaching modalities, we will seek to integrate the access to practitioners in Portland with the strong basis of research occurring in Eugene. We want our students to receive technical knowledge from those in practice as well as those in research.

Since the last accreditation there has been ongoing faculty concern for the student cohort that arrives at the capstone studio with deficiencies in technical knowledge. Various prototypes for a technology driven, integrated studio experience were offered from 2014 through 2017. These studios were suggested as #7 or #8 in the sequence leading up to the capstone studio (#9-10). Students with the expected knowledge and skills prospered in these experimental studios, but students with significant deficiencies could not overcome them in a single quarter term. Beginning in 2018, the faculty moved instead to clarify and strengthen the technical content of all the preparatory studios (#1-8), using the learning packages and cross-over exercises mentioned above. An effort has also been made to expand the studio performance evaluation process to reinforce the growth of technical understanding at each stage of the developmental sequence. Graduate students entering this process in 2019-2020 will reach the capstone studios in 2021-2022, with undergraduates arriving one or two years later.

Beginning in AY21-22, all faculty teaching in the intermediate vertical studios (ARCH 4/584) will be part of the application of a new proposal to iteratively cover technical content in the studios. The proposal is available in the evidence.

SC.5 Design Synthesis

—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

Program Response:

Our B.Arch and M.Arch programs are built around studios that teach design skills while integrating and synthesizing the technical courses, history and theory courses (Design Arts), and human and behavioral design courses. We assess the synthesis of these design content through the design studios. Each program begins with separate core studios, followed by intermediate vertical studios and capstone comprehensive terminal studios which blend B.Arch and M.Arch students to maximize peer teaching. B.Arch students take four core studios (ARCH 283, 284, 383, 384), four intermediate ARCH 484/584 studios and two terminal studios (485, 486). M.Arch Track 1 students take three core studios (680, 681, 682), five intermediate ARCH 584 studios and two terminal studios (585, 586). M.Arch Track 2 students take ARCH 683 as their core studio and then ARCH 585/586 Terminal Studios.

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In both programs, the core studios culminate in a four to five story building that integrates structural, environmental and construction considerations. Working from this foundation, students enter vertical studios and encounter a variety of building projects ranging in scale, complexity, and concern. The goal of these vertical studios is to provide the opportunity to develop specialized interests while assuring that students hone their ability to make design decisions that are increasingly informed by the integration of technical data and knowledge. Students conclude their design studies in terminal studios, where they demonstrate their abilities in the design of a comprehensive building project across the space of two-terms.

As a program that is on the quarter system (as opposed to the semester system), our students have the advantage of taking far more courses than those in semester systems. Our B.Arch and M.Arch 1 students take ten design studios through their education at UO. Architecture education relies on iteration and our program provides many opportunities for students to integrate the non-studio content courses within studio.

The final core studio of each sequence (ARCH <u>284</u> for B.Arch, ARCH <u>682</u> for M.Arch Track 1, and ARCH <u>683</u> for M.Arch Track 2 students) introduces many aspects of user requirements, regulatory requirements, site conditions, accessible design, structural design, construction and environmental design considerations.

The intermediate (vertical) studios (ARCH <u>484/584</u>) intermittently address the integration of these criteria. In 2020, the architecture faculty approved a <u>Building Integration in Vertical Studios</u> proposal to integrate a series of technical criteria throughout these studios, which must be covered by the completion of the intermediate studio sequence. This is still being developed, but will better prepare students for the final, comprehensive "terminal" studio sequence.

The comprehensive "terminal" studio sequence fully addresses design synthesis. While there are typically 6-9 sections of terminal studio offered concurrently each year total (Eugene and Portland), there are workshops that are offered across the studios that address both technical content (described in <u>SC.6</u>) and the aspects of architecture that include program, regulatory requirements (code and zoning), site conditions, accessible design, and environmental factors that impact design.

The department engages in a number of measures to assess how well students are meeting learning outcomes in their core, intermediate, and terminal design studios. Those discussed in this section apply to all studio levels, across both programs. This content is followed by a description of learning outcomes and additional assessment efforts, specific to studio level and/or degree program.

Studio Evaluation

In lieu of letter grades, students are required to take studios on a "pass/no pass" basis. This encourages open-mindedness, critical inquiry, collaboration, and risk taking, all necessary qualities for creative achievement. In addition to the recorded grades, studio faculty, complete a written evaluation of each student. All studios regardless of level utilize the same studio performance final <u>evaluation form</u> in order to maximize the ability to track individual development and compare group performance over time. These evaluation forms assess the following criteria:

- <u>Design Process</u> (Research/Analysis; Generative Ideas; Exploration of Alternatives; Synthesis & Design Development; Graphic Communication; Oral & Written Communication; Studio Participation; Initiative & Attitude);
- Quality of Design Project (Project Understanding; Parti or Overall Organization; Design Development; Context & Site Response; Spatial Composition; Human Purposes; Structure & Construction; Comfort and Climate Response; Sustainability of Design; Life Safety & Universal Design; Quality of Presentation
- 3. <u>General Progress</u> (Growth Over the Term; Evidence of Architectural Knowledge; Creative Insight.
- 4. Overall Performance



Studio performance evaluation forms are accompanied by "Indicator" lists which describe or indicate what success looks like for each criteria at the various studio levels (core, intermediate, and advanced). Completed forms are placed in students' academic files managed by SAE staff. Students also receive a copy. In 2021, a Qualtrics version of the form was introduced to expand the department's ability for data management and outcome analysis.

"Gate" Evaluation and Review Process

In addition to evaluating performance in individual studios, programs also evaluate the pattern of student performance and progress at critical junctures within the studio sequence.

All students seeking to transition from core studios to intermediate studios, and from intermediate to terminal studios pass through a "gate" review process to determine if they can enter the next level of the studio sequence. The process has two phases. The first phase is an administrative review of past studio grades to determine if students can continue on, or if their prior studio performance indicates that they meet the criteria for a second phase of evaluation commonly referred to as a "Gate meeting". The criteria for determining what will trigger this next level of review is based on how often and/or recent a 'Marginal' or 'No-Pass' grade was earned in prior studios. The vast majority of students don't meet the criteria and are eligible to register for the next studio level. Students who have been identified as meeting the criteria are required to participate in either the Intermediate Studio or Terminal Studio Entrance Evaluation GATE meeting with select faculty to look at the studio work to-date, discuss challenges, and determine next steps. After discussion, the faculty will either recommend continuation with specified stipulations, or an alternate course of action. The outcome of all gate review meetings are explained to students at the conclusion of the meeting and documented via memo. Detailed information about the Gate Evaluation process and its respective criteria can be found here.

ASSESSMENT - SC.5

The synthesis of program, regulatory requirements (code and zoning), site conditions, accessible design, and environmental factors that impact design is introduced throughout the core studios and fully integrated in the terminal studios. We are assessing the initial integration of these criteria in the final studio of the core sequence: ARCH 384 for B.Arch, ARCH 682 for M.Arch Track 1, and ARCH 683 for M.Arch Track 2 students. We are assessing the successful integration of these criteria in the terminal studio projects (ARCH 485/585 and 486/586).

Since all UO Architecture studios are Pass / Marginal Pass / No Pass, we are assessing the number of students who are passing each studio (not including marginal pass). The benchmark is that at least 80% of undergraduate students and 90% of graduate students are passing any given studio. We will also evaluate the studio rubrics which were implemented in the Terminal Studios for internal and external reviewers.

One of the roles of our new Architecture Advisory Group of professionals will be provide input on the capacity of our students to synthesize design decisions effectively.

MAKING DESIGN DECISIONS WITHIN ARCHITECTURAL PROJECTS

UNDERGRADUATE INTRODUCTORY STUDIO SEQUENCE | ARCH 283, 284, 383 & 384 The core studios mirror the grad sequence beginning in ARCH 283 with the introduction of basic design principles of abstract composition and space-making. Students learn to make simple architectural assemblies that respond to natural elements (topography, water, wind, sunlight) throughout a series of small exercises. Students team with classmates in the final project, to create shelters that work together on a sloped landscape. ARCH 284 increases in complexity and scale, as students transition from designing single-room to buildings composed of multiple rooms. After a series of focused exercises, 284 introduces students to an architectural program that requires greater specificity in their response to site conditions, circulation, spatial organization, user requirements, and awareness of building typology as they examine cross-cultural rituals of bathing. It also provides their first introduction to ADA and life safety egress regulations.

In the second year, studio projects continue to grow in size and complexity as students take building construction, theory, and environmental control systems coursework alongside studio.

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Unlike first-year, second-year studios focus the duration of the term on a single design project to make space for investigating contextual factors, site design, and the integration of new knowledge gained in subject area courses. ARCH 383 emphasizes integrating lessons from building construction coursework. In some years, student building designs were used as the subject of the 4/570 Building Construction's Life Cycle Analysis and other assignments. ARCH 384 is the final studio of the core undergraduate sequence and adds the integration of environmental controls systems to its requirements.

The specific building projects for ARCH <u>383</u> and ARCH <u>384</u> have varied year to year, but are planned in consideration of one another with respect to setting and type. If one studio's project is located in an suburban setting where available site exceeds the building footprint, the other is in a higher-density environment and necessitates a multi-story solution. Similarly, one term's project is always of a public or institutional nature with a strong community identity (branch library, community center, school, etc.) while the other term will be mixed-use with housing and retail. The ultimate goal is to ensure students have experience with a range of public to private uses and settings. For instance, from 2015 to 2019, ARCH <u>384</u> used a boathouse project to emphasize environmental impacts, such as maintaining native plants and wildlife corridors, using swales to cleanse parking lot rainwater drainage.

GRADUATE INTRODUCTORY STUDIO SEQUENCE | ARCH 682 & 683

To provide a stronger basis for sustainable environmental design, in summer 2017 we revised the initial graduate 680 studio to focus on composing spatial experiences using natural elements (earth, water, sun, air). This introductory studio had been followed by an open rural or suburban site with an ensemble of buildings and an urban studio with a tight infill site. In 2014, to simplify the second 681 studio, we flipped the order of these studios, so that the students had fewer decisions with a two to three story urban infill slot or corner site first, and a more open campus setting second. In 2019, the second grad studio, 681, was revised to focus on designing three structurally related (S,M,L) buildings that generate site-responsive public and semi-public outdoor spaces. The third graduate studio, 682, focuses on organizing a four to five story urban building on a corner site, focusing on sectional relationships for daylighting, natural ventilation, and relationship to context.

VERTICAL STUDIOS I ARCH 484/584

Because the intermediate studios provide students opportunities to explore special interests, the wide range of offerings address a wide range of considerations. Studios with smaller scope and less complexity generally require a higher level of research, conceptual exploration, material prototyping or construction detail.

During the Fall 2018 retreat, faculty convened the beginning of what would become a two-year curriculum committee initiative to improve studio vertical offerings and increase reliability in learning outcomes regarding technical integration in student learning without compromising flexibility and choice. The result is a Building Integration in Vertical Studios initiative that will integrate technical requirements into the 4/584 sequence of studios beginning in AY20-21.

TERMINAL STUDIO SEQUENCE | ARCH 485/585 & 486/586

In fall 2019, separate meetings were held with students and ARCH <u>485/585</u>- <u>486/586</u> terminal studio faculty to strengthen awareness of the need for design integration and the 2020 NAAB Student Criteria. A matrix template showing crucial requirements to be covered along with a timetable example was distributed.

EXTERNAL REVIEWER FORMS: Local practitioners, alumni, and consulting professionals, are often highly engaged in the interim and final review events for terminal studios, given their comprehensive and often celebratory nature. These reviews were critical events for the department to gather external feedback on its effectiveness, competitiveness, and ability to prepare students for practice. Beginning in 2021, the Department sought to formalize this by implementing an external review form asks reviewers to assess individual student design decision-making across a variety of content areas. A copy of the form can be found here.



Spring 2021 was the first time these results were captured. The questions addressed SC.5, SC.6 and other factors of design. There were 541 responses collected from external reviewers and faculty. However, the results were not extremely informative because the average responses on a 1-4 scale for all questions only ranged from 3.22-3.49. This suggests that we need to revisit the questions in AY21-22 to produce more informative results.

SYNTHESIS OF USER REQUIREMENTS, REGULATORY REQUIREMENTS, AND SITE CONDITIONS

Non-studio courses on professional subjects provide students with an understanding of the domains of knowledge that comprise the discipline of architecture including: spatial composition, construction methods, human factors, environmental control systems, place and culture, structures, building enclosure, representation and communication, architectural history and professional practice. Equally as important as the studio, the study of professional subjects informs studio explorations and presents information within the context of architectural design. Faculty teaching professional subjects emphasize relevance to the architectural design process. Students integrate lessons learned in their professional subject coursework into their studio projects.

ARCH 491/591 | ENVIRONMENTAL CONTROL SYSTEMS I

Environmental Control Systems I, described further in SC.4, introduces students to the use and integrate site and climate conditions in making design decisions. A building performance case study project enables students to consider environmental impacts of design decisions, which is evaluated by the teaching team using a detailed rubric.

ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

Environmental Control Systems II introduces students to principles of daylight and lighting design, the acoustics of interior spaces, noise management, auditorium design, water and waste systems, fire egress systems in buildings. The course is divided into four integrated segments: architectural daylighting, integrated electric lighting, acoustics, and water/waste, and fire protection systems as strategies for sustainable building.

ARCH 607 | SEMINAR

The assessment mechanism in this graduate seminar on Contemporary Issues in Architecture, described in SC.4, in 2018 and 2020 was an-class urban design project conducted as a design charrette using urban theory and sustainability measures to assess user requirements, incorporate regulatory requirements (specific to region and using form-based codes), results are evaluated with a rubric.

ARCH 470/570 | BUILDING CONSTRUCTION

The Building Construction class is the students' first introduction to many of these topics of SC.5. Throughout the course, presentation and discussion about selection and development of construction systems and materials is framed around how to base those choices in user requirements and project context/site. Parallel to that they are introduced to specific content for benefits and challenges posed by each major system with respect to building regulatory requirements and construction costs, and environmental impacts for carbon, embodied energy and hazardous content or manufacturing.

ARCH 471/571 | BUILDING ENCLOSURES

In this course, students learn to consider the multiple aspects of the design of building skin using multiple construction methods. They design window details and wall sections based on lessons on detailing, construction, structure and design expression.

ARCH 462/562 | STRUCTURAL DESIGN



In this course, students take a current or recent studio project and calculate the active structural forces. They then make design modifications as needed in order to understand the relationship between structure and design intent.

Information on egress and fire safety is in <u>SC.6</u>, as it is a part of the necessary life safety systems.

INTEGRATING ACCESSIBLE DESIGN

ARCH 440/540 | HUMAN CONTEXT OF DESIGN

- User requirements and program development through field interviews and the study of patterns (from Christopher Alexander and others).
- Regulatory requirements ADA. The research are synthesized into Christopher Alexander's Design Patterns. From site observation, book and internet research, interviews. Site, user requirements, ADA and other human needs to synthesize patterns appropriate to the specific situation.
- Site conditions: patterns and traces.

CONSIDERING MEASURABLE ENVIRONMENTAL IMPACTS

In the ARCH <u>470/570</u> Building Construction class, the final project includes students doing Embodied Energy and Global Warming Potential calculations for the materials in a selected portion of wall/roof/floor section of their studio project (usually a <u>383</u> or <u>682</u> studio). And, in 4/591 ECS1 the students have a couple of parts of assignments that ask for calculations on "operational" carbon-impact, based on energy consumption, and also shown as Global Warming Potential, for a hypothetical "studio" space they work with during the term. In ECS2, students calculate the impact of daylighting and electric lighting systems on lighting energy savings and GHG emissions. They also develop a design for a zero-water and waste building using water budgets and operations.

SELF-ASSESSMENT - PC.5

Design Synthesis is currently being assessed in the final core studio and terminal studio sequence. We will be evaluating our curriculum in the coming year and doing a holistic review of all the studio content across the curriculum for B.Arch, M.Arch Track 1 and Track 2. We intend to verify that the students' work is showing a consistent evolution of design knowledge and synthesis throughout their studio experience. We will make adjustments as needed. We are also exploring new ways of organizing leadership and oversight of areas of the studio curriculum. We will also be seeking external input on design synthesis and quality from our Architecture Advisory Group. In the Graduating Student Self-Assessment Survey, the average was **3.29 of 4**, one of the highest of all the criteria. While this is encouraging, we will seek additional input from our faculty and professional community. As the discipline of Architecture is changing, we will continue to adjust our teaching across the design curriculum to best prepare our students to successfully integrate the complex technical, environmental and human factors that must be synthesized in successful design solutions.

SC.6 Building Integration

—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

Program Response:

The curriculum at Oregon is characterized by the incorporation of technical teaching and design activities in both required technical courses and the entire sequence of design studios. Design exercises are assigned in lecture courses in order to ground building technology in design, while



technical content is explicitly addressed in all three levels of studio in order to progressively build competency in design integration.

For both undergraduate and graduate students, the sequence of design studios is structured in three tiers with matching technical content and expectations:

- A sequence of introductory studios characterized by progressively more complex and demanding design projects, in which fundamental design skills are developed and technical concerns are *introduced*.
- 2. Intermediate studios, which are further subdivided into two categories:
 - a required minimum number of "integrated design studios," in which students must address and develop competency in the integration of building technology, and
 - an additional number of "topical design studios", which may range from
 experimental studios aimed at exploration and the development of new
 knowledge, studios with significant urban design problems, housing studios,
 and landscape studios; to furniture-building studios and design-build.
- 3. Comprehensive, Integrated Design Studios ("Terminal Studios") in which students must *demonstrate* competency in the integration of the gamut of technical concerns.

The first encounter with particular technical issues occurs in the introductory studio sequence and is linked to an appropriate design assignment. Teaching faculty or guest speakers will introduce a technical topic and explain how it is integrated in building design: how building orientation, massing and enclosure design, for example, can be used as effective strategies for climate responsive design that address energy, carbon impact, and comfort; or how the essential requirements of structure to support, span, and brace can be used to create and define architectural space and allow daylight into buildings.

The introduction of technical concerns in the early studios sets the stage for the more rigorous study of construction systems, enclosure assemblies, building structure, environmental control systems, and life safety in our required technical lecture courses. Theory and technical content are consistently presented in the context of design, asking what is the specific design problem and what are the possible technical responses appropriate to design context and purpose?

Design integration is addressed in three ways:

- A. While the technical courses at the University of Oregon all follow a traditional format that includes lectures, labs, homework, and exams, they are uniformly characterized by—and in some cases are driven by—integrated smaller-scale focused design assignments. Representative examples include:
 - The design and framing of a cabin in the first construction class.
 - The design and performance analysis of a shading device in the first ECS class.
 - The design of a public market with spaces at three levels of scale defined only by the elements and systems of structure in the first structures class.
 - The design of a metal rainscreen with custom glass application and external shading in Building Enclosure, the final class in the required technical course sequence.
- B. The first courses in the technology sequence (Building Construction, ARCH 470/570; and Environmental Control Systems I and II, ARCH 491/591 and 492/592) are taught concurrently with introductory design studios. Technical expectations in those studios are set to match the delivery of content in the concurrent technical class. When appropriate, design assignments in a technical class relate to and are part of the larger design project in studio: the design projects in the third undergraduate studio (ARCH 383) and the second graduate studio (ARCH 681), for example, are similar in scale and program and both require the use of a heavy-timber construction system, the elements and systems of which are introduced in the concurrent first construction class (ARCH 470/570). The final design assignment in the building construction class is to develop and detail the complete



exterior wall section for the student's heavy timber studio project and present it in both their final studio review and for evaluation in the lecture class.

C. Once students have completed a given course in the technology sequence, we then have expectations that they apply what they have learned in the lecture class in subsequent studios, particularly in their required intermediate "integrated design studios" and in their final comprehensive "terminal" studio project. In the intermediate studios our expectation is that they are developing competency in the integration of building technology and that students best learn to do so through iteration (hence the requirement for multiple intermediate "integrated design studios."). For the final comprehensive "terminal" studios, we have a shared matrix of comprehensive technical expectations covering material and construction system selection, integration of building envelope systems and assemblies, definition and integration of structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance that each terminal studio instructor adjusts for delivery according to the structure and schedules of their individual studios.

Principal assignments and design projects (A and B, above) that address design integration in the technology courses are as follows (for more detailed course descriptions see <u>SC.4</u>).

ASSESSMENT - SC.6

Given the comprehensive nature of this content, we are assessing SC.6 through final evaluation in the Terminal Studios:

- ARCH 485/585 Advanced Architectural Design I
- ARCH <u>486/586</u> Advanced Architectural Design II

The technical content for these studios is taught in the following technical courses. If we see any consistent deficiencies in the Terminal Studios, we will address the technical course content.

- ARCH 470/570 Building Construction
- ARCH 471/571 Building Enclosures
- ARCH 461/561 Structural Behavior
- ARCH 462/562 Structural Design
- ARCH 491/591 Environmental Control Systems I
- ARCH 492/592 Environmental Control Systems II

ARCH 485/585 and 486/586 | TERMINAL STUDIOS

ARCH <u>485/585</u> Advanced Architectural Design and ARCH <u>486/586</u> Advanced Architectural Design 2 represent the Terminal Studio sequence which all architecture students take as their capstone studio sequence. While building integration and comprehensive design is introduced in the core studios as well as through some of the ARCH 484/584 Vertical Studios, the Terminal Studios represent the comprehensive studio design sequence, where the technical content is fully integrated into the design process and solution. In these studios all of the technical content taught through the curriculum is integrated into the individual students' studio project. There are workshops throughout the first quarter on structure, mechanical systems, passive design, construction, electrical, and lighting systems. While each studio has its own program and focus, there is an extensive list of content that needs to be covered in each studio.

Students in terminal studios work collectively on research on the site, program, environment, code and other shared project factors in the first term. They then work individually on their studio proposal in the second term.

Based on faculty input regarding the inconsistency of students level of preparation for building integration in the terminal studios, the curriculum committee put forth a proposal to <u>integrate building technology</u> throughout the intermediate vertical studio sequence. This was approved by the faculty and was initiated in AY20-21. It is still being fully integrated and will be assessed in AY21-22.



COURSES THAT PREPARE STUDENTS FOR BUILDING INTEGRATION

INTRODUCTION TO BUILDING TECHNOLOGY AND BUILDING PERFORMANCE ARCH 470/570 | BUILDING CONSTRUCTION

The Building Construction course is the first course in the required seven-course technology sequence, and as such, establishes the idea and importance of building integration and lays the foundation for the subsequent technology courses. The course introduces construction materials and construction assemblies; the elements of structure and structural systems; environment and environmental control (climate, climate change, carbon, energy, healthy buildings, indoor air quality); along with building codes, fire, and life safety.

A series of lab assignments are the first instances of application of material covered in the lectures, progressing from the design of a simple spanning structure to framing systems, framing details, and more complex construction assemblies.

Two required design projects and a final design assignment linked to concurrent introductory studio projects are more comprehensive in nature and more directly require integrated design.

- 1. **Stir Stick Structure** design and construction of a simple spanning structure loaded to failure).
- 2. Framing Shelter design of a wood light-frame cabin.
- 3. **Taking Design into Account** design, assembly, construction efficiency, cost, and lifecycle environmental impacts of frame & wall assemblies.

INTEGRATING BUILDING ENVELOPE SYSTEMS AND ASSEMBLIES ARCH 471/571 | BUILDING ENCLOSURES

The Building Enclosure course focuses on the weather envelope that surrounds architectural space and provides students with a comprehensive design methodology for high performance cladding systems at the residential, commercial and institutional scales. A sequence of four detailing projects require that the students develop "product knowledge" for the assigned systems and apply them to an integrated design solution. They are expected to carry on with this methodology in their subsequent studio work.

The design projects focus on established enclosure systems combined with an enhanced performance objective or emerging technology:

- 1. Passive House application of wood frame with rainscreen cladding.
- 2. Metal rainscreen with custom glass application and external shading.
- 3. Anchored Brick Veneer with aluminum curtain wall in a "perfect wall" configuration.
- 4. Terra cotta rainscreen with integrated terra cotta external shading.

STRUCTURAL DESIGN

The two-term structures sequence follows a design-based model of structures education that aims to enable students to use structure as a creative design force throughout all phases of design (for more details see "Design Based Model of Structures Education"). This is accomplished by:

- 1. Developing students' understanding of how buildings and their constituent structural systems behave, in terms of force distribution and kinematics.
- 2. Developing students' understanding of how the elements and systems of building structure are engineered and assembled.
- 3. Teaching students the mechanics of an integrated design process and asking them to implement it in course-specific design projects and in their subsequent studio projects.

ARCH 461/561 | STRUCTURAL BEHAVIOR

The first structures course builds on students' basic understanding of building structure and construction and explicitly establishes the relationship between structure, space, and light. Design projects include:



- **Design of a Tent Complex for North Africa**. Using only tension and compression elements and responding to both gravity and lateral loads, student teams design and build models of tents with spaces at three levels of scale and test them to fails under simulated severe wind loads. (Not assigned in Fall 2020 due to Covid-19 restrictions.)
- **Design of a Market Hall** using assigned material combinations and plan geometries to create naturally day-lit spaces at three levels of scale defined solely by the elements of structure.
- **Design of a Habitat-Viewing Tower in the Rainforest**. Indeterminate structures are designed and analyzed using finite element analysis software, and physical models are tested to catastrophic failure under lateral load.

ARCH 462/562 | STRUCTURAL DESIGN

While Structural Design covers detailed engineering design in steel, wood, and concrete; the course is fundamentally design-driven, aiming to further student's understand of – and ability to implement – an integrated design process in which structure is considered in terms of its relationship to space and daylight and as fundamental to beautiful and compelling architecture.

- 1. **Case Study and Bay Study.** Following students' study of force distribution and the physical response of buildings to external forces in *Structural Behavior*, and in preparation for larger design projects later in the term, the second structures course begins with a case study assignment with a particular focus on the use of structure as a critical design feature in building design.
- 2. Design of a Steel Tram Shelter is the first comprehensive design project in which students must engage the complete process of integrated design, from project conception and schematic design, defining and modeling gravity and lateral loads, and structural analysis, to detailed engineering design for strength, stiffness and stability.
- 3. Timber Roof over a Meeting Hall is the final project in the structures sequence. Students are asked to design and engineer a wood roof structure with exposed timber trusses and secondary spanning members in which the bottom chord of the truss must be broken (not be straight and level), thus increasing the volume of space defined by the bottom of the trusses. The aesthetic qualities of the overhead structure are central to the assignment, and detailed engineering includes design of a number of critical exposed connections.

ENVIRONMENTAL CONTROL SYSTEMS AND MEASURABLE BUILDING PERFORMANCE ARCH 491/591 | ENVIRONMENTAL CONTROL SYSTEMS I

Environmental Control Systems I focuses on building design strategies for climate control and includes study of both passive and active solutions. The course aims to give students foundational information to understand and apply at the schematic design level. A sequence of assignments and class activities provide opportunities for students to learn about design decisions that go into integrating building envelope systems and assemblies to yield measurable outcomes of building performance. These activities require student understanding of principles and concepts and reinforce their design abilities through physical experience.

- Design a shading device for a building near campus. Students must understand solar geometry, shading and daylighting needs, build a scale model and test its performance on a heliodon.
- 2. **Design a wall for a small studio**. Students select materials, calculate the insulative value of the wall (and window) and do an overall heat loss calculation for the entire studio. Calculations serve as the foundation for using more advanced design integrating daylighting, passive/active systems, and energy calculations.
- 3. **Workshops on aspects of building performance**: weekly optional workshops on use of Climate Consultant software, Sefaira energy performance software, WuFi thermal



- performance software, and several handheld devices such as temperature/humidity dataloggers.
- 4. **Design Charrette**. Student teams are given a design program in various climates in the U.S. Working collaboratively using climate data generated from Climate Consultant, the teams are asked to integrate as many of the climate-responsive strategies that they learned in lecture and complete calculations that will validate their designs.
- 5. **Balance Point Game**. Student teams are given a glass box with a light on the base and play money to spend on strategies (insulation, foil, paper, thermal mass, higher wattage light bulb, etc.) to reach the highest temperature possible. Activity reinforces understanding and application of design moves, with instant feedback on those selections.
- 6. Lecture on Integrated Design. The lecture explores the integrated design processes in practice and steps to develop building that has outstanding building performance. Case studies of buildings that have achieved the Living Building Challenge, USGBC LEED certification, Passive House certification, AIA TopTen COTE Awards demonstrate the results of the integrated design process as well as systems that work together. Application is expected in subsequent studios.

ARCH 492/592 | ENVIRONMENTAL CONTROL SYSTEMS II

Environmental Control Systems II develops student understanding of daylighting systems, electric lighting systems, water and waste systems, acoustics, and strategies for net-zero design.

The principal project in ECS II is divided into four phases, and involves both analysis and design activities of a local coffee shop and lounge:

- Tell a Sensory Tale. Case study assignment in which students explore the meaning
 of sensory quantities and qualities of space through a hands-on approach and
 explore the relationship between lighting & acoustics, spatial details, and functional
 use of spaces.
- 2. **See the Light.** Case study assignment to learn daylighting metrics and the evaluation of daylight distribution in space and to explore designing with light as a design material.
- 3. **Illumination and Fabrication.** the design and construction of an electric luminaire. Student teams explore how to control the distribution of electric light in spaces through the design of a custom-made luminaire. Three-person teams design and construct a full-scale prototype of an electric lighting luminaire which could be designed to provide ambient lighting conditions, task lighting, accent lighting, or to act as a focal point in the space they are re-designing.
- 4. **Listening to Spaces.** Analysis and design project to develop an understanding of the relationship between room volume, materials, and sound behavior in indoor spaces and to explore the principles of architectural acoustic design.
- 5. Assembly Required. Design synthesis and integration of all the previous four projects in addition to developing a water budget and fire egress system for the space under re-design. The final space re-design proposal is supported by evidence of integration of all the aspects of daylighting, electric lighting, acoustics, water and waste, and fire egress systems.

LIFE SAFETY SYSTEMS

Students are introduced to the requirements for and design of life safety systems early in the program in both ARCH 470/570 Building Construction (see above) and in the sequence of required introductory studios. In the introductory studio setting, instructors reiterate the principles and code requirements related to life safety, students receive an illustrated life safety summary document and students are required to meet life safety requirements in their studio design projects. Instructors critique and evaluate student projects accordingly. Students are then expected to meet life safety requirements in subsequent intermediate integrated design studios and in their final comprehensive "terminal" studio project.



ADVANCED TECHNOLOGY SEMINARS

A minimum seventh 4-credit technology course is required of all students in which they will delve into more advanced topics of their choosing. In recent years, advanced technical electives have included:

- Oregon BILDs design-build program
- Residential Construction
- Daylighting
- Passive Heating
- Passive Cooling
- Passive House Design and Details
- High Performance Buildings
- Dynamic Adaptive Facades
- Electric Lighting
- Mass Timber Design and other courses developed cooperatively with the Tallwood Design Institute

SELF-ASSESSMENT - SC.6

Building Integration is currently being assessed in the Terminal Studios. Over the next year, we will be looking closely at how effectively students are integrating all of the technical content that they cover through their education into their final studio. We are aware that the "comprehensive studio" can occur at different places in a curriculum. We have taught this as the capstone of the studio education. We will be exploring whether this is the best position in the curriculum for the culminating integrated design studio.

We expect that the new Building Integration content that will be required in several of the vertical (intermediate) studios will have a positive impact on the success of building integration in the terminal studio (that is the explicit intention). We will be assessing this process as well as the impact of building integration on the terminal studio projects once this new proposal is fully embedded within the curriculum.

In the Graduating Student Self-Assessment Survey, the average for Building Integration was **3.63 of 4**, one of the highest averages. This suggests our students feel prepared for Building Integration, though we will do more assessments to complete a thorough evaluation.

4—Curricular Framework

This condition addresses the institution's regional accreditation and the program's degree nomenclature, credit-hour and curricular requirements, and the process used to evaluate student preparatory work.

4.1 Institutional Accreditation

The APR must include a copy of the most recent letter from the regional accrediting commission/agency regarding the institution's term of accreditation.

Program Response:

The University of Oregon was re-accredited by the Northwest Commission on Colleges and Universities (NWCCU) in 2017. The most recent letter of re-accreditation is available here.

Details of the accreditation process including the self-study report are available here.

4.2 Professional Degrees and Curriculum

The NAAB accredits professional degree programs with the following titles: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D.



Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and optional studies.

4.2.1 Professional Studies.

Courses with architectural content required of all students in the NAAB-accredited program are the core of a professional degree program that leads to licensure. Knowledge from these courses is used to satisfy Condition 3—Program and Student Criteria. The degree program has the flexibility to add additional professional studies courses to address its mission or institutional context. In its documentation, the program must clearly indicate which professional courses are required for all students.

Programs must include a link to the documentation that contains professional courses are required for all students.

Program Response:

We offer two professional degrees (B. Arch and M. Arch) that are currently accredited by NAAB and recognized by independent ranking agencies as among the best programs in the U.S. We seek renewal of accreditation for both degree programs. These degree programs are complimented by opportunities for professional study in Eugene, Portland, throughout the Pacific Northwest and through integrated off-campus experiences.

Overview of the Professional Program

Both the B.Arch and M.Arch degrees lead students through an intensive design studio sequence in addition to subject area coursework in design fundamentals, design arts, media, technology, professional context, and architectural history. The core curriculum is organized in iterative cycles with challenges that grow in complexity as students develop the capacity to apply course topics in the design studio. In the undergraduate program, the studios are distributed two per year over five-years for students who begin their study of architecture in their first year of college. The graduate degree programs follow a similar but more compressed timeline. The sequential completion of design studios and the associated subject courses defines the length of the graduate program as designated by track. The Department of Architecture section of the UO Catalog describes degree requirements in detail here.

The student population in architecture is composed of traditional undergraduate and graduate students, as well as a significant number of returning students, many whom have employment experience in related fields. Interaction among these groups is facilitated by courses that combine students from different levels, such as vertical studios, which enrich the educational opportunities. Architecture students further benefit from interaction and coursework in the larger context of the school. The Interior Architecture and Architecture degree requirements greatly overlap, and students in both disciplines now learn basic drawing and computer graphics along with Landscape Architecture students in Eugene. In Portland, Historic Preservation and Architecture courses are planned to maximize cross-fertilization. In recent years, interdisciplinary activities through the Sustainable Cities Year and other collaborative relationships among faculty in different departments has provided more opportunity for architecture students to work closely with students in allied fields, such as planning, as well as fields that contribute very different perspectives, such as dance.

One area that truly distinguishes our professional programs is faculty devotion to teaching. A high level of effectiveness in teaching, and a corresponding commitment to the development of the students, makes this department truly unique. Many of the department's faculty have national reputations as teachers of distinction, engage in the scholarship of teaching, are authors of textbooks or course materials that have been adopted by teachers in schools of architecture throughout the U.S. and internationally, have received national awards for teaching, and undertake leadership roles in national organizations concerning architectural education.

BACHELOR OF ARCHITECTURE, a fifteen-quarter, 231-credit program including gen. ed.



An outline of the B.Arch curriculum showing the distribution of general studies, the sequence of required professional courses, professional electives, other electives and the credit hours assigned to each course by quarter is available on the department's website and summarized via curriculum guide found here. Our UO B.Arch. five year on-time graduation rate of 84% greatly exceeds the U.S. average of 67% and the UO 4-year on-time graduation rate of 60.7% (data from UO Institutional Research).

MASTER OF ARCHITECTURE, a ten-quarter, 144-credit program

Completion of the M.Arch program is achieved by either of two paths: the M.Arch Track I program is for students with non-architecture degrees and requires ten quarters of graduate study. The M.Arch Track II program is for students with pre-professional degrees in architecture and normally requires six quarters of graduate study and 87 required credits. The Track II program functions as the graduate component of a traditional 4 year plus 2-year program. Since we do not offer a pre-professional undergraduate architecture degree, all Track II students have undergraduate degrees from other institutions. Track II students must fulfill all Track I accreditation requirements either through their undergraduate study or at University of Oregon. In 2012, the department raised the number of credits for Track II from 81 to 87 to encourage more elective study in a focus area.

Students with design degrees of related disciplines such as environmental design, interior architecture, and architectural engineering may be admitted to the Track II program with the stipulation that any academic deficiencies must be addressed by additional coursework, or to the Track I program, depending on their individual academic backgrounds. A careful transcript and course records evaluation is conducted to make the appropriate program placement. A common outcome for students with degrees in related fields is a personalized degree program that falls somewhere between Track I and Track II requirements.

In 2020, the faculty voted to raise the credits for the two structures courses from 4- to 6-credits to address the workload of the courses. To keep the total credits at 144, one elective was removed as a requirement.

An outline of the M.Arch curriculum showing the distribution of the sequence of required professional courses, professional electives and the credit hours assigned to each course and each guarter are shown here.

PROFESSIONAL STUDY IN PORTLAND

The Portland Program is an extension of the department's degree-granting programs in Eugene. Degree requirements for the Eugene and Portland campuses are identical, although the menu of elective courses and the teaching approaches used in some courses vary between the two sites in order to take advantage of the unique strengths of each. M.Arch Track II students who have completed appropriate coursework prior to starting at the UO have the option to complete all of their degree requirements in Portland. B.Arch and M.Arch Track I students begin their degree programs in Eugene. Once they have completed the first year of professional subject area courses, they can transfer to Portland for one or two years. Since our Portland program moved to a newly opened UO Portland White Stag Block satellite campus in 2009 (See 5.6 Physical Resources), the number of architecture students has ranged from 60 to 105 per year. For Fall 2021, 36 M.Arch. students and 30 fifth-year B.Arch. students are enrolled. With the move of Oregon's Historic Preservation program from Eugene to Portland in 2016, curricula between the two programs have been coordinated to maximize interdisciplinary collaboration.

Study in Portland is voluntary, with placement offered to new students who have applied to Portland and meet the Portland Program's admissions requirements, and to Eugene-based students who can apply to transfer in their second year of an M.Arch or final year of their B.Arch studies. The duration of study in Portland ranges from one quarter (usually in the summer) to two years (usually graduate students with no general education requirements). Students choose the Portland program for its focus on urban architecture, urban design, and for historic preservation coursework options. Some students choose Portland's location for its urban life, employment



opportunities, and connections to Portland's larger, nationally acclaimed community of practicing architects, advocacy organizations, and nonprofits.

The same governance and administrative structure that serves the department's programs in Eugene administers the Portland Program centrally, coordinating with the Portland Architecture Program Director.

The department has offered architecture and urban design studies in Portland since 1989 with the first Portland-based M.Arch. class starting in Fall 1994. In 2009, the department moved into the newly renovated historic White Stag Block (see 5.6 "Physical Resources"). The participation of full-time faculty currently comprises approximately 3.0 FTE with three full-time positions located in Portland and several faculty members based in Eugene who teach there periodically. There is also a large and highly qualified adjunct pool in Portland that draws upon the resources of the Portland professional community. Staff support has expanded to three full-time positions, including an academic advisor that we share with the Sports Product Design, Product Design, and Historic Preservation programs. There has also been a significant increase in computing, library and facilities staff support provided by the university. The UO Portland campus also has a dedicated Student Services Director.

Because of the advanced level of students in Portland, fewer core courses are needed there. The core courses we do offer address the urban architecture and design focus of the program and meet the needs of students in their final two years of study in the professional degree programs. M.Arch Track II students who are applying directly to Portland are expected to have completed most coursework in design, construction, human factors, place and culture, and architecture history in their undergraduate education. Many, but not all, Track II students have completed environmental controls or structures coursework as undergraduates. To accommodate students in Portland with different core course needs, structures, environmental controls systems, and some seminars in architectural history and theory, have been offered every other year, but increasingly, these offerings—such as Enclosures, Structures, Environmental Control Systems, and Professional Context—are being streamlined across the two campuses through hybrid delivery modes with a mix of in-person and live online teaching. We are transitioning to offering all required courses as a single, hybrid delivery across both campuses. The advisors and directors of undergraduate and graduate studies conduct a careful review of the transcripts and transfer credits of all students applying to study in Portland to ensure they have the sufficient background to be able to fulfill their degree requirements in Portland. Entering Track II students with deficiencies are required to enroll at the Eugene campus to satisfy those deficiencies before moving to Portland.

Descriptions of Portland's facilities, faculty and support services are provided in Section 5.6.

Integrated Off-Campus Experiences

In their first term, graduate students participate in a regional, off campus experience which provides them a chance to bond with their classmates. Typically, Track I students visit the Oregon coast, a historic mountain lodge and see forests, streams and waterfalls. Track II students take a field trip related to their design studio. First year undergraduates have the opportunity to visit Alvar Aalto's Mount Angel Library through a department sponsored trip, now organized by our American Institute of Architecture Students.

4.2.2 General Studies.

An important component of architecture education, general studies provide basic knowledge and methodologies of the humanities, fine arts, mathematics, natural sciences, and social sciences. Programs must document how students earning an accredited degree achieve a broad, interdisciplinary understanding of human knowledge.

In most cases, the general studies requirement can be satisfied by the general education program of an institution's baccalaureate degree. Graduate programs must describe and document the criteria and process used to evaluate applicants' prior academic experience relative to this requirement. Programs accepting transfers from other institutions must



document the criteria and process used to ensure that the general education requirement was covered at another institution.

Programs must state the minimum number of credits for general education required by their institution <u>and</u> the minimum number of credits for general education required by their institutional regional accreditor.

Program Response:

B.ARCH General Education Coursework

Students complete a minimum of 68 general education credits. These are met via a collection of required University of Oregon Core Education courses; English Composition, Math, and Physics courses; and upper division general electives.

B.Arch Degree Requirements

University of Oregon B.Arch <u>degree requirements</u> promote educational breadth; they include courses in expository writing, mathematics or foreign language, humanities, social sciences, natural sciences, and multicultural studies. The degree requirements include <u>Core Education</u> requirements, which are divided into three major components: Areas of Inquiry, Cultural Literacy, and English Composition. In order to complete the core education requirements B.Arch. students must complete the courses in the following categories:

Areas of Inquiry (Total Minimum Credits: 36; must include courses in at least two subjects)

- 12 credits in Arts and Letters
- 12 credits in Social Science
- 12 credits in Science

Cultural Literacy

- 3-4 credits in Global Perspectives
- 3-4 credits in US: Difference, Inequality, Agency.

English Composition

- 4 credits in WR 121 College Composition I
- 4 credits in WR 122 College Composition II or WR 123 College Composition III

Students enrolled prior to Fall 2019 take courses from Group-Satisfying (now called Area of Inquiry, above) and Multicultural courses. Information about these courses can be found on the Office of the Registrar's websites:

https://registrar.uoregon.edu/current-students/group-satisfying-and-multicultural-courses; https://registrar.uoregon.edu/current-students/bachelors-degree; and https://catalog.uoregon.edu/genedcourses/

Math and Physics

Although there is no specific math requirement for architecture majors, there is a minimum expectation of math ability. Algebra (MATH 111) and Trigonometry (MATH 112) are prerequisites for General Physics (PHYS 201), which is a prerequisite for the structures sequence for undergrads. Many students will have already completed algebra, trigonometry, and calculus in high school. Incoming students take a placement exam before enrolling in their first math course. Math and Physics courses can be used to fulfill the science group requirement. Undergraduate and graduate students planning to enroll in Structural Behavior (ARCH 4/561), are required either to earn a passing grade on a math/physics diagnostic examination administered by the architecture department or take a math/physics refresher workshop taught by the department's structures faculty. This pre-structures requirement ensures that students enrolling in the first structures course have sufficient knowledge of prerequisite subjects to be successful in their study of structures.

Upper Division General Elective Requirements



Bachelor of Architecture majors must complete 16 credits of Non-ARCH/IARC upper-division courses (numbered 300+) taken in residence. These can include courses that also satisfy group and multicultural requirements, as well as any upper-division ARH courses taken beyond the ARH requirement.

General Education Transfer Credit for Undergraduates

All general education transfer credits for undergraduate students are articulated on the transcript evaluation report during the admissions process. Undergraduate students are eligible to receive credit for core education coursework through the Advanced Placement examination program, International Baccalaureate program, and Concurrent Enrollment during high school. Also, students entering the University of Oregon with an Associate of Arts Oregon Transfer (AAOT) degree from an Oregon community college will have already fulfilled the university's written and group requirements. The University of Oregon has similar agreements to meet its lower division group requirements with community colleges throughout Washington and California. For more information on these articulation agreements visit this link.

M.ARCH General Education Coursework Verification

M.Arch students have typically complete all their general education requirements during their undergraduate degrees. Prospective M.Arch applicants go through a transcript evaluation during the admissions process. Graduate degree applicants will have already fulfilled the university's written and group requirements as part of fulfilling undergraduate degree.

4.2.3 Optional Studies.

All professional degree programs must provide sufficient flexibility in the curriculum to allow students to develop additional expertise, either by taking additional courses offered in other academic units or departments, or by taking courses offered within the department offering the accredited program but outside the required professional studies curriculum. These courses may be configured in a variety of curricular structures, including elective offerings, concentrations, certificate programs, and minors.

The program must describe what options they provide to students to pursue optional studies both within and outside of the Department of Architecture.

Program Response:

Graduate Professional Focus Options

Master of Architecture students are required to declare a professional focus. This requirement can be fulfilled by completing credits in an approved cluster of courses, by completing required coursework for a specialization, by earning a graduate certificate, or by completing concurrent degrees. M.S. and Ph.D. students may also pursue degree specializations and certificates. The Professional Focus Overview provides information on Specializations, Certificates and Clusters. There are also minors, concurrent degrees, off-campus study options and non-accredited degree programs available for students in Architecture.

Graduate Specializations - 16 credits

Specializations offer a focus in pre-designated areas of study related to architecture meant to provide depth in these areas through a selection of departmentally approved courses. Students interested in pursuing specializations must take a studio course related to the area of specialization, (interior architecture, housing, etc.) of which only 4 credits may count. The remainder of the credits come from a list of courses that is provided to a student once they declare their specialization. Specializations are noted on academic transcripts but not diplomas. There are 5 specialization options, 3 offered on the Eugene Campus, 2 offered on the Portland Campus:

- Interior Architecture (Eugene) AY20-21 enrollment 7
- Architectural Technology (Eugene) AY20-21 enrollment 22
- Housing (Eugene) AY20-21 enrollment 8



- Urban Architecture and Urban Design (Portland) AY20-21 enrollment 10
- Historic Preservation (Portland) AY20-21 enrollment 0

Clusters—15 credits

Clusters are a customizable option that allow for a breadth of study related to architecture. Clusters may be any combination of subject area, independent study, practicum, research, design studios (up to 6 credits), terminal preparatory courses, and relevant courses in other departments.

Students interested in pursuing clusters must offer a one-page statement on how each course selected are related to one another and how it offers a professional focus into architecture. Specific information regarding particular overlaps, projects, synthesis of material, and subject/content of a studio must be provided. Clusters are not noted on academic transcripts or diplomas.

Sample cluster names include the following (AY20-21 13 total students):

- Architectural Media
- Architectural History and Theory
- Craft and Fabrication
- Housing
- Interior Architecture
- Human and Social Contexts of Design
- Technology and Sustainable Technology
- Place, Urban Design, and Sustainable Urbanism
- Landscape Architecture
- Historic Preservation

Graduate Teaching Certificates

Graduate students are eligible to enroll in graduate certificates to pursue additional study that complements their degree program. The department offers a 24-credit graduate certificate in Teaching in Technical Subjects and partners with other units to provide interdisciplinary certificate programs in Ecological Design, Museum Studies, New Media and Culture as well as many others. There are also many interdisciplinary Graduate Specializations available. More information about these programs is available in the UO Course Catalog. Current enrollments are low due to the high credit requirement. We are exploring options to integrate some portion of the required credits from the existing curriculum.

Certificate in Teaching in Technical Subjects in Architecture (AY20-21 enrollment 1)

The department is known for its graduates who pursue teaching careers, particularly in the area of building technology. In recognition of the department's success in developing future building technology educators, and in acknowledgement of the national need for more qualified teachers in technical fields, professors John Reynolds and Edward Allen developed the Technical Teaching Certificate Program. Click here for more info on this certificate.

Graduate students interested in pursuing teaching careers can earn a Certificate in Teaching Technical Subjects in Architecture while enrolled in one of the department's graduate programs. The certificate is also available through University Extension to qualified individuals who hold a professional degree in architecture. The certificate provides an avenue for students to pursue interests in building technology, gain teaching experience, and delve into curricular and pedagogical issues. Since 2002, 40 students have completed the certificate and most have gone on to teach in other architecture programs.

Ecological Design Certificate (AY20-21 enrollment 4)

The School of Architecture & Environment has a national reputation as a leader in sustainable and ecologically sensitive design. The Ecological Design Certificate Program provides a cross-curricular offering, encouraging students to develop a holistic, ecologically based design awareness and promoting students' capacity for leadership in the field. It is focused on the development of a practical framework for the integration of the built environment with local



and regional natural systems. It is available to all graduate students. Participating students are challenged to develop an in-depth understanding of the relationships between ecological processes, issues of cultural and social sustainability, and urban development and form, as well as how allied design and planning disciplines approach these relationships. Students will acquire a theoretical and pragmatic basis to carry these understandings into the world of practice.

Concurrent Degrees (AY20-21 enrollment 15 students)

Concurrent degrees require completion of the architecture degree but also requires depth in areas of study that merits successful completion of another degree concurrently (at least 45 credits for the second degree). Architecture currently supports concurrent degree options with the Interior Architecture and Community and Regional Planning programs, where departmental agreements are made to waive specific courses that may be deemed as overlaps in curriculum. Students interested in pursuing concurrent degrees outside of Interior Architecture and Community and Regional Planning may do so, even if departmental agreements aren't made to waive courses that may or may not be overlaps. Concurrent Degrees award two separate diplomas.

M.Arch. Professional Focus (2020-21)	Track I	Track II	Non-SAE		
Architectural Technology	9	10			
Architectural Technology & Housing	2				
Architectural Technology & Interior Architecture	1				
Housing	5	1			
Housing & Interior Architecture	1				
Interior Architecture	4	1			
Urban Design & Urban Architecture		10			
Cluster (any)	6	7			
Concurrent Degrees	7	8			
Certificate (Teaching Technology)		1			
Certificate (Ecological Design)	3		1		

Undergraduate Minors

B.Arch students can elect to pursue any of numerous minors across the university. The most popular choices are business, interior architecture, landscape architecture, art history, historic preservation and foreign languages. In AY20-21,126 architecture students had at least one minor with some having up to three separate minors.

Professional Study in Other Off Campus Locations

Architecture students can participate in foreign exchange with universities in Singapore, Hong Kong, and Stuttgart, U.S. off-campus programs such as Pacific Northwest Historic Preservation field school and study abroad programs. Before the pandemic, our students were participating in foreign study at a much higher rate than either UO or AAU students (typically 25%). Students in Architecture, Landscape Architecture and Interior Architecture had participation rates of 75% in 2017-18 and 50% in 2018-19. The department's faculty-led global programs combine design studios with history/theory and media courses for a full quarter of 9 to 16 professional program credits:

- Rome Summer Architecture & Urban Design program has had a rotating directorship since 1984. It is a professional development opportunity and shared experience for all UO Architecture faculty.
- Barcelona Urban Design Summer program led by Philip Speranza focuses on urban sensing and mapping for urban vitality and pedestrian livability, started in 2012.
- Vicenza, Italy Spring program led by Jenny Young and Don Corner emphasizes plazas, town form and building tectonics. Started 2005, previously in Macerata and Oira.



 The number of Architecture students studying abroad varies year to year based on interest and program availability. In AY16-17, 70 architecture students participated in study abroad while in AY18-19, 36 students participated. Details of participation are in the study abroad folder.

These programs are self-supporting and administered by UO faculty directors with the assistance of the <u>Global Education Oregon</u> (GEO), a unit in the university's Division of Global Engagement. Program details including courses offered, credits earned, program duration, facilities, and faculty qualifications are available online <u>here</u>. During 2013-2020, programs have been offered in Vancouver, Canada; Hong Kong, China and Gabon. A forthcoming program in Tanzania, East Africa is being planned by Michael Zaretsky who has worked there since 2008.

Non-Accredited Degree Programs in Architecture

In addition to our accredited B.Arch and M.Arch degree programs, the Department of Architecture offers additional non-accredited research-based graduate programs of study. These include the: Ph.D. in Architecture; Master of Science in Architecture, and the Minor in Architecture for undergraduate non-majors.

NAAB-accredited professional degree programs have the exclusive right to use the B. Arch., M. Arch., and/or D. Arch. titles, which are recognized by the public as accredited degrees and therefore may not be used by non-accredited programs.

Programs must list all degree programs, if any, offered in the same administrative unit as the accredited architecture degree program, especially pre-professional degrees in architecture and post-professional degrees.

The number of credit hours for each degree is outlined below. All accredited programs must conform to minimum credit-hour requirements established by the institution's regional accreditor. Programs must provide accredited degree titles, including separate tracks.

4.2.4 Bachelor of Architecture.

The B. Arch. degree consists of a minimum of 150 semester credit hours, or the quarter-hour equivalent, in academic coursework in general studies, professional studies, and optional studies, all of which are delivered or accounted for (either by transfer or articulation) by the institution that will grant the degree. Programs must document the required professional studies courses (course numbers, titles, and credits), the elective professional studies courses (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Bachelor of Architecture									
Required Studio Courses			Elective Prof Courses		General Studies		Optional Studies		
Course #x & titles	crds	Course #x & titles	crds	Course #x & titles	crds	Course #x & titles	crds	Course #x & titles	crds
ARCH 283: Arch Design I	6	ARCH 201: Intro to Architecture	4	ARH 3xx or 4xx: Art History Elective	4	Arts & Letters	4	General Elective(s)	27
ARCH 284: Arch Design II	6	ARCH 202: Design Skills	3	ARH 3xx or 4xx: Art History Elective	4	Cultural Literacy	4		
ARCH 383: Arch Design III	6	ARCH 222: Intro to Arch Comp Graphics	4	Subject Area Elective(s)	6	Social Science	4		
ARCH 384: Arch Design IV	6	ARH 314: History of World Arch I	4			Social Science	4		
ARCH 484: Architectural Design	6	ARH 315: History of World Arch II	4			Social Science	4		
ARCH 484: Architectural Design	6	ARCH 417: Context of the Arch Profess	4			PHYS 201	4		
ARCH 484: Architectural Design	6	ARCH 423: Media for Dsgn Develop	3			PHYS 202	4		
ARCH 484: Architectural Design	6	ARCH 430: Architectural Contexts	4			Science	4		
ARCH 485: Advanced Arch Design I	8	ARCH 440: Human Context of Design	4			WR 121 College Composition I	4		
ARCH 486: Advanced Arch Design II	8	ARCH 450: Spatial Composition	4			WR 122/123 College Comp II or III	4		
		ARCH 461: Structural Behavior	6			300+ Upper Div Gen Ed Elective (s)	16		
		ARCH 462: Structural Design	6						
		ARCH 470: Building Construction	4						
		ARCH 471: Building Enclosure	4						
		ARCH 491: Env Control Systems I	4						
		ARCH 492: Env Control Systems II	4						
		Advanced Technology	4						
Total req prof	64	Total req prof	70	Total prof electives	14	Total gen studies	56	Total opt. studies	27
	28%		30%		6%		24%		12%
Total # of degree credits				231					



4.2.5 Master of Architecture.

The M. Arch. degree consists of a minimum of 168 semester credit hours, or the quarter-hour equivalent, of combined undergraduate coursework and a minimum of 30 semester credits of graduate coursework. Programs must document the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for both the undergraduate and graduate degrees.

Masters of Architecture Track I							
Required Studio Courses		Required Prof Courses		Elective Prof Courses		General Studies	
Course #x & titles	crds	Course #x & titles	crds	Course #x & titles	crds	Course #x & titles	crds
ARCH 584: Architectural Design	6	ARCH 517: Context of the Arch Profess	4	Architectural History	4		
ARCH 584: Architectural Design	6	ARCH 523: Media for Dsgn Develop	3	Architectural History	4		
ARCH 584: Architectural Design	6	ARCH 530: Architectural Contexts	4	Subject Area Elective(s)	12		
ARCH 584: Architectural Design	6	ARCH 540: Human Context of Design	4				
ARCH 584: Architectural Design	6	ARCH 550: Spatial Composition	4				
ARCH 585: Advanced Arch Design I	8	ARCH 561: Structural Behavior	6				
ARCH 586: Advanced Arch Design II	8	ARCH 562: Structural Design	6				
ARCH 680: Introductory Grad Design	6	ARCH 570: Building Construction	4				
ARCH 681: Introductory Grad Design	6	ARCH 571: Building Enclosure	4				
ARCH 682: Introductory Grad Design	6	ARCH 591: Env Control Systems I	4				
		ARCH 592: Env Control Systems II	4				
		ARCH 610: Global Modern Architecture	4				
		ARCH 610: Intro to Arch Computing	2				
		ARCH 611: Grad Design Process	3				
		5xx: Advanced Technology Elective	4				
Total reg prof	64	Total req prof	60	Total prof electives	20	Total gen studies	
	44%		42%		14%		
Total # of degree credits		•	-	144	1	•	•

Required Studio Courses		Required Prof Courses		Elective Prof Courses		General Studies	
Course #x & titles	crds	Course #x & titles	crds	Course #x & titles	crds	Course #x & titles	crds
ARCH 584: Architectural Design	6	ARCH 607: Option II Seminar	3	Subject Area Elective	4		
ARCH 584: Architectural Design	6	Required Core Course	4	Subject Area Elective	4		
ARCH 584: Architectural Design	6	Required Core Course	4	Subject Area Elective	4		
ARCH 585: Advanced Arch Design I	8	Required Core Course	4	Subject Area Elective	4		
ARCH 586: Advanced Arch Design II	8	Required Core Course	4	Subject Area Elective	4		
ARCH 683: Introductory Grad Design	6	Required Core Course	4				
		Required Core Course	4				
		Students may need the following cou	rses				
		dependent on their prior degree courses					
		ARCH 517: Context of the Arch Profess					
		ARCH 530: Architectural Contexts					
		ARCH 540: Human Context of Design					
		ARCH 550: Spatial Composition					
		ARCH 561: Structural Behavior					
		ARCH 562: Structural Design					
		ARCH 570: Building Construction					
		ARCH 571: Building Enclosure					
		ARCH 584: Architectural Design					
		ARCH 591: Env Control Systems I					
		ARCH 592: Env Control Systems II					
Total req prof	40	Total req prof	27	Total prof electives	20	Total gen studies	
	46%		31%		23%		

Note: All Track 2 students need to fulfill Track 1 requirements either through transfer articulation (previous education) or enrollment at UO. They must take a minimum of 87 credits.

Graduate program requirements

The minimum number of credits that must be earned for the M Arch degree is 144 (quarter) credit hours. This is equivalent to 96 semester credit hours. Advanced placement is available for qualified students. Credits are distributed as follows:

Architectural design studios 64 credits 44% of total



Required professional courses 60 credits 42% of total Elective professional courses 20+ credits 14% of total

Graded Credits

There is no graded hour requirement for M Arch students. If graded hours are taken, however, an average GPA of 3.0 must be maintained. For a graduate student to receive a pass in a course taken on a pass/no pass basis, the student must earn a minimum grade of 80%.

Pass / Marginal Pass / No Pass

Many courses in architecture are not graded. All studios are pass / no pass with a marginal pass option if a student is deemed in need of additional review (leading to a "gate review"). Other courses can be offered as pass / no pass at the discretion of the professor. Some courses offer the student the option of taking the course for graded credit or not.

Graduate Concentrations

Master of Architecture students are required to declare a <u>professional focus</u> (as described above). This requirement can be fulfilled by completing credits in an approved cluster of courses, by completing required coursework for a specialization, by earning a graduate certificate, or by completing concurrent degrees. M.S. and Ph.D. students may also pursue degree specializations and certificates. 16-credit specializations in Housing, Interior Architecture and Building Technology are offered in Eugene; Urban Architecture/Urban Design and Historic Preservation are offered in Portland. Students pursuing concurrent degrees in Architecture and Interior Architecture naturally have a dual focus and are not required to cover another professional focus.

Non-Professional Programs

Master of Science (M.S.) in Architecture, enrollment: 10

Master of Science in Architecture is a post-professional program that is primarily for candidates who already hold a NAAB- accredited Bachelor of Architecture degree, a CIDA-accredited Bachelor of Interior Architecture/Design degree, or for international students, a substantially equivalent degree accredited by a recognized architectural accrediting agency in a foreign country as well as for students with degrees in related disciplines. Most international M.S. degree candidates are registered architects abroad. Starting in 2017, the department added areas of focus to the M.S. program in areas such as Architecture and Health, High-Performance Buildings, and Mass Timber Design.

Doctor of Philosophy (Ph.D.) in Architecture (founded in 2011, enrollment: 13)

Building upon more than forty years of excellence in environmental design teaching and research at the UO, the Ph.D. program focuses on sustainable architecture and integrated design. It engages students in multidisciplinary investigations that create new knowledge in compelling and time-sensitive research topics. With this focus, the program addresses the needs of the profession as society faces the environmental impact of buildings and cities.

4.2.6 Doctor of Architecture.

The D. Arch. degree consists of a minimum of 210 credits, or the quarter-hour equivalent, of combined undergraduate and graduate coursework. The D. Arch. requires a minimum of 90 graduate-level semester credit hours, or the graduate-level 135 quarter-hour equivalent, in academic coursework in professional studies and optional studies. Programs must document, for both undergraduate and graduate degrees, the required professional studies classes (course numbers, titles, and credits), the elective professional studies classes (course numbers, titles, and credits), the required number of credits for general studies and for optional studies, and the total number of credits for the degree.

Program Response:

The University of Oregon does not offer the D.Arch degree.



4.3 Evaluation of Preparatory Education

The NAAB recognizes that students transferring to an undergraduate accredited program or entering a graduate accredited program come from different types of programs and have different needs, aptitudes, and knowledge bases. In this condition, a program must demonstrate that it utilizes a thorough and equitable process to evaluate incoming students and that it documents the accreditation criteria it expects students to have met in their education experiences in non-accredited programs.

4.3.1 Evaluation of Prior Academic Coursework

A program must document its process for evaluating a student's prior academic coursework related to satisfying NAAB accreditation criteria when it admits a student to the professional degree program.

See also Condition 6.5

Program Response:

The timeline and process for university and program admissions, transfer credit evaluation, and review of prior academic coursework is structured differently for the undergraduate and graduate professional degree programs. However, the guidelines used to determine course equivalency are shared.

B.ARCH Transfer Application and Transcript Evaluation Process

The admission and academic advising process for undergraduate transfer students has been under revision for the last three years to achieve better alignment with university admissions deadlines and best practices in holistic assessment. Previously, transfer students applied to the department through a separate application process, were admitted as space was available, with course equivalency evaluations happening loosely on a rolling basis. As of AY21-22, there is no longer a separate departmental application for new students applying to the Bachelor of Architecture program. New transfer students are reviewed within a closer timeframe as regular applicants and are given a clearer timeline and instructions surrounding course equivalency evaluation. Admissions information for B.Arch applicants including transfer students can be found here.

The process for evaluating transfer credits occurs in tandem with the admissions process for undergraduate transfer students. Once an applicant submits an official transcript, the Office of the Registrar will initially articulate transfer credits as elective or electives meeting various university-requirement attributes. This information is summarized in a transfer evaluation report and degree guide. The transfer evaluation report shows how prior courses will meet core education requirements or be counted toward major/minor requirements at various course levels. The degree guide is a web-based program that allows students to view progress toward degree completion. Both of these resources are accessible online through the DuckWeb information system. More information about the university-level process can be found here at the Office of Admissions website.

Once transfer applicants have been offered admission to the university, they are reviewed at the program-level by Admissions Committee faculty using the same holistic <u>assessment rubric</u> for regular B.Arch applicants. Final admissions decisions are determined by the Director of Undergraduate Studies (DUS) in consultation with the Department Head. All evaluations and decisions are recorded and tracked through UO Office of Admissions using Slate, an admissions and enrollment management system.

M.ARCH Track II Application and Transcript Evaluation Process

Placement of M.Arch Track II students, and all requests for transfer credits or advanced placement from M.Arch Track I students, are evaluated by the Director of Graduate Studies and the SAE Graduate Advisor (GA).



Transcript Course Equivalency Evaluation Process: Graduate students who have been offered admission to the program undergo a transcript analysis and program planning review. The SAE Student Services Manager prepares a proposed course equivalency folder with the student undergraduate transcripts and a blank form of course equivalency analysis for each admitted graduate student. The course equivalency analysis forms report the credits from the student evaluation report and proposes the required M.Arch. course they satisfy. In case the equivalent course taken by the student in their undergraduate degree is not properly labeled or not in the desired level, the student is asked to submit the necessary syllabi and student work examples for review. The DGS, in consultation with relevant teaching faculty, will use the guidelines below to confirm final course equivalency determinations. Following the course equivalency determination and waivers, the DGS develop a program of study for each student with the help of the DGS assistant and the GA. The GA sends students a finalized copy of their course waiver approvals and program of study prior to the start of Fall term to aid them in the registration process.

Course Equivalency Guidelines for Coursework from NAAB-Accredited Programs In all cases, evaluations adhere to the following guidelines for articulating studio and subject area credit course equivalencies of similar credits taken be prospective students that would allow them to waive similar required courses of the degree. The same guidelines are also used to evaluate any study-abroad or other special study programs that students propose to attend for transfer credit.

Evaluation of Design Studio Credit (M.ARCH Track 1 students)

- 1. Students with no previous architectural studios will be required to complete the full design studio sequence at UO regardless of other transfer credit.
- Transfer students with the credit equivalent of up to three previous terms of architectural design from NAAB-accredited degree programs will be evaluated for appropriate placement in the introductory design studio sequence (280's or 380's for undergraduates or 680's for graduate students) based on grades in those courses and submitted examples of previous studio work.
- 3. Transfer students with the credit equivalent of three to four previous terms of architectural design from NAAB-accredited degree programs will be evaluated for appropriate placement in the intermediate design studio sequence (484's) based on grades in those courses and submitted examples of previous studio work.
- 4. A minimum of two ARCH 4/584 studios must be completed at UO prior to enrollment in ARCH 4/585 even though the total accumulated studios (including transferred studios) may exceed degree requirements.

Evaluation and Waiver procedures of Subject Course Credit (M.ARCH Track 1 & 2)
Upon submission of transcripts, course descriptions, and syllabi for the required course work being considered to be waived, the DGS, in consultation with faculty members who teach in the relevant subject areas, evaluate coursework for approval as substantially equivalent to UO required professional courses. All course work considered for course equivalence must be accepted as transferable by the UO. Credit from programs that have articulation agreements with other NAAB- accredited schools may be accepted. The waived course must meet the following criteria:

- The course is equivalent in content, credit hours, and requirements as the UO program course to be waived.
- The course must be from a NAAB accredited degree program taken within the last six years prior to the student's admission to the M.Arch Program.
- The student passed the course successfully with a B- grade or equivalent.
- The course is not used to waive another required UO course.

4.3.2 Standards for Preparatory Education Experience

In the event a program relies on the preparatory education experience to ensure that admitted students have met certain accreditation criteria, the program must demonstrate it



has established standards for ensuring these accreditation criteria are met and for determining whether any gaps exist.

Program Response:

Credit from programs not accredited as professional degree programs by the National Architectural Accrediting Board (NAAB) will normally not be accepted for the Master of Architecture degree. Exceptions may be made if the student's work is clearly competent, but only at the introductory undergraduate studio level (280's, 380's, 680's).

All course work considered for transfer equivalence must be accepted as transferable by the UO. As with transfer students, those graduate and undergraduate applicants seeking advanced placement within the curricular sequence must submit evidence of previous studio work and subject area course syllabi for review during the course equivalency verification processes described in section 4.3.1.

4.3.3 Evaluation of Degrees in Admissions Process

A program must demonstrate that it has clearly articulated the evaluation of baccalaureatedegree or associate-degree content in the admissions process, and that a candidate understands the evaluation process and its implications for the length of a professional degree program before accepting an offer of admission.

Program Response:

B. ARCH

Transcript evaluation occurs in tandem with the admissions process for undergraduate transfer students applying to the B.ARCH program. At the university-level, students can review their transcript evaluation reports and degree guide shortly after submitting official transcripts during the admissions process. Both of these resources are accessible online through the DuckWeb information system. More information about the university-level process can be found here at the Office of Admissions website.

Upon offer of admission to the university and program, the department engages transfer applicants in a course equivalency process to determine how the credits from their transcript evaluation report will be matched to satisfy specific B.Arch courses. Information about this process can be found on the information for transfer students page on the department website: *site forthcoming.*

M. ARCH

As part of the application requirements to the UO M.Arch program, prospective applicants submit transcripts from previously attended UG or Grad programs for evaluation and consideration. The transcript evaluation occurs as part of the admissions process to determine the applicant eligibility to either the Track 1 or Track 2 program. The applicants are notified of their admission decision and to the M.Arch Track they have been accepted to. Upon acceptance of their track designation, the process for detailed transcript evaluation and course planning is initiated as outlined in section 4.3.1, so that students understand time to degree completion prior to beginning the program.

In summary, our programs provide a comprehensive professional education with strong options for specialized study and research. The required curriculum thoroughly integrates values of sustainability, collaboration and equity, with coursework information applied in the design studio. Our advising staff works closely with the departmental leadership to ensure student fulfillment of accreditation requirements whether taken completely at Oregon or in combination with previous study. As our Director of Graduate Studies has been key to supporting the academic needs of M.Arch. students, we anticipate that our new Director of Undergraduate Studies will play a key role in fostering successful B.Arch. students.



5—Resources

5.1 Structure and Governance

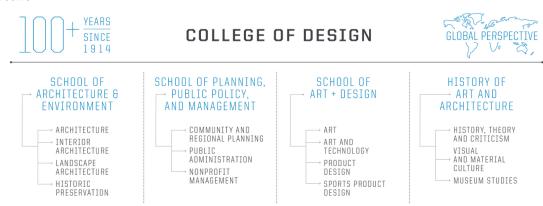
The program must describe the administrative and governance processes that provide for organizational continuity, clarity, and fairness and allow for improvement and change.

5.1.1 Administrative Structure

Describe the administrative structure and identify key personnel in the program and school, college, and institution.

Program Response:

The Department of Architecture is the largest unit of the College of Design, a major academic component of the University that operates with a degree of autonomy. The university is composed of nine schools and colleges: the College of Arts and Sciences (largest unit on campus); the Graduate School, the Honors College and six professional units, of which the College of Design is one. The College of Design's student population (1,838 in Fall 2020) represents over seven percent of the institution's total enrollment (23,602 in Fall 2020), making it the second largest professional school at the University. Since the last accreditation visit, the University shifted to an independent Board of Directors in 2014 as the consolidated Oregon University System disbanded. The University has more autonomy with the Oregon Higher Education Coordinating Commission than it previously had with the Oregon Board of Higher Education.



With the shift from the School of Architecture and the Allied Arts (AAA), The College of Design was created and reorganized in 2017 into the following schools: Architecture & Environment, Art and Design, Planning, Public Policy and Management, and the Department of the History of Art and Architecture. The School of Architecture & Environment includes all the accredited design professions (Architecture, Landscape Architecture, Interior Architecture and Historic Preservation). Architecture students represent approximately 26% of the College enrollment and Architecture faculty 24% of the tenure-track faculty.

UO Provost Patrick Phillips works closely with two executive vice-provosts and five vice-provosts, to head the University's academic divisions. Decisions affecting academic affairs and allocation of resources are made by the provost and are subject to the approval of the UO president, Michael Schill.

The highest administrative officer of the College of Design is the Dean, who reports directly to the Provost. The dean works closely with two associate deans and a director, who manage the school's activities in the areas of academic affairs, operations, finance and the oversight of the Eugene and Portland programs. The highest administrative officer in the department is the department head, who reports directly to the School of Architecture & Environment Director, the Dean's designee for many matters except personnel. The architecture department head works



closely with three directors responsible for overseeing Graduate studies, Undergraduate Studies and the Portland Architecture Program. Faculty members holding administrative positions receive course releases and summer salary to support their work.

Administrative Positions

Administrative positions held by faculty and staff members in the College who provide direct administrative support to the department include:

Dean of the College of Design

The Dean is the chief academic and administrative officer responsible for the College of Design and reports to the UO Provost and Senior Vice President. They are responsible for the academic vision and strategies, managing the organization and finances, and facilitating excellence in research, creative practice and education across the College.

The Dean represents the interests of the College within the university and is a member of the central academic leadership team. The Dean works with university partners and external leaders to advance the strategic objectives and potentials for the College.

The Dean works directly with the Associate Deans (of Facilities, Student Affairs and Academic Affairs), with the Assistant/Associate Dean of Finance as well as with the School Directors.

Adrian Parr became the Dean of the College of Design in Spring 2021 after being Dean at the University of Texas-Arlington. She is an internationally recognized environmental, political, and cultural thinker and activist who engages in research related to water and global sustainability. The majority of her 12-month appointment is dedicated to leadership, development, and administration of the collective and individual interests of all units within the school.

The College provides centralized services that support the work of all of the units. The Associate Dean for Finance and Administration oversees many of these units.

Central Business Services Office (CBSO)

The Central Business Services Office provides budget and accounting services to manage the financial resources of the college. The CBSO helps develop department and program annual budgets and provides financial information to assist in the management of college resources. The office also administers purchasing personal services contracts, travel and payroll. While providing high level support for the College, The CBSO also provides centralized fiscal services to a number of other academic and administrative units on campus.

Each School has its own administrative staff team, including a Business Operations Manager, that supports the work of all the units within their School. The Business Operations Managers report to both their School Director and the Director of Financial Operations, and they work collaboratively with the entire College business operations team.

Communications

The Communications Office leads efforts on external and internal communications, including digital, print and social media. They coordinate efforts with central communications and work directly with schools, departments and programs to improve communications, including marketing and outreach.

Development

The Development Office leads college fundraising efforts, donor relations and gift stewardship.

Facilities Support Services

The Facilities Services team provides primary support for the College of Design facilities and equipment, in both Eugene and Portland. They work closely with the academic units, to respond to needs and make improvements, and with Campus Planning and Facilities Management.

Student Services



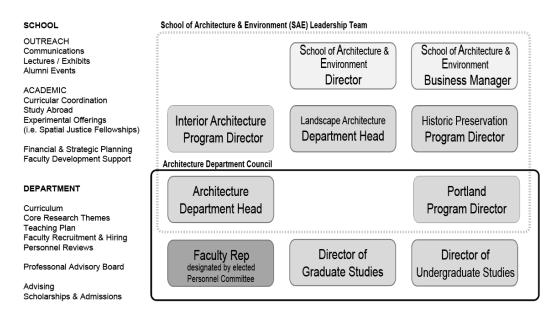
The Student Services office provides undergraduate academic advising and career services to students across the College. The advising office has expanded in recent years to four full-time advisors. They also work collaboratively with schools and departments to organize career fairs, recruitment events and orientations and manage the College-wide scholarship process. Student Services reports to the Associate Dean responsible for student affairs.

Portland Administration

The Portland administration team provides support services for the program based at the White Stag Building.

School of Architecture & Environment Leadership Team

The School of Architecture & Environment Leadership team is comprised of the School Director, the Business Manager, Department Heads of Architecture, Interior Architecture, Landscape Architecture and Directors of the Portland Architecture Program and the Historic Preservation Program. This team administers School efforts including shared curricular, and financial decisions, coordinating with the School, College and University levels.



<u>Director of the School of Architecture & Environment (SAE)</u>

The Director of SAE oversees the four units within the School – Departments of Architecture, Landscape Architecture, Interior Architecture and the Historic Preservation program. They hold leadership meetings weekly, oversee the staff for the School and oversee communications for the School.

Interim Director Kevin Van Den Wymelenberg was appointed in summer 2021. He is a Professor of Architecture and Director of the Institute for the Health in the Built Environment, the Biology and the Built Environment Center, as well as the Energy Studies in Buildings Lab in Eugene and Portland. Associate Professor Liska Chan (Fall 2017-Spring 2018) and Professor Erin Moore (July 2018-June 2021) previously held this position, with Moore additionally serving as one of three Associate Deans during 2020-21.

School of Architecture & Environment Business Operations Manager

The Business Operations Manager oversees finances for the School in collaboration with the College finance team. They oversee the SAE staff, oversee contracts and other aspects of business for all four units in the School. Shaun Haskins is the Business Operations Manager for SAE and manages school and department finances and faculty personnel matters and supervises the school staff.



Department Head

The Department Head for Architecture is responsible for the administration and oversight of the Architecture Department, working closely with their colleagues to lead the vision and shape the research and teaching profile of their unit. As designated in the Collective Bargaining Agreement, the department head is part of the management team at the UO and is the department faculty's first point of contact for administrative issues. Department Heads are responsible for communicating and implementing school, college and university priorities. Appointed by the Dean for a renewable, three-year term, the process for selecting and recommending a department head is described in the department's internal governance policy.

The Department Head reports to the Director of the School of Architecture and Environment within the College of Design and works with SAE administrative staff on department operations. The Department Head is a member of the academic leadership team in the School and contributes to the direction and operation of the School as a whole, including collaborating on shared priorities for curricular planning, staffing, programming, facilities and resource allocation.

Associate Professor Michael Zaretsky assumed the department head role in Spring 2021, responsible for department operations, faculty affairs, and the curriculum. Since the last accreditation visit, Judith Sheine (2013-Spring 2018), Kevin Van Den Wymelenberg (Summer & Fall 2018) and Nancy Cheng (Winter 2017-Winter 2021) have served as the department head. With the College reorganization in Fall 2017, the department head compensation has shifted from three course releases per year to two, and the two-month appointment during the summer quarter has been reduced to one quarter. However, in recent reorganization, the course releases are now four annually and there is a two-month summer appointment.

The Associate Department Head and Director of Student Affairs (discontinued in 2017)
Glenda Utsey (2013-16) and Peter Keyes (2016-17) served as the department's chief academic advisor and chair of the admissions and scholarship committees. The position received two course releases per year and a one-month appointment during the summer quarter. This position was eliminated with the College reorganization.

Architecture Administration Council

The Architecture Administration Council includes the Director of Graduate Studies, the Director of Undergraduate Studies, the Director of the Portland Program and one other faculty member (currently the Chair of the Architecture Curriculum Committee). They meet regularly with the Head of Architecture to confer on oversight and coordination of the Department.

Director of the Portland Program

The Director of the Portland Program oversees the faculty in Portland in consultation with the Department Head for Architecture. They work closely with the UO staff in Portland to assure the success and coordination of the Portland program.

Justin Fowler, Career NTTF instructor in Architecture, has been the Portland Program Director since July 2019. He advises students, mentors faculty and represents the program in Portland Campus and external venues. He receives two course releases per year and a one-month appointment during the summer quarter. The position was previously held by Nancy Cheng (2009-13), Hajo Neis (2014-17), and Brook Muller (2017-19)

Director of Graduate Studies (DGS)

The Director of Graduate Studies (DGS) oversees the graduate programs in the Department of Architecture and works closely with the Department Head, the Administrative Council, and the staff of the School of Architecture and Environment. The DGS helps to develop and administer policies and programs that improve the quality of the graduate curriculum and course offerings, foster research and advanced work among graduate students, and solicit new students to the department. The DGS maintains contact with the Graduate School, attending its periodic



meetings of directors of graduate studies and interacting on matters of policy, and keeps up-todate on University rules and policies that affect graduate education and teaching. The DGS also maintains connections between graduate activities, courses and students in Eugene and Portland and has an active presence in both locations.

Professor Ihab Elzeyadi chairs the department's Graduate Studies Committee, works with the Graduate Advisor and Graduate Recruiter and addresses graduate curricular issues. He oversees all graduate students advising matters, perform transcript evaluations, approves course plans, and required course waivers for graduate students. In addition, he coordinates approvals and graduate program requirements between the department and the graduate school. He receives one course release per year and a stipend. This position was previously held by Howard Davis (2009-14), Alison Kwok (2014-17) and Erin Moore (July 2017-Sept 2018).

Director of Undergraduate Studies (new in Fall 2020)

The Director of Undergraduate Studies (UGS) oversees the undergraduate program in the Department of Architecture and works closely with the Department Head, the Administrative Council, and the staff of the School of Architecture and Environment. The UGS helps to develop and administer policies and programs that improve the quality of the undergraduate curriculum and course offerings, oversee admissions, and solicit new students to the department. The UGS maintains contact with the registrar and central admissions offices and interacts on matters of policy, and keeps up-to-date on University rules and policies that affect undergraduate education and teaching.

Associate Professor Daisy O'lice Williams chairs the department's Undergraduate Studies Committee, supervises undergraduate admissions and addresses undergraduate curricular issues. She receives one course release per year, a one-month appointment during the summer quarter and a stipend.

Faculty participation in administration and governance

The <u>UO Committee</u> on <u>Committees</u>, the dean's office, the department head and several advisory boards on campus distribute requests for faculty interest to serve or run for election. All tenure-related faculty members and several adjunct faculty members participate in administration and governance activities. A typical service participation level for tenure-related faculty members includes work with one committee at each of the department, school and university levels, in addition to an individual service assignment. In AY20-21, UO leadership asked each unit to reduce non-essential service duties for faculty.

The department is committed to ensuring the tenure-track faculty has sufficient time to teach and pursue their research agendas, and that all faculty members have access to leadership roles at the school and at the university. As a professional program, service to the profession and to the community, which can take time away from service on campus, is also an important part of our mission. To address these challenges, the department maintains some flexibility in the formation of committees, combining some committees together in some years if there are too few faculty members available to fill all committees. In making service assignments, the department head rotates appointments with heavy time demands and takes into account the level of administrative activity individual faculty members expect to have at the school and university levels.

Student participation in administration and governance

Students provide highly valued input into school and departmental matters at all levels and help to facilitate effective communication among students, faculty and administrators. Student groups in the department—the AIAS in Eugene, HOPES Ecological Design, and the Portland Design Student Union—are particularly active voices in the self-governance process. These groups conduct meetings to discuss student priorities and concerns and bring these to the faculty for consideration. Student participation includes appointments to several of the school and department committees. Most appointments are made by issuing a call for student volunteers and by faculty encouraging students to step forward. In cases when there is more interest than



positions available, faculty members of committees with openings review student qualifications and recommendations when making appointments.

5.1.2 Governance

Describe the role of faculty, staff, and students in both program and institutional governance structures and how these structures relate to the governance structures of the academic unit and the institution.

Program Response:

The University Board of Trustees has ultimate governing authority over the University, including fiscal and program approval and appointment of the President. The President makes key decisions on daily operations, working closely with the university Senate, the administration and university committees to further the University's academic mission. The UO Senate is unusual among university governing bodies in that it is comprised of all campus stakeholder groups: faculty, students, officers of administration (OAs), officers of research and classified staff. This inclusiveness enables all groups to have a voice in decision-making. Senators are elected by the constituents they represent, i.e. elected officers of the Associated Students of the University of Oregon (ASUO) represent students in the Academic Senate. Processes, roles, and responsibilities of governance bodies is available at the UO Senate blog.

The Office of the Provost (OtP) is responsible for carrying out the academic mission and defining and managing the financial allocation model. With faculty unionization in 2013, personnel policies for tenure-related faculty and pro-tempore as negotiated by the university and United Academics are codified into a Collective Bargaining Agreement.

Self-governance of the university is facilitated by a committee structure that includes administrative advisory groups, standing and ad hoc committees and external boards. University committees are filled by the University's Committee on Committees, with positions on the University Personnel Committee and the Faculty Advisory Committee to the president, filled by election.

Governance at the college, school and department resides with the faculty with support from staff. Monthly departmental meetings are the primary forums for governance decisions, following policies such as the departmental <u>internal governance document</u>. Tenure-related faculty function as a voting body, which approves any changes to curriculum. Within the department, tenure-related faculty members also decide on policies related to the mission and governance.

Faculty members are assigned by the department head to serve on department committees and by the dean to serve on school committees. Committee members are appointed in response to faculty requests for committee assignments and to provide the expertise needed to address the year's agenda items. The school's Faculty Advisory Committee, the school's Personnel Committee, the school's representatives to the Academic Senate, and the department's Personnel Committee are all elected by the tenure-related faculty of the school and the department.

Most committees elect a chair who convenes committee meetings and serves as the committee's representative. Every year, hundreds of individuals participate in university governance through their service. At the school and department levels, all faculty, most staff and student representatives, participate. A comprehensive list of the UO standing committees is <u>available</u> online.

The following is a list of committees, boards and groups that have current representation by architecture faculty, staff and students:

College Level

 Administrative Council (chaired by the dean, includes associate deans/heads of schools and the financial officer) – provides input on decisions at College level



- Faculty Personnel Committee (elected by the school's tenure-related faculty)
 - The FPC is charged with evaluating promotion and tenure cases on behalf of the College. FPC members are elected for a two-year term, on a staggered schedule to ensure continuity in the committee.
- Equity and Inclusion Committee (chaired by the Associate Dean for Academic Affairs)
 - The Equity and Inclusion Committee is charged with reviewing and maintaining policies and practices affecting equity, inclusion and diversity in the College. The committee works closely with the Dean's team to make recommendations on policies and practices to the schools and departments. The Committee includes four faculty and two staff members
- Academic Affairs Committee (chaired by the Associate Dean for Academic Affairs)
 - The Academic Affairs Committee is charged with providing college-level review and approval of all new and revised courses and academic programs within the College. The committee includes four or five faculty members, representing a range of disciplines.
- Faculty Affairs Committee (chaired by Associate Dean for Faculty and Academic Affairs)
 - The Faculty Affairs committee is charged with providing faculty input and counsel to the Dean and other academic leaders. They are also charged with reviewing and selecting college awards and student scholarships. The committee consists of four faculty members.

School Level

- SAE Leadership Team (chaired by the School Director, includes department and program heads)
- Outreach and Communications (chaired by the School Director, includes department and program representatives) – this is currently being restructured to the College-level
- Internal Governance Committee (chaired by the School Director, includes department and program representatives)

Department Level Committees

- Department Administrative Council (head, director of graduate studies, director of undergraduate studies, directors, curriculum chair and Portland program director)
- Curriculum Committee
- Personnel Committee (elected from the tenured faculty)
- Design Committee (previously Design Review Committee)
- Faculty Search Committee (convenes in years when there is a faculty search)
- Graduate Studies Committee (includes student members, sometimes combined with curriculum). Led by Director of Graduate Studies
- Undergraduate Studies Committee. Led by Director of Undergraduate Studies
- Portland Program Workgroup (comprised of the Portland faculty)
- Ph.D. Program Workgroup
- · Admissions Committee
- Scholarships Committee
- Assessment Committee (beginning AY21-22)

Department Level Individual Service Assignments

- Director of Graduate Studies
- Director of Undergraduate Studies
- ACSA (Association of Collegiate Schools of Architecture) Councilor (elected)
- Architectural Research Centers Consortium Representative
- Director of the Teaching Technology Certificate Program
- Director of the Ecological Design Certificate Program
- Director of the Ph.D. Program
- Directors of Study Abroad programs



- AxP (Architectural Experience Program) Education Coordinator
- Faculty advisors to student groups: AIAS, HOPES, STaNDD
- Faculty coordinators of introductory studio teaching teams

5.2 Planning and Assessment

The program must demonstrate that it has a planning process for continuous improvement that identifies:

5.2.1 Multiyear Strategic Objectives

The program's multiyear strategic objectives, including the requirement to meet the NAAB Conditions, as part of the larger institutional strategic planning and assessment efforts.

Program Response:

As noted in the Introduction in *Progress Since the Previous Visit*, following the NAAB review in spring 2013 the department embarked on a Strategic Planning Process at the fall 2013 faculty retreat and voted to approve The Department of Architecture Strategic Plan at the fall retreat in 2015. The process included discussions at multiple faculty meetings, a series of focus group meetings with external professionals, including heads of large firms, emerging professionals, and mid-career professionals, and meetings with student leaders who also conducted a survey of students, all during 2013-14. The results were discussed at the fall retreat in 2014 and additional faculty meetings were held during 2014-15 to develop strategic priorities and goals. That year, the university required the department to undergo a University Program Review in 2014-15 as part of a regular review process required for all units. We were also required to summarize these in a memo to the UO Senior Vice Provost for Academic Affairs. In our two-year process, we identified several strategic objectives, established both short and long-range goals with action items and timelines. These objectives incorporated the strengths, weaknesses, challenges, and opportunities identified by the 2013 NAAB VTR, by our own discussions, by external focus groups, by the students, and by the University Program Review. Please refer to the three documents noted above for further detail on the planning and assessment process and specific strategic objectives.

The Strategic Plan was revisited in 2015-16 by the faculty at a series of meetings and progress was noted. Also in 2016, we reviewed the memo we sent to the UO Senior Vice Provost for Academic Affairs, noting which recommended actions had been taken and when. In 2016-17 the university required an assessment plan; we reported on our accreditation status, our plans for correcting our one curricular deficiency identified in the 2013 VTR and described our internal plans for assessing and improving our design studio outcomes and our digital media courses, which we had identified as needing improvement in our Strategic Planning process. Again in 2018-19, the university required a new assessment plan, with specific learning objectives identified for assessment. This plan identified five SPC from the 2014 NAAB Conditions, described Assessment Processes for them, the Status, Outcomes and Results, and the Decisions, Plans and Recommendations. In the fall faculty retreat in 2018, an assessment of several of the strategic objectives identified in the 2015 Strategic Plan resulted in a decision to identify Centers of Excellence in the department, capitalizing on our strengths to aid recruitment of students, advocate for additional tenure-related faculty and for university and external resources; subsequent meetings of faculty and students were held over the 2018-19 and 2019-20 academic years to discuss these and to develop a plan to create them.

The coronavirus pandemic, starting spring term 2020, challenged our ability to conclude this effort, but in spring 2021, the department again reviewed the Strategic Plan, noting what goals had been accomplished, revised or were still in the process of being met.

During spring quarter 2021, the department held six faculty meetings and created ad-hoc committees to develop comprehensive assessment plans, addressing the criteria of the 2020 NAAB Conditions. Specific courses were identified as meeting the new Performance and Student Criteria and projects, exams or other activities were identified as the ones that would be used for



assessment. As noted above in *Progress Since Previous Visit*, our new department head is planning a fall retreat to revisit the department's Vision, Mission and Strategic Plan, in response to a number of new circumstances, including the recent changes to the administrative structure of the College, the new 2020 NAAB Conditions, the retirement of many senior faculty members, and changing priorities at the university level, as described above in 1. Context and Mission.

5.2.2 Key Performance Indicators

Key performance indicators used by the unit and the institution.

Program Response:

For the 2015 <u>University Program Review</u>, for both the B.Arch and M.Arch programs, we were required to report on a large variety of data, much of it provided by the university. These included student graduation rates, results of student satisfaction surveys conducted by the university, quality of students (entering students' GPAs, SAT, and GRE scores), student demographics, ARE passing rates, numbers and percentages of tenure-related and non-tenure-related faculty, numbers of staff, our funding and infrastructure. Additionally, we reported on our research and creative activity productivity, including labs and institutes and their funding and on faculty publications. See the <u>Department of Architecture University Program Review</u> (UPR) Report for more detail. The Design Intelligence Rankings are another, perhaps less reliable indicator. As our University Program Review evaluation report noted, that year we were ranked #1 in Sustainable Design, but our rankings recently in this area have ranged from #1 - #14.

As noted above, the department has identified course and specific indicators within those courses for continuous assessment of metrics for the PC and SC in the NAAB 2020 Conditions. We conducted external reviewer assessments of the ARCH 384 (last of the undergraduate core studios) and ARCH 4/586 studios and plan to conduct similar surveys annually, next year including ARCH 682 and 683 (the last of the graduate core studios). We also conducted student self-assessments of their education via surveys to all graduating students and plan to conduct those annually.

The Graduate School also runs <u>surveys of all graduate students</u>. The most recent survey is from 2015. The 2015 survey data was integrated into our University Program Review. Highlights were very high quality of the faculty, the program, "program's performance in keeping pace with recent developments in my field," and intellectual community of the program. However, this survey also highlighted serious issues with financial support for graduate students and academic advising. As mentioned previously, advising has been heavily supported and improved in recent years and students now report advising as being much more successful than 2015.

Under the direction of a new Assessment Committee which will be formed in fall 2021, there will be a comprehensive plan for continuous improvement that addresses the shared values, program criteria and student criteria identified herein. We will incorporate faculty, staff, administration, students and our advisory group and others as needed to collect all the assessment mechanisms and develop a plan to annually evaluate whether we are meeting or exceeding our benchmarks. And, we will evaluate whether the criteria and benchmarks currently defined are effectively assessing our program and curricula.

The university requires a number of assessments of faculty. Faculty Annual Reports of research, teaching and service are required of tenure-related faculty and are used for merit raise evaluations in accordance with department policy (Architecture Merit Policy) in years in which merit raises are given. Pre-tenure faculty are reviewed annually by the department head and are required to undergo a three-year review for contract renewal. This process includes a review by the Departmental Faculty Personnel Committee, the Head, the Dean and the Provost. Evaluation criteria are noted in the University Tenure and Promotion Guidelines and the Department of Architecture Tenure and Promotion Guidelines. For annual reviews and three-year reviews of tenure-track faculty, approved plans are required to be devised for remediation of any noted deficiencies.



As specified by the <u>UO United Academics Collective Bargaining Agreement</u>, tenured faculty are required to be reviewed by the Department Head and the Department FPC every three years post-tenure, with a major review every six years. Six-year reviews also include reviews conducted by the College Faculty Personnel Committee (FPC), Dean and Provost. Again, any deficiencies noted must be followed by an approved plan for correction. All faculty reviews include peer reviews of teaching; these reviews include a <u>rubric for evaluation of teaching performance and effectiveness</u>. Full professors may be given merit raises following six-year reviews, while reviews for associate professors are designed to assess progress towards promotion to full professor.

Non-tenure track faculty (NTTF) also undergo required reviews, with timetables and requirements specified by the UO United Academics Bargaining Agreement for the various classifications of NTTF, for performance reviews, merit evaluations and promotions.

5.2.3 Progress Towards Multiyear Objectives

How well the program is progressing toward its mission and stated multiyear objectives.

Program Response:

As noted above, under 5.2.1, the 2015 Strategic Plan has been reviewed and annotated to reflect which of our goals have been met, not met, revised, or are still undergoing review. We have satisfied the deficiencies noted in the 2013 NAAB VTR. We developed a strategic plan, revised our curriculum to meet the Global Culture requirement, coordinated the technical course content and delivery in Portland with our Eugene-based courses, revised our Practicum to conform to AIA policies, improved academic advising and our delivery of digital media instruction. See the Strategic Plan with the 2021 update referred to above.

We have also established and consolidated new research centers and institutes, including combining ESBL, BioBE and the Baker Lighting Lab into the Institute for Health in the Built Environment in 2018 and has developed a robust industry consortium to support it. Urbanism Next, a new initiative associated with SCI kicked off with a very successful conference in 2018 and the TallWood Design Institute, a third well-funded collaborative research initiative with OSU's Colleges of Forestry and Engineering, was begun in 2015 All of these are multidisciplinary research groups and provide students with interdisciplinary classes and research opportunities, supporting our strategic objectives.

5.2.4 Strengths, Challenges, and Opportunities

Strengths, challenges, and opportunities faced by the program as it strives to continuously improve learning outcomes and opportunities.

Program Response:

Our department has maintained its leadership position in sustainable design, with the development of existing and new research institutes and initiatives and as demonstrated with noted student awards in the Solar Decathlon, AIA COTE Top Ten for students and the ACSA Timber in the City competitions focused on new applications of mass timber. We have significant opportunities to expand our leadership in areas of buildings and health, mass timber, as well as other areas of building performance, in part with our collaborations with Oregon Health and Science University and OSU. These activities will support maintaining our reputation in sustainable design and attracting and educating students in this critical area.

As noted above in Program Changes, we have had a significant number of faculty retirements in the past few years and this has proved challenging in terms of covering our classes in all areas, including in the courses that address NAAB PC and SC requirements. But this has also resulted in an opportunity to enrich the diversity of our faculty and course offerings with the new Spatial Justice Fellows program, which has brought in a variety of faculty from a wide array of places and varied viewpoints. Additionally, as we replace tenure-track positions, the department has an opportunity to strategize about which positions we want to fill or create and to re-examine our



vision, mission, strategic goals and curriculum with new faculty members who bring a fresh point of view. We have had two new TTF positions approved for Fall 2022.

As with many public institutions, particularly with the circumstances brought on by the pandemic, the department has faced some budget challenges. We have had reduced institutional funding to support our graduate student employment but have been fortunate to be able to support some of them on research funds associated with our institutes. The pandemic has also made us embrace virtual and hybrid teaching models, which are helping us to coordinate Eugene and Portland courses and reduce the need to duplicate classes on the Portland campus.

5.2.5 Ongoing External Input

Ongoing outside input from others, including practitioners.

Program Response:

The department employs a variety of methods for seeking outside input. As noted, above, UO required us to have a University Program Review in 2014-15, led by three noted academics. We also have a strong relationship with practitioners, both alumni and others. Our Student Services staff organize the annual career fair each year in Eugene. At the Eugene career fair, we started the tradition in 2014 of meeting at the end of the event with the professionals who have come to interview our students and asking them a series of questions designed to evaluate how well they think our curriculum is working to educate students for the profession. In 2021, the department and College Student Services made a substantial push to further develop our Alumni mentorship network to advise students in this difficult pandemic year, when connection to the profession was even more important. Many of these alumni also provided informal feedback to the faculty about how the students were doing and what they thought we needed to know about their progress.

The <u>Dean's Council</u>, with a large representation of alumni from the architecture program, also serves to advise on what they see as our strengths and weaknesses. As part of strategic planning, as noted, we held a series of focus groups with practitioners at many stages of their careers to get feedback on our programs' strengths and weaknesses and are planning to hold these again as part of our new strategic planning process. We have also periodically conducted alumni surveys, most recently in 2020 to assess interest in interacting with students.

In spring 2021, department head Zaretsky met with several Portland firm leaders to gain insight on the architecture program from their perspective. In summer 2021, Zaretsky formed an Architecture Advisory Group of professionals from firms in the Pacific Northwest and the regions where our students and alumni are typically working. This group will advise the department head and faculty on decisions in regards to the mission and objectives of the program, the development of the curriculum and provide input on outreach.

Like most architecture schools, we have practitioners on our midterm and end of term design studio reviews, who also give us feedback on the student work. With the virtual reviews brought on by the pandemic, we were able to expand our ability to have external reviewers, particularly in Eugene, and will continue to take advantage of this in the future. This year we formalized their feedback with surveys delivered at the end of the core and final design studios, as noted above, which we plan to continue.

Additionally, our many community-engaged studios work with local and regional clients whose professional consultants provide feedback to our students and faculty. In a formal service learning program created in 2009 by SCI, that has been widely copied, the Sustainable Cities Year Program (SCYP) solicits municipalities and non-profit agencies to propose problems, along with staff who can work with Oregon students and faculty. Clients such as the Tri-Met light rail development agency who have benefitted from planning, architecture and department expertise across the university, have returned to offer sponsored architecture studios.

Several of our research institutes have professional advisory groups that work with our faculty to prioritize research and the funding associated with it. IHBE has an industry consortium and an annual symposium where current and future research are discussed with consortium members.



TDI has an industry advisory group that ranks competitive research proposals from faculty in UO's College of Design and OSU's Colleges of Forestry and Engineering for awards from about \$1 million annually from the USDA's Agricultural Research Service. TDI also recently established an industry consortium to fund and prioritize research and testing projects.

The program must also demonstrate that it regularly uses the results of self-assessments to advise and encourage changes and adjustments that promote student and faculty success.

Program Response:

Our strategic planning process resulted in direct changes made to our design studio and digital design media classes, as these were flagged by our faculty external focus groups and student surveys as areas in critical need of revision. In 2014 the Design Review Committee revised the required content for core studios in both the B.Arch and M.Arch programs. Digital media exercises were integrated with the design studios and the student position of Design Media Coach was created for additional peer-to-peer teaching and learning in the digital media area. In response to the expressed interest in more multidisciplinary opportunities, the department, for example, established concurrent master's degree programs in Architecture and Interior Architecture and in Architecture and Community & Regional Planning, is offering more courses in conjunction with the Historic Preservation Program in Portland. We have started a process to expand offerings in design communication courses which already include students and faculty in both architecture and interior architecture to include landscape architecture faculty and students.

The University has revised requirements for peer teaching evaluations to make them more comprehensive and advisory, even for very senior faculty. The required annual, three-year and six-year performance review process has become more rigorous, with the requirement of approved plans for remediation of deficiencies, particularly in teaching and research.

The recent creation of assessment plans for metrics in individual courses will inform the department about needed areas of improvement on a more granular level, with work on needed curricular revisions first discussed by the Curriculum Committee and then brought to the faculty as a whole for discussion and approval, following established department policy and procedures.

Under the direction of a new Assessment Committee which will be formed in fall 2021, there will be a comprehensive plan for continuous improvement that addresses the shared values, program criteria and student criteria identified herein. We will incorporate faculty, staff, administration, students and our advisory group and others, as needed, to collect all the assessment mechanisms and develop a plan to annually evaluate whether we are meeting or exceeding our benchmarks. And, we will evaluate whether the criteria and benchmarks currently defined are effectively assessing our program and curricula.

5.3 Curricular Development

The program must demonstrate a well-reasoned process for assessing its curriculum and adjusting based on the outcome of the assessment.

Programs must also identify the frequency for assessing all or part of its curriculum.

5.3.1 The relationship between course assessment and curricular development, including NAAB program and student criteria.

Program Response:

Curriculum Review and Development is an ongoing process that involves all faculty members. Teaching teams, such as the core design studio faculty, meet annually with the department head to review achievements and shortcomings of the previous iteration and suggest course modifications. Similarly, in December, instructors for the ARCH 4-585/4-586 terminal studios discuss and plan how to meet comprehensive design requirements and how to best utilize external advisors. Useful feedback is also garnered from architects who hire graduates, who



serve as course consultants, and participate in reviews of student work. Students also contribute through the UO course evaluation process and by serving on the department's committees and participate in student organizations.

One way that we are regularizing what has been an informal process for design curriculum assessment and development is by requiring the use of self-evaluation and external critic evaluation forms in studio. We will bring the results of these forms to small groups in our annual mid-September Faculty retreat for discussion

Proposals for special curriculum assessment projects, changes to existing curricula and new programs can be put forward by any member of our community, including colleagues from allied disciplines who may propose collaborative initiatives. These proposals are typically an outcome of self-assessment and, depending on the complexity of the project, may be identified as part of a long-range planning initiative.

As previously discussed, faculty feedback from Terminal Studio faculty led to the Building Integration in Vertical Studios proposal through the Curriculum Committee, This was developed within the committee, approved by the faculty, and begun in AY20-21. This is still being integrated and will be developed through faculty input in AY21-22.

The Assessment Committee will be formed in Fall 2021 and will be responsible for evaluating the results of our course and program assessments and to develop plans for continuous improvement. This will be done in conjunction with the Curriculum and Design Committees and with input from the full-time faculty.

5.3.2 Roles and Responsibilities

The roles and responsibilities of the personnel and committees involved in setting curricular agendas and initiatives, including the curriculum committee, program coordinators, and department chairs or directors.

Program Response:

Curricular initiatives follow the policy development process defined in the department Internal Governance Document. The tenure-related faculty has primary responsibility for curriculum content and initiates an inquiry or proposal. This may be discussed briefly in faculty meetings or reviewed by the administrative council to determine relevance before being sent to the appropriate departmental committee for analysis and development. (i.e. curriculum, design review, graduate studies, Portland work group, or interdepartmental group.)

All changes to the curriculum are discussed in faculty meetings and approved by faculty vote. Changes impacting degree requirements are submitted through the Courseleaf document management system for approval at the college and university levels and when necessary, by the Oregon Higher Education Coordinating Committee. The Curriculum Committee chair who represents the department on the college's committee for academic affairs, coordinates this work.

Individual instructors are responsible for assessing and developing the courses they teach within the parameters set by the department. The department head and program directors provide oversight of teaching to ensure that courses meet the intent of the curriculum.

Course Change Approval Workflow	Program Proposal Approval Workflow
Committee initiates, Faculty approves. Program author enters proposal in Courseleaf with syllabus and required support documentation. Unit approval (Business Manager, Dept head, other designated staff)	Department level:



2. College level:

- Dean's Office initial review by Dean's designee, Associate Dean of Faculty and Academic Affairs Dean's office
- Review/approval by Academic Affairs Committee
- Dean's office final review/approval by Dean's designee, Associate Dean of Faculty and Academic Affairs before leaving the college

3. University Level:

- UO Committee on Courses initial approval (administrative) / final approval (committee);
- UO Senate approval

 Dean's Office initial review by Dean's designee, Associate Dean of Faculty and Academic Affairs

3. Department:

 Program author enters proposal in Courseleaf with required support documentation. Dept Head approval

4. College level:

- Review/approval by Academic Affairs Committee
- Dean's office final review/approval by Dean's designee, Associate Dean of Academic Affairs before leaving the college

5. University level:

- Undergraduate and/or Grad Council (meet monthly / cut off to add programs for review-end of prior month)*
- Registrar, then Provost Office (1st review/approval)
- University Senate

*new programs will go through the state for approval.

Board of Trustees, Provost Council, External review, State Higher Education Coordinating Council, Regional accreditor NWCCU (new programs only)

*revised programs (new certificates, minors, specializations, concentrations, etc.) go from the UG or Grad Council to the UO Senate via the Curriculum Report

*UO Senate approval (new and revised programs)

*Registrar & Catalog Editor

This chart illustrates how curriculum development relates to self-assessment and long-range planning, and the role of participating committees and individuals. In response to the 2013 NAAB Visiting Teams Report, the undergraduate requirement was changed in 2014-15 with help from the History of Art and Architecture department who revised ARH 314/315 to become Global surveys. Multiple paths for meeting the undergraduate requirement were simplified to a single path of taking two survey courses and two upper-level electives. The Curriculum Committee shepherded this change that was approved by first by the Architecture faculty, then the college and university.

With the formation of the Assessment Committee, they will work in tandem with the Design Committee and Curriculum Committee to set up periodic reviews of all aspects of the curriculum.

As previously mentioned, the fall 2021 retreat is devoted to revisiting the mission and vision of the program. However, this is a kickstart to an extensive re-evaluation of the curriculum which will likely be a 2-year process.



5.4 Human Resources and Human Resource Development

The program must demonstrate that it has appropriate and adequately funded human resources to support student learning and achievement. Human resources include full- and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. The program must:

Total Instructional Faculty AY12-13 to AY20-21

	Ma	ale	Differe	ence	Fen	nale	Diffe	rence	To	tal	Diffe	rence
	2012-13	2020-21	#	% change	2012-13	2020-21	#	% change	2012-13	2020-21	#	% change
Tenured/Tenure Track	20	15	-5	-25%	10	9	-1	-10%	30	24	-6	-20%
Non-Tenure Track	33	23	-10	-30%	16	17	1	6%	49	40	-9	-18%
Total	53	38	-15	-28%	26	26	0	0%	79	64	-15	-19%

Full list of AY20-21 Faculty found here, and on our website.

Curriculum Vitae for full-time faculty can be found here.

5.4.1 Workload Balance

Demonstrate that it balances the workloads of all faculty in a way that promotes student and faculty achievement.

Program Response:

The Department of Architecture has policies vetted by United Academics (the campus's faculty union) and the Office of the Provost governing workload expectations for all faculty to ensure equity and reasonableness, approved in 2016 and 2017. The policy governing tenure-track faculty mandates a workload of five courses over three academic-year terms, coupled with research/scholarly activity and institutional/professional service at typical TTF rates. The policy governing non-tenure-track faculty provides a rubric for a standard course load (at 1.0 FTE) of approximately three courses per term. Faculty working outside of these parameters ("on overload") is a rare occurrence, and institutional priority has been placed on eliminating such situations wherever possible. The policy for workload for Architecture faculty can be found here.

Tenured or tenure-track faculty (TTF) have a workload that is approximately 40% teaching, 40% research, scholarship or creative work, and 20% service. TTF are expected to pursue their research, scholarship or creative work in summer, unless they are hired to teach or for specific service responsibilities. Summer session instruction policy can be found here.

As noted above, faculty at the University of Oregon are represented by a union, and the relevant collective bargaining agreement (CBA) contains many provisions that ensure manageable workload expectations for faculty as well as formal remedies for non-compliance. The 2018-2020 CBA is <u>available online</u> and is under extension due to COVID-19 disrupting negotiations.

In 2020-21, the Department of Architecture had 18 tenure-track faculty teaching architecture courses, one TTF on a full-year sabbatical, one TTF with a full administrative appointment as school director and associate dean, one TTF arriving partway through the year to serve as Department Head, four tenure-reduced faculty (teaching a reduced load) and 29 non-tenure track faculty contributing additional instruction. The total full-time equivalent (FTE) of faculty effort was approximately 24.9.

Additional support was provided by graduate employees (GEs), with a total of 5.95 FTE of teaching GEs and 1.15 FTE of research or administrative GEs. Faculty and GTF full-time equivalents are 9-month appointments over the three-quarter academic year.

During 2019-20, the department offered 69 design studios and 71 subject area courses. (These numbers do not include courses offered by other departments within the school that serve as professional electives for architecture degree requirements). Class sizes vary according to format with some large lecture courses having enrollments as high as 160 students and seminars that



may have 10 or fewer students. Faculty who teach required courses with enrollments exceeding 50 students are assigned a co-instructor and/or GE support. The average numbers of students enrolled in design studios are:

Studio Level	2011-12 Average students/studio	2019-20 Average students/studio
Studio: first year undergraduate	13.9	15.3
Studio: second year undergraduate	15.7	15.9
Studio: graduate track I core	12.2	15
Studio: graduate track II core	12.6	15.5
Studio: intermediate topic	19.9*	13.4
Studio: terminal studio	17.1	13.75

^{*}Studios with more than 18 students are assigned two or more instructors such that the student to faculty ratio is smaller than the average students/studio figures.

5.4.2 Architect Licensing Advisor

Demonstrate that it has an Architect Licensing Advisor who is actively performing the duties defined in the NCARB position description. These duties include attending the biannual NCARB Licensing Advisor Summit and/or other training opportunities to stay up-to-date on the requirements for licensure and ensure that students have resources to make informed decisions on their path to licensure.

Program Response:

This responsibility was initially carried by retired Professor and adjunct instructor Otto Poticha, then in 2014, the instructor for *ARCH 4/517 Context of the Architectural Profession*, John Rowell, assumed the role. In 2019, his co-teacher of the course, pro-tempore instructor Karen Williams, AIA, attended the DC training and began sharing the role. As of AY21-22, Williams will be the full-time Architect Licensing Advisor for the Department. Karen is heavily involved with NCARB and is currently preparing to expand her role as Architect Licensing Advisor for our program. In addition to Williams, Student Services and AIAS have hosted events highlighting career pathways for architects.

5.4.3 Faculty/Staff Professional Development

Demonstrate that faculty and staff have opportunities to pursue professional development that contributes to program improvement

Program Response:

The Department of Architecture <u>Professional Development Policy</u> was approved in summer 2017. The policy states that "The Department of Architecture is committed to encouraging and supporting faculty in professional development activities that further the university's academic mission and enhance teaching, scholarship, research, creative activities, service, and equity and inclusion. Career NTTF and tenure-related faculty are eligible to receive or compete for available professional development funds." The policy addresses what is considered professional development and how it will be distributed.

When Visiting Faculty or Tenure-Track Faculty are hired, they typically receive start-up funds for research, depending on the focus of their research. This is negotiated with the Dean. Some faculty who lead research centers, labs and institutes have received course releases, as negotiated with the Provost or the Dean.

NVB

The University of Oregon currently provides \$1,500 per year in professional development funding to all tenure-track faculty. In addition, the department supports travel to professional conferences for faculty and makes yearly awards of funds to support innovative studio projects or faculty-led research projects. Staff in the Department have access to comprehensive skill-training programs through online learning platform Skillsoft as well as funding to support specialized skill-building workshops and training, such as project management courses that can open the pathway to PMP certification, at no cost to the individual. Faculty are encouraged to access UO development opportunities such as:

- The <u>Teaching Engagement Program</u> holds special New Teacher Trainings for GE's and new hires, on-going drop-in workshops and special funded intensive opportunities.
- The <u>Center on Diversity and Community</u> (CODAC) sponsors workshops, writing circles (for faculty and grad students) and other events.
- The faculty union, United Academics has partnered with UO to provide research support sessions for faculty. (pre-pandemic)
- The Provost's office has sponsored the <u>Leadership Academy</u> management training and cohort-building.
- The <u>Division of Equity and Inclusion</u> created an 2019-2020 Executive Coaching Pilot Program
- College of Design created a writing retreat at the coast in September 2019 and has initiated a faculty mentoring program in Fall 2021.

5.4.4 Student Support Services

Describe the support services available to students in the program, including but not limited to academic and personal advising, mental well-being, career guidance, internship, and job placement.

Program Response:

College of Design Student Services provides a resource for undergraduate students to access academic and career advising as well as referrals to the larger campus resources such as mental health, tutoring, scholarships and student groups involvement to name a few. Individual academic advising is available to students to ensure they are on track with program requirements and getting the support they need to succeed. A team of four academic advisors are trained on course requirements for all majors and minors in the College so they can assist students in considering curricular options.

Graduate student advising is provided on the Eugene campus by School of Architecture and Environment Student Services Manager Toby Kim in coordination with the Director of Graduate Studies (DGS), Ihab Elzeyadi. In Portland, College of Design Academic Advisor Jessa Waters supports both undergraduate and graduate students in Architecture with holistic advising services.

The university offers extensive types of mental, emotional and financial support for students. The university created the following page in 2020 to <u>support student mental health</u>. In addition, there is a mental health statement that all faculty are encouraged to use in their syllabi:

Life at college can be very complicated. Students often feel overwhelmed or stressed, experience anxiety or depression, struggle with relationships, or just need help navigating challenges in their life. If you're facing such challenges, you don't need to handle them on your own—there's help and support on campus.

As your instructor if I believe you may need additional support, I will express my concerns, the reasons for them, and refer you to resources that might be helpful. It is not my intention to know the details of what might be bothering you, but simply to let you know I care and that help is available. Getting help is a courageous thing to do—for yourself and those you care about.



University Health Services help students cope with difficult emotions and life stressors. If you need general resources on coping with stress or want to talk with another student who has been in the same place as you, visit the Duck Nest (located in the EMU on the ground floor) and get help from one of the specially trained Peer Wellness Advocates. Find out more at health.uoregon.edu/ducknest.

University Counseling Services (UCS) has a team of dedicated staff members to support you with your concerns, many of whom can provide identity-based support. All clinical services are free and confidential. Find out more at counseling.uoregon.edu or by calling 541-346-3227 (anytime UCS is closed, the After-Hours Support and Crisis Line is available by calling this same number).

Counseling services are offered for students through the following:

- University Health Services Counseling Services
- Kognito Training Portal
- Division of Student Life Mental Health Support
- Division of Student Life Wellness

Faculty support is offered through the following:

- Counseling Services
- Employee Assistance Program which can advise on finding local caregivers, etc.
- Resources for faculty/staff from University Counseling Services
- Dean of Students Community Care and support
- Student Success Resources for Faculty and Staff

Each year, excepting 2020-21 due to COVID concerns, the Department of Architecture provides a series of formal professional practicum/internship courses guided and coordinated by a Professor of Practice, with the intention of connecting students with professional resources and helping to build practical networking and work-environment skills.

The Department of Architecture also offers "ARCH 199: Design Your Success" each fall in conjunction with College of Design Student Services. Initiated in Fall 2019, this is a course intended to help incoming first-year admitted Architecture majors navigate the first term in a meaningful, exploratory way that helps students to:

- Build community with fellow School of Architecture and Environment First-Year majors.
- Build support network at UO.
- Build potential 5 year academic and career plan.
- Enhance a tolerance for ambiguity.
- Learn about SAE based tools, vocabulary, opportunities.

ARCH 199 was designed specifically as a tool to support underrepresented students as they enter college.

5.5 Social Equity, Diversity, and Inclusion

The program must demonstrate its commitment to diversity and inclusion among current and prospective faculty, staff, and students. The program must:

5.5.1 Distribution of Resources

Describe how this commitment is reflected in the distribution of its human, physical, and financial resources.

Program Response:

The College of Design invested in making Planning Professor Gerardo Sandoval our Diversity Fellow to help shepherd the updating and implementation of our college <u>Diversity Action Plan</u> (completed in spring 2021). The SAE and the Department have allocated substantial time and energy to diversify the faculty by building up the Design for Spatial Justice Initiative (DSJI)



Fellowship program. After committing existing foundation funds to the program, Erin Moore, as SAE Director, worked with the College of Design development officer to solicit \$153,000 in donor commitments for the program from 2019 through 2021. She worked with Department Head Nancy Cheng to welcome the DSJI Fellows and support them with introductions to allies who could serve as guides and mentors. At the university level, all faculty and staff must take Workplace Harassment and Discrimination Prevention Training. Implicit Bias training is required for all those on Faculty Search Committees and all Graduate Employees. Faculty are required to include an Equity and Inclusion statement for personnel reviews every 3 years and for non-tenure-related faculty promotions.

The SAE staff works closely with Institutional Research and the Department of Equity and Inclusion to collect data on diversity of students and faculty as part of our ongoing efforts to track our demographics as compared to our goals.

5.5.2 Diversity Plan

Describe its plan for maintaining or increasing the diversity of its faculty and staff since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's faculty and staff demographics with that of the program's students and other benchmarks the program deems relevant.

Program Response:

In AY20-21, we had 23 Tenured and Tenure-track Faculty (TTF). However, two TTF retired at the end of AY20-21. We also have five additional TTF completing their Tenure-Reduction Plan (TRP) over the next two years. Of the 23 TTF, there are fifteen faculty who identify as male and eight faculty who identify as female. Of the 23 TTF, four identify as "other than white" (Asian, Black/African American, Hispanic/Latino). Full details of the faculty demographics are available for the NAAB Visiting Team.

We are deeply committed to increasing the percentage of TTF from diverse backgrounds in the future. The DSJI Fellows program has had an extremely positive impact on our faculty, staff and student populations (as discussed previously). Our College of Design Diversity Action Plan lays out goals for the College that involve increasing diversity of our faculty.

<u>Benchmarks</u>: Our goals are 1) for faculty and staff to meet or exceed the demographic diversity of the U.S. in terms of binary gender, race/ethnicity, and sexual orientation/other genders, 2) to support staff for retention and well-being in recognition of power structures related to employment rank and identity, and 3) to support faculty in retention and promotion without disproportionate barriers associated with identity, and 4) to offer pay equity without discrimination.

Assessment:

- 1) The UO records binary gender and race/ethnicity of staff and faculty but does not record sexual orientation or other genders or other measures of diversity. Compared to the nation, Department of Architecture (School of Architecture & Environment) staff are slightly less diverse in recorded measures with increases in diversity since the last accreditation cycle. Tenured instructional faculty are comparatively less diverse with declines in gender diversity since the last accreditation cycle, in part due to the Interior Architecture program becoming an independent department and the migration of faculty to administrative roles.
- 2) SAE worked with an organizational consultant to gather input from staff on their workplace experience and to implement any needed changes. In 2020, staff identified some attention needed to relationships with academic leadership. Feedback to administration in spring 2021 from staff was positive.
- The Department of Architecture tracks retention and promotion; there is no correlation of retention with recorded identity demographics.
- 4) The UO tracks pay equity. The last review of faculty pay equity was in 2019 in which at least one faculty member was recognized as receiving unequal pay and received an adjustment.



Faculty and Staff Diversity: Since 2018, SAE has instituted the university's <u>active recruitment guidelines</u> and <u>expected practices</u> for all staff and tenure-track faculty hires. This includes the participation of an external search advocate and implicit bias training for all search participants. All UO faculty and staff appointments are guided by the Human Resources' Affirmative Action team which provides training for all of the department's search committees to help them be more effective at addressing diversity and equity issues. The Office of Investigations and Civil Rights Compliance (OICRC) monitors compliance with university efforts to hire members of underrepresented groups. The Provost's office offers a <u>Target of Opportunity</u> program which has been developed to allow the university to expedite the hiring process to serve such mission critical strategic initiatives, such as faculty of diversity.

Tenure-track faculty hiring is conducted through a centralized institutional hiring plan (IHP). Within this framework, departments demonstrate need and receive endorsement to hire according to university priorities. In each year since the inception of the IHP, the Department of Architecture has submitted at least three requests to hire, including demonstrating need for increased demographic diversity and increased diversity of expertise. One search was approved in 2019 (but failed) and two searches are approved for 2021-22.

To build capacity to recruit and retain faculty from underrepresented groups, in 2019 the SAE launched the Design for Spatial Justice Initiative fellowship program as a three-year program to support visiting faculty whose teaching and scholarship are at the intersections of gender, race, ethnicity, indigeneity, sexuality, and economic inequality that is enriched by their lived experience. In these three years, the Department of Architecture hired four faculty from underrepresented groups and six international visiting faculty who taught in the required curriculum. The national visibility of this initiative and the critical mass of scholars working on topics connected to identity strongly positions the Department of Architecture to be successful in recruiting, and fully supporting and retaining tenure-track faculty from underrepresented groups.

Also, to build capacity to support faculty colleagues from underrepresented groups, the SAE hosted a workshop in a 2020 fall retreat on critical race theory in the designed environment, with a focus on skill-building for recognizing the identity-related power structures in which we do our work.

Staff Retention and Well-being: In 2020, SAE engaged an organizational consultant who worked with staff and academic leadership on operational relationships, with particular attention to building awareness of identity and power. In 2021, there will be a follow up series of sessions to evaluate the success of this initiative.

Faculty Retention and Promotion: Since the last accreditation cycle, the UO has required that faculty to include an equity and inclusion statement in all faculty submissions for review to better recognize the contributions of faculty to diversity. The College of Design has recently instituted a faculty mentorship program that is intended to support faculty toward promotion, with recognition of the challenges faced by faculty from underrepresented groups.

Pay Equity: A <u>2018-19 faculty pay equity study</u> found minimal discrepancies according to gender and race/ethnicity within specific ranks. The UO remedied at least one pay equity disparity in the Department of Architecture.

5.5.3 Diversity Plan

Describe its plan for maintaining or increasing the diversity of its faculty and staff since the last accreditation cycle, how it has implemented the plan, and what it intends to do during the next accreditation cycle. Also, compare the program's faculty and staff demographics with that of the program's students and other benchmarks the program deems relevant.

Program Response:

UO has been committed to increasing the diversity of its student body for many years.



BENCHMARKS

Our goals are 1) for students to meet or exceed the demographic diversity of the U.S. in terms of gender, race/ethnicity, and sexual orientation/identity; and 2) to support student retention and graduation rates without disproportionate barriers associated with identity demographics.

ASSESSMENT

The UO records binary gender and race/ethnicity and country of origin of students but not sexual orientation or other genders.

The following data compare the University of Oregon to 22 other NAAB accredited programs at institutions with Carnegie Classifications DRU, RU/H, and RU/VH:

B. Arch New and Total Student Enrollment Data (see tables here):

- New student enrollment for underrepresented minorities in the UO B.Arch program was 17% of total new enrollment in 2013, compared to 28% at comparison institutions. This was a difference of 11%. In 2020, the UO B.Arch program's new enrollment of underrepresented minorities was 28%, compared to 37% at comparison institutions. Although this was a difference of 8%, the UO program doubled its new enrollment of underrepresented minorities (2013 = 15, 2020 = 30) while the average of the comparison institutions only increased by half (2013 = 15, 2020 = 23).
- Total student enrollment for underrepresented minorities in the UO B.Arch program was 17% in 2013, compared to 31% at other comparison institutions. This was a difference of 13%.In 2020, the UO B.Arch program's total enrollment of underrepresented minorities was 25%, compared to 35% at comparison institutions, which was a difference of 11%. Again, although the UO remains behind its comparison institutions, the UO's improvement was almost four times the improvement of its comparators.
- The UO new B.Arch student ratio of male to female was very similar to its comparison institutions in both 2013 and 2020. Both the UO and its comparators saw a reversal of enrollment from a slightly higher ratio of men to women in 2013 to a slightly higher ratio of women in 2020.
- Total student enrollment by gender in the B.Arch program at the UO and its comparator
 institutions had the same trends as new student enrollment. Although not shown because of
 FERPA concerns, underrepresented females in the UO program increased from 9% in 2013
 to 15% in 2020, while the average enrollment of underrepresented females at comparison
 institutions decreased from 20% in 2013 to 14% in 2020.

M. Arch New and Total Student Enrollment Data (see tables here):

- New student enrollment for underrepresented minorities in the M.Arch program was 19% in 2013 and was 24% in 2020. This was 19% higher than the comparison institutions for 2013 and 18% higher for 2020.
 - Note: while the averages of zero and one for the comparison institutions appeared questionable, the total enrollment average numbers are similarly low.
- Total student enrollment for underrepresented minorities in the UO M.Arch program in 2013 was 16% and was 19% in 2020. This was 3% higher for 2013 and 1% higher for 2020.
- New student enrollment by gender in the UO M.Arch program was 44% male and 56% female in 2013, which was the opposite trend of 59% male and 41% female for the comparison institutions. Both the UO and comparison institutions had exactly the same 50/50 ratio of males and females in 2020. Underrepresented minority females in the program increased from 11% in 2013 to 12% in 2020.
- Total student enrollment by gender in the M.Arch program was 55% male and 45% female in 2013 and 48% male and 52% female in 2020.. Underrepresented minority females in the program decreased from 8% in 2013 to 7% in 2020.
- New student enrollment in the B.Arch program in 2021 (2020-21 data) was 34% lower than in 2013. This was a result of the COVID-19 pandemic.



 Total student enrollment in the M.Arch program in 2021 (2020-21 data) was 47% lower than 2013. See note above for explanation.

B. Arch & M.Arch 2013-21 Comparative Enrollment Data (see tables here)

- Total student enrollment in the B.Arch program in 2021 (2020-21 data) was 12% higher than in 2013. Underrepresented minorities continued to show the same increasing trend from the 2013 to 2020 comparison.
- New student enrollment in the M.Arch program in 2021 (2020-21 data) was 51% lower than in 2013. This is the result of several factors including: significant increase in the number of accredited architecture programs, changes in available funding for GE positions and available funding for scholarships. However, through recent recruitment efforts, our numbers are rising and we are optimistic that we will reach our goal of 60 M.Arch incoming students.

B. Arch & M.Arch 2013-21 Graduation Rate Data (see tables here)

- The UO records graduation rates and first-year retention rates for all programs and retention and graduation rates for underrepresented minority students, first-generation students, and Pell Grant Recipients.
- The UO B.Arch program consistently exceeds the institutional overall graduation rate and the difference is increasing (see tables here).

The NAAB visiting team can find additional data on demographics in the Section 5.5 folders.

ADMISSIONS

Since the last accreditation cycle, we have made several changes to Department of Architecture admissions to remove barriers to application for students from underrepresented groups.

a. Undergraduate admissions:

We reduced the application process from two applications (UO application and departmental application) with two fees, two sets of recommendations, two review teams, and separate decision processes to one consolidated application in partnership with UO Admissions. We are in our second year of applicants submitting one UO application where they can select the Architecture major and optionally a short essay or portfolio.

This consolidation connected UG architecture applications to a larger pool of students via the Common Application and access to UO admissions resources in counselor reviews and improved holistic admission processes that align with UO admissions (i.e, optional SAT and ACT scores for domestic applicants and international students exempt from submitting SAT and ACT scores).

With this consolidation, applicants have more available deadlines (4+) compared to the previous departmental deadlines (2). Applicants were able to submit applications under this system between August 1 and April 1 (twice as many deadlines spread over a longer period).

Project management software (Asana & Teams) was added to UG admissions which reorganized the UG admission process, and improved communication and admission processes between the department and the Office of Admissions.

Architecture improved the transfer evaluation review and academic advising process by conducting it ahead of schedule. The scoring rubric for the department was revised to a 1-5 scale and the rating criteria were updated to holistic admission review terms.

Architecture created a new, detailed master timeline for undergraduate admissions ensuring timely review and notification of admission decisions.

Architecture undergraduate websites and the Admission Office websites were significantly revised to improve instructions for applicants on the new process.

As a result of these changes, submitted B.Arch applications increased by 58%, admitted applicants increased by 40% and accepted offers increased by 23% as of August 2021. The final matriculation check of 2021 undergraduate data takes place in October 2021.



b. Graduate admissions:

For 2021 admission, the Department added a waiver option for the Graduate Record Examination (GRE) requirement for M.Arch applicants. In 2020, 48 M.Arch applicants were granted a GRE waiver. Of the 48 M.Arch students who received a GRE waiver, 13 were BIPOC students (5 Asian, 6 Hispanic, 1 Black, and 1 American Indian), and 9 were international students.

To further remove barriers for BIPOC applicants, the Department removed the Graduate Record Examination (GRE) requirement for 2022 M.Arch applicants, with test score reporting made as part of an optional upload question at the end of the application.

Architecture added the following questions to the M.Arch departmental application specifically to improve holistic admissions and invite a broader range of essay responses from BIPOC applicants:

We understand that some metrics are imperfect indicators of a student's ability or potential. What would you like us to know that adds context to this application?"

Are there personal, cultural, economic, or social experiences that have shaped your academic journey? If so, how? Have any of these experiences provided unique perspective(s) that you would contribute to your program, field, or profession?

We value the breadth of experiences, perspectives, and backgrounds that our students bring to the School of Architecture and Environment. Why are you interested in architecture at the University of Oregon? How will your unique experience and background contribute to our program?*

We have been able to improve international admissions by maintaining a working relationship with the Fulbright program. The Fulbright program offers 8,000 grants each year for graduate study, research, lecturing, or teaching. The department and the UO Exchange program often both contribute additional scholarship funds to recruit Fulbright applicants. Between 2016 and 2021, the department matriculated fourteen M.Arch Fulbright students from Austria, Ecuador, Germany, Honduras, Pakistan, Panama, Russia, South Africa, Spain, Tanzania, and Venezuela.

FUNDING

Since the last accreditation cycle, the Department of Architecture has provided over \$500,000 in financial support to incoming students and over \$300,000 to continuing students. We have offered full scholarship support offers to some graduate students based on student demographic representation, in support of increasing equity amongst students. These sums are in addition to University financial aid structures.

In March 2020 the Department of Architecture provided small emergency grants to students experiencing barriers to access to remote education, totaling \$56,000 for grants in architecture. This is in addition to general emergency funding from the UO Dean of Students.

The admissions process for students entering the department's accredited programs promotes a diverse student body through recruiting of student applicants and a review process that considers multiple measurements of student performance in addition to transcripts of academic work and standardized test scores. Applicants submit letters of recommendation, drawing samples, and writing samples. In 2019-20, the department made the portfolio of creative work optional to increase access for low-income and under-represented students. Admission is competitive, and we offer admission to the highest-ranking students in the applicant pool. In the interest of equity and diversity, the department's admissions committee may offer admission to students with slightly lower scores on SAT, GRE, or TOEFL tests, or slightly lower GPAs in cases where students' other materials clearly demonstrate high potential for success in the program.

To continue to expand applications to our program, in 2019-20, we added a question to our applications that provided an opportunity for our students to provide an open-ended explanation of their potential - "We understand that some metrics are imperfect indicators of a student's ability



or potential. What would you like us to know that adds context to this application?" This question seeks to allow students to provide additional detail on their academic and creative capability that goes beyond reviewing the students as just numbers through their GPA and GRE scores. Students can provide background on personal challenges that they have overcome, difficult situations they are or have been in that may have affected their academic scores, and more detail on why they would be a suitable student for our program despite the typical metrics used to review students. This question allows the committee to more holistically and personally review a student to bring in more diversity in our program through an understanding of their personal experiences and background.

In spring 2021, it was decided that the Department of Architecture would no longer require the GRE exam to apply to the Master of Architecture and Master of Science in Architecture programs. The reasoning behind this was because over the past two years, we have been collecting feedback from students as to why they did not apply to the program, and accepted GRE waiver requests during the 2020 admissions cycle. From the students' responses and waiver requests of students, we found that the GRE exam requirement posed a serious barrier to many students, including students of color or low-income socioeconomic status, international students who also struggled financially, and put us in opposition with many of our competitor universities who had already begun to waiver or make the GRE exam optional.

We work closely with the university's Office of Admissions to ensure quality and accuracy in our communication with the public. We also participate in the university's minority recruitment programs.

We also work closely with the Graduate School to secure matching funds for recruiting and to identify students eligible for the Promising Scholars Program (a program designed to aid minority students in the pursuit of advanced degrees). Funds are also available to recruit international graduate applicants.

RECRUITING

As our departmental funding depends on graduate enrollment, in January 2018, SAE hired Jessica Wu as Graduate Recruitment Manager to travel around the country and conduct virtual information sessions. Within 3 years, graduate applications from students in underrepresented groups increased 30%.

We are also interested in increasing the diversity of our B.Arch. program. Undergraduate applications have been increasingly steadily, but we cannot accommodate more students. We closed a four-week Summer Academy program aimed at high school students and other career explorers because we found that this program did not expand access to our program for underrepresented groups. Instead, our faculty have participated in UO pipeline programs that focus on reaching and supporting underrepresented groups, low-income and first-generation students: Summer Academy to Inspire Learning, Reach for Success and Oregon Young Scholars Program. To better understand how we can best engage and entice those from underrepresented groups, we commissioned architect Suenn Ho to compile a Teport about available K-12 design preparation programs in the Portland metropolitan region and participated in the Architecture Foundation of Oregon's networking around this topic. On-going work includes creating transfer articulation agreements with community colleges.

Summer Academy to Inspire Learning: SAIL

SAE has offered a week-long session introducing the <u>Summer Academy to Inspire Learning</u> (SAIL) participants to the disciplines within the School of Architecture and Environment until the pandemic in 2020. The SAIL is an innovative bridge program that serves middle and high school students from underrepresented backgrounds, which include lower income and/or first-generation college students, with the aim of encouraging students to enroll and succeed in college through early exposure and exploration.

SAIL offers free one-week summer programs on the University of Oregon campus, where students learn about various subjects from distinguished University of Oregon faculty members



through fun social and interactive activities. Each summer, returning students choose a new academic subject. SAIL programs include sessions on the college admissions process, scholarship availability, and the financial aid process. During the school year, SAIL offers mentoring – administered by University of Oregon students – to eligible students who are navigating the college admissions process.

We intend to reactive SAIL in AY21-22.

Student Demographics

The tables below show the numbers of architecture students who reported being members of under-represented groups in 2020 (2019-20 data). For reasons of privacy, the specific groups cannot be shared publicly. The NAAB Visiting Team will have access to this information.

2020-21 12-Month ARCH Major Enrollment by Level and Gender

Due to FERPA concerns, cell sizes of <10 are combined into 'Other.'

NEW B.Arch Students

Race/Ethnicity Description	Male	Female	Total
Other*	7	15	22
White	11	25	36
TOTAL	18	40	58

^{*}Other = American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Black/African American, Hispanic/Latino, Two or more races, and Race/Ethnicity unknown

NEW M.Arch Students

Federal Ethnicity Description	Male	Female	Total
Other*	5	9	14
White	15	16	31
TOTAL	20	25	45

Source: Student Information System (ODS), 7/14/2021

ALL B Arch Students

ALL B.Arch Students								
Federal Ethnicity Description	Male	Female	Total					
	<10, included in							
Asian	Other	22	22					
Hispanic or Latino	23	35	58					
Other*	16	7	23					
White	95	113	208					
Two or more races	17	12	29					
Nonresident alien	11	14	25					
TOTAL	162	203	365					

^{*}Other = American Indian/Alaska Native, Asian (male only), Native Hawaiian/Other Pacific Islander, and Black/African American

ALL M.Arch Students

Federal Ethnicity Description	Male	Female	Total
Other*	17	20	37
White	39	40	79
TOTAL	56	60	116

^{*}Other = American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Black/African American, Hispanic/Latino, Two or more races, and Race/Ethnicity unknown

Student Diversity Initiatives

College of Design Student Services actively supports College of Design student groups and fosters emerging <u>student groups</u> and student led initiatives related to career development through mentoring, leadership development, and funding events.



- 1. Host interdisciplinary engagement such as a meeting with student leaders each term to enhance student experience and promote diversity.
- 2. Recent Emerging Student Groups from SAE:
 - Design for Climate Action fostering community engagement and action
 - Project Artemis is a group dedicated to understanding and improving the quality of life and opportunities for students in the College of Design, with a focus on women, mothers, indigenous students, students of color, LGBTQ identifying students, students with disability or various accessibility needs and other key identifying features which render them often sidelined or invisible.
 - STAnDD student group Supporting the Advancement of Diversity in Design strives to support a community for the advancement of underrepresented groups and the promotion of diversity in the fields of architecture and design. STAnDD is committed to the professional development of students in design professions and works to provide access for all students to attend conferences and events that will prepare them for their future careers. STAnDD is also committed to creating a culture of inclusion by making current disparities understood and a part of a larger conversation about equity in the field.
 - NOTE through Covid, participation in some student groups has been reduced, though we anticipate returning to active participation in AY21-22.

See also Section 5.4 on <u>ARCH 199: Design Your Success</u>, a course which has been designed specifically to support underrepresented students as they enter college.

5.5.4 Equal Employment Opportunity/Affirmative Action (EEO/AA)

Document what institutional, college, or program policies are in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA), as well as any other social equity, diversity, and inclusion initiatives at the program, college, or institutional level.

Program Response:

From UO Human Resources site on Affirmative Action:

The University of Oregon maintains an Affirmative Action Program for women, minorities, veterans, and individuals with disabilities, providing annual updates on these efforts through its Affirmative Action Plan (AAP). The plan is centered on analysis of employee data as of February 28 of the plan year and is typically publicly available within 90-120 days of that date. As the plan is prepared and throughout the year the university's Affirmative Action Program is active and focused on maintaining compliance with our Equal Employment Opportunity and Affirmative Action obligations.

The UO's overall Affirmative Action Program:

- identifies and assesses equal opportunity, nondiscrimination and affirmative action policies, practices and procedures;
- uses diagnostic procedures to evaluate the composition of the workforce and compare it to the composition of the relevant labor pools; and
- identifies action-oriented efforts designed to address any under-utilization of groups not being employed at a rate expected given their availability in the relevant labor pool.

The results of these efforts are incorporated into the annual written affirmative action plans for Eugene and Portland found here.

5.5.5 Adaptive Environments

Describe the resources and procedures in place to provide adaptive environments and effective strategies to support faculty, staff, and students with different physical and/or mental abilities



Program Response:

Student Access

We welcome faculty, staff and students with all ranges of needs and abilities. Procedures and services developed by the UO facilitate access and full inclusion of students with disabilities into the university environment and include provisions for student access and engagement, universal/inclusive design initiatives, technology access and usability. Compliance with the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 are minimum expectations.

<u>Self-Assessment:</u> Given the age of Lawrence Hall, in Eugene, we have to adjust to some challenging access conditions for faculty, staff and students with differing physical abilities. We work closely with Campus Planning and Facilities Management to make sure that all changes provide all users equitable access to all spaces. The university also has extensive mental health support for faculty, staff and students as described in section 5.4.4.

5.6 Physical Resources

The program must describe its physical resources and demonstrate how they safely and equitably support the program's pedagogical approach and student and faculty achievement. Physical resources include but are not limited to the following:

General Description of Facilities

Eugene

The Department of Architecture is located on the University of Oregon's main campus in Eugene with a satellite location at UO Portland's White Stag Block. Both sites provide studios, classrooms, meeting and event spaces, faculty and staff offices, research labs, libraries, fabrication shops and computing support services. Physical resources are adequate to serve the current needs of the architecture program. The College of Design currently occupies thirteen buildings on the main UO campus with additional space for artist and design studios off-campus. Most of our Architecture facilities are located in Lawrence Hall with newly renovated Gerlinger Hall studios added since the last accreditation visit and additional shops across Franklin Boulevard on what is known as the North Site or Millrace. (plans provided here) Lawrence Hall is shared by programs in architecture and interior architecture, along with four other departments in the College. The College's administration and support facilities, including a gallery, the Hearth (a café and event space), a student computer lab and output room, a studio woodshop, and the Design Library, are all located in Lawrence Hall. On the North Site, architecture students take the Interior Architecture furniture design studio, engage in Oregon BILDS hands-on construction and use a CNC router and other shop machines. The department has replaced most of the furniture and audio-visual equipment in the classrooms it schedules.

Portland

In 2008, the Portland program moved to the newly renovated historic White Stag Block, a refurbished,140,000 square-foot LEED Gold building, where we enjoy state-of-art classrooms, daylit studios and community space, new studio workstation furnishings designed by architecture faculty and students, and a collection of architect-designed furniture. It is located on the riverfront in the Old Town/Chinatown district of downtown Portland, a short walk to the Pearl District and many of the cities' leading architectural offices. It is adjacent to a light rail stop and a bus stop and within walking distance to the train station. Students have 24-hour building access and secured indoor bicycle parking.

There are two public event spaces on the ground floor adjacent to the lobby, used for lectures, classes and design reviews. In the lobby gallery, we host traveling architectural exhibits and display the work of our students. We have access to a computer lab, a library (with group study and seminar spaces), and other shared spaces that can be scheduled for meetings, events, and exhibits. We also have access to a virtual reality lab and a broadcasting studio for video and podcasting, courtesy of the UO School of Journalism and Communication. (See plans here)



School of Architecture and Environment facilities, located in **Lawrence**, **Pacific**, **Onyx Bridge** and **Gerlinger Halls**, are shared by the Departments of Architecture, Interior Architecture, and Landscape Architecture. Space used by the Architecture Department includes:

Landscape Architecture. Space used by the A	Architecture De	partii	Total	ues.	SF
Category	Rm Type	#	SF	SF Range	Avg
Eugene Campus Arch. Spaces					
Gerlinger Studios	Studio	8	7393	764 to 1019	924
Gerlinger Classroom	Classroom	2	730	308 to 422	365
Gerlinger Open Space, Kitchen	Support	2	651	66 (Kit) 585 (Op)	325
Lawrence 2nd Floor Classroom	Classroom	4	3975	392 to 1325	994
Lawrence 2nd Floor Studio	Studio	2	1830	849 to 981	915
Lawrence 3rd Floor Classroom	Classroom	2	1674	823 to 851	837
Lawrence 3rd Floor Studio	Studio	7	6265	816 to 940	895
Lawrence 4th Floor Classroom	Classroom	1	375		
Lawrence 4th Floor Studio	Studio	6	6203	816 to 1891	1033
Pacific Classroom	Classroom	1	805		
Lawrence Faculty Dedicated Offices	Office	11	1351	109 to 172	123
Lawrence Faculty Shared Offices	Office	2	241	119 to 122	121
Pacific Faculty Dedicated Offices	Office				
Pacific Faculty Shared Offices	Office	2	310	129 to 181	155
Onyx Bridge Faculty Dedicated Offices	Office	1	134		
Onyx Bridge Faculty Shared Offices	Office	3	357	101 to 151	119
Lawrence Grad Student Shared Offices	Office	1	267		
Onyx Bridge Grad Student Shared Offices	Office	1	319		
Pacific Grad Student Shared Offices	Office	1	307		
College of Design Library					
Lawrence Woodshop (added in 2009)	Shop		1,091		
Computer Graphics Lab			400		
Archive of Student Work			308		
Materials Resource Center			400		
IARC Materials Study Room			300		
SAE Office (renovated in 2009)			1,430		
Onyx Bridge Research Storage Room	Research	1	152		
Pacific Hall NetZed Case Study Lab	Research	1	857		
Pacific Hall Storage	Support	1	289		
Pacific HiPE Lab	Research	1	607		
Baker Lighting Lab	Research	1	616		
Baker Lab GE Offices	Research	1	156		
Total Research space			2677		
Directly north of Lawrence Hall at the Millrac	e are College o	of Des	sign Shop	facilities	
Furniture Design Studio	Studio		1,055		
Furniture Shop	Shop		2,511		
Plastics Shop	Shop		259		
Metals Shop	Shop		899		



CNC Router Lab	Shop	220
Finishing Lab (paint booth)	Shop	220
Oregon BILDS const./storage space	Shop	1488

The UO Portland campus in the White Stag building includes the following architecture spaces:

White Stag Studios	Studio	5	5525	910 to 1171	1105
White Stag Faculty Dedicated Offices	Office	3	384	111 to 144	128
White Stag Maker Spaces	Shop		3330		
UO Portland Library + Learning Commons			5500		
Output Room			245		
White Stag Classroom 451			631		
White Stag Classroom 555			529		
White Stag Kitchen Lounge			491		

Other Facilities

The school owns three historic properties designed by John Yeon, an important modern architect who holds a pivotal position in the history of the Pacific Northwest regional style. They form part of the John Yeon Center, dedicated to education and research.

The Shire occupies a 75-acre waterfront site in Skamania County, WA, in the heart of the Columbia River Gorge. Directly across from Multnomah Falls, the Shire is a carefully designed landscape with a sculpted lawn, a series of meadows, wetlands, vista points, river bays, and walking paths, which John Yeon created over 30 years. He purchased the property in 1965 to protect it from possible industrial development. Today, it provides an educational site for the study of landscape preservation, design, ecology, and management creating opportunities for individuals and study groups to engage in research and discussion of landscape architecture, planning, conservation and preservation issues associated with the Columbia River Gorge, the Pacific Northwest region, and the nation.

Two of Yeon's Portland residences, the Watzek House and the nearby Cottrell House, are beautifully sited high in Portland's west hills. The Watzek house, designed by Yeon when he was 26, is preserved as a study site and has recently been designated as a National Historic Landmark. The Cottrell House, across the street, is used by the school to house faculty visiting from Eugene and other guests of the school's programs. The department covers the cost of Cottrell House stays for faculty based in Eugene when they teach in Portland. More information about the Yeon properties is available here.

Equipment and facilities services

In Eugene, the School of Architecture and Environment office coordinates mail distribution and provides printing and copying services. College of Design, Facilities Support Services (FSS) manages and staffs the Lawrence Hall and Millrace Woodshops, performs building maintenance, maintains equipment. College of Design, Technology Services (Tech) provides technology services to students, faculty, and staff in the College of Design and its affiliated institutes that do not fall under the scope of centralized services offered by UO Information Services. Technology Services furnishes software, hardware, computer accessories, and audiovisual equipment. The Service Desk in Lawrence Hall is operated by FSS and Tech. The Service Desk provides equipment checkout, package receiving, and distribution, and building or technology support. Students and faculty can also request equipment from the university library's Media Services Center. In Portland, the school partners with the library, the office of the Vice Provost, and White Stag Facilities Services to provide similar support services for students and faculty.

Workshops and Fabrication Resources

A 1,020 square-foot Studio Shop in Lawrence Hall near design studios services students throughout the College of Design. The Studio Shop is in an accessible location adjacent to the



loading dock and freight elevator. It contains woodworking power tools, hand tools and laser cutters. It is open every day school is in session, as well as evenings and weekends as staffing allows. All Architecture students receive orientation in their first core studio. Fabrication lab technician Tom Coates, hired in 2009, oversees equipment selection, set up, maintenance, operation, and safety of all of the College's six shops. He reorganized and outfitted our shops and developed equipment use protocols and safety training, including the addition of instructional videos available online and accessible to students in both Eugene and Portland. He provides assistance with a 5' x 8' CNC router and a vacuum forming machine located in the Millrace Furniture Woodshop. Coates is assisted by one full-time technician and several part-time shop assistants. Details about shop equipment and services can be found here.

The <u>Portland Studio Shop and Fabrication Laboratory</u>, located in the lower level of the White Stag building, is equipped with manual and digital tools including computer-controlled routers, 3D printers and laser cutters. A full-time shop manager supports this shop with the assistance of part-time student staff. The lab, which is fully accessible, is scheduled to accommodate the needs of students in the architecture program. Safety protocols have been established and all students who use the shop are required to complete safety training.

Additional digital fabrication equipment is available to students through the DeArmond
Makerspace in the Price Science Commons and Research Library and the UO Craft Center. They may also in Product Design and Art courses that have access to equipment such as clay extruders and metal tools. Faculty may use high-end additive manufacturing, milling and waterjet equipment and hire staff services through the UO Technical Science Administration, new in 2021.

5.6.1 Studio-Based Learning

Space to support and encourage studio-based learning.

Program Response:

Studio spaces in Eugene are located in Lawrence Hall and Gerlinger Hall. Studio spaces in Portland are located in the White Stag building. Studio spaces accommodate a minimum of 16 individual desks with stools, at least one table with chairs for instruction, a large screen monitor, pin-up space, trash, and recycling receptacles. Every student enrolled in studio and every M.S. and Ph.D. student have a personal desk with locked storage and pin-up space, power and WiFi access. The space per student ranges from 60-75 square feet or more, depending on the studio configuration, furniture arrangement and number of students enrolled in the studio. Design studio students typically have access to extra shared tables. Tabloid size grayscale printers are centrally located on each floor and color printing is available with a short walk. Eugene has 460 desks in Lawrence and Gerlinger studios and Portland has 80 desks. More recently purchased desks in the Gerlinger and Portland studios are all wheelchair accessible, these lower height desks are provided as needed in Lawrence.

5.6.2 Didactic and Interactive Learning

Space to support and encourage didactic and interactive learning, including lecture halls, seminar spaces, small group study rooms, labs, shops, and equipment.

Program Response:

Given the cross-disciplinary nature of our College, spaces other than studio are shared with other disciplines on the Eugene and Portland campuses. Faculty share large multi-purpose review rooms in Lawrence Hall (LA 206, 230, 231, 278, 279) and seminar rooms (LA 286, 405A) that are booked through the SAE staff. Similarly, lecture and shop spaces are shared in the White Stag building in Portland. The staff at both locations help faculty book computer labs, and lecture rooms are centrally managed. Workshops are managed through the main shop technicians in Eugene and Portland. There are also shared review spaces on the 2nd floor of Lawrence Hall where design reviews are scheduled and held. This is in the center of the building, encouraging engagement with the whole College population. There are woodshops in Lawrence Hall and the



White Stag as well as a dedicated design/build shop on the North Site in Eugene and a furniture shop that is shared with Interior Architecture and Product Design.

5.6.3 Faculty Support Space

Space to support and encourage the full range of faculty roles and responsibilities, including preparation for teaching, research, mentoring, and student advising.

Program Response:

Every tenure-related faculty has access to a private office for their work and access to shared printers. Pro-tempore and retired professors are accommodated in shared offices, with some retired faculty provided remote spaces. Due to limited Portland facilities, pro-tempore and Eugene-based faculty teaching in Portland are required to share office space. All faculty members and graduate employees can reserve conference rooms or small seminar spaces to meet privately with students as needed. GE's typically share a workspace associated with a lab or a faculty research area. Every full-time staff member has a personal workstation. Part-time student staff members share workstations.

5.6.4 Resources to Support All Learning Formats

Resources to support all learning formats and pedagogies in use by the program.

Program Response:

Department space is dedicated to studio teaching, flexible-use large spaces designated as review rooms and specialized facilities such as the library, computer labs and shops. Studio spaces provide 24/7 access for students with private workspaces, a table and chairs for small group interaction, a large-screen monitor for instruction and pin-up surfaces. In order to support multiple kinds of teaching, our school has invested in moveable furnishings for review rooms and classrooms. With smaller modular tables on casters, faculty and students can rearrange the room setups for large group lectures, small group discussions and individual study. Specialized technology is housed in centrally managed computer labs with central support via an online Service Portal. See more about fabrication equipment below and under Information Services.

The second floor of Lawrence Hall in Eugene is where all members of the College meet. There is a main stair that brings everyone to a central location that is near the "hearth," a café designed by faculty and students in the 80's. The majority of the review spaces in the building are intentionally located on pivoting panel walls near this central space. Reviews are meant to be public and all are invited to attend.

Studio spaces are also designed to be open and accessible so that students can see what each other is doing. This is in alignment with the non-competitive nature of the program (such as all studios being pass/no pass).

If the program's pedagogy does not require some or all of the above physical resources, the program must describe the effect (if any) that online, off-site, or hybrid formats have on digital and physical resources.

While the University had not previously developed much online teaching infrastructure, this immediately changed when the pandemic required closing the campus. Over Spring break 2020, the university immediately expanded support for online teaching through campus licenses for Zoom, MS Teams, and Miro. SAE supported faculty with weekly training sessions and an online forum to support online teaching. All faculty who taught online were supported to ensure their ability to effectively deliver their courses in an online format.

The university has created a series of <u>"HyFlex" classroom spaces</u> that combine face-to-face learning with simultaneously streamed remote instruction. As we continue to deal with the uncertainty of the pandemic and our need for flexible modalities of instruction, the HyFlex model offers an important transitional mode of instruction while some students remain remote and



others return to campus. It also permits students to continue their coursework when they are quarantined. As we return to campus in fall 2021, several faculty will be utilizing these spaces to teach a hybrid teaching format. We are planning on utilizing this teaching mode to align the learning experience for students in Eugene and Portland in several courses.

5.7 Financial Resources

The program must demonstrate that it has the appropriate institutional support and financial resources to support student learning and achievement during the next term of accreditation.

Program Response:

Overview:

In Fall 2017, a major administrative reorganization of the former School of Architecture & Environment into the College of Design (with the School of Architecture & Environment as a major sub-unit of the new College) resulted in a substantial alteration of budgeting and administrative support across all affected units. In addition, since 2012 a faculty union has been implemented on the UO campuses and another substantial alteration of the University budget model has taken place. The University of Oregon provides annual financial reports which are publicly available.

As a result, while the information provided via expenditure tables (in NAAB folders) has been structured to be as comparable as possible to prior reporting (especially the equivalent 2011-12 report), it is important to note that the redistribution of shared services, changed faculty classifications, and budget allocation conditions are different enough that direct comparison may be difficult. We have provided additional context where it seems appropriate to clarify.

University of Oregon Budget Model

The University of Oregon budget model that has been employed during the current period of review is a complex multivariate construct comprising several distinct elements:

- a) Tenure-track faculty positions
- b) Graduate employee positions
- c) Graduate tuition revenue
- d) General operating allocation

When this budget model was initiated, a baseline of overall budget for each unit (for the Department of Architecture's situation, this was at the College of Design level) was set that would provide a starting point for budget change over time. This baseline was established by averaging unit-level expenditures from the prior three years.

This baseline was then subdivided based on the variables above: first, all current, ongoing tenure-track salary and benefits were fully-funded as part of the budget number. Second, the centrally-assigned allocation for graduate employee positions for the coming year were fully-funded. Third, a baseline of graduate tuition revenue based on average enrollment numbers over the past three years was established, minus a percentage holdback to support central administration, was assigned as part of the budget total. The remaining portion of the original expense-calculated total budget was assigned as a "general operating allocation" to provide for all other ongoing expenses.

The intent of this budget model was to establish a budget baseline that considers current operational costs as a fixed historical value, and focuses instead on vectors of change over time. Because it was built of four distinct elements, the vectors of change for this budget value are tightly constrained:

 Addition or loss of tenure-track faculty directly adjusts the available budget, though control over added tenure-track positions is held at the Office of the Provost level and are managed via a competitive Institutional Hiring Plan process University-wide, regardless of unit-specific budget circumstances;



- b) Graduate employee position numbers are likewise centrally controlled, and before the current year (FY22), reductions in spending on graduate employee positions did not yield usable budget dollars for other categories of expense;
- Enrolling fewer students than the baseline would result in a net loss of budget, whereas increasing enrollment beyond the established baseline will yield additional revenue to support the unit at the College level;
- d) This category is a fixed allocation by fiat, and typically is modified only by an agreement with the Office of the Provost—a commitment to fund a new initiative or operational unit, or to reallocate resources from category (a) or (b) to something not includes (such as non-tenure-track faculty or additional staff, all of which is funded out of category (d)).

There are two elements of this budget model that are particularly salient to the Department of Architecture context.

First, changes in the roster of TTF have a more substantial impact on unit budget when the number of faculty decreases than when it increases, because added faculty increases the budget while maintaining all other resources, whereas a reduction in TTF removes resources from the unit without any expectation of replacement. In the short term, units typically are able to acquire resources from the Office of the Provost for visiting non-tenure-track faculty to backfill instructional needs, but this is typically intended as a bridge for the period required to hire a replacement TTF. When there is no replacement TTF approved via the Institutional Hiring Plan, funding for the visiting position will eventually disappear from the budget.

Second, graduate enrollment is the only variable over which a unit has a substantial element of control (subject to the success of recruitment efforts) if it wishes to expand its base of resources.

Both of these factors have impacted the current budgetary circumstances for the Department of Architecture. The progressive reduction in tenure-track faculty in Architecture has not been met by a commensurate number of replacement TTF hires due to Institutional Hiring Plan decisions, which has resulted in an increasing reliance on non-tenure-track (including visiting) faculty, without solid guarantees that the full funding for these positions will continue because they are not accompanied by permanent augments to the "general operating allocation".

Though the net expenditures (noted below) on TTF faculty have remained effectively flat, this comes in a context of increased benefits cost and routine merit and promotion increases, so that the same budget is shared among a slowly diminishing number of total faculty. For FY21, the tenure-track faculty size stands at 20 individuals with only 18.2 dedicated departmental FTE between them (plus an additional 5 in tenure-reduction or on a post-retirement appointment with a combined total of 1.3 FTE). For the coming year, we have no new incoming faculty and have had two retirements, further reducing the overall TTF roster to 18 individuals with 16.4 dedicated FTE. We are conducting two IHP-approved tenure track searches this year, which means that for FY23 we should be increasing the TTF roster to its FY21 size, providing there are no additional retirements in the coming year, though more are on the horizon.

Departmental General Fund Expenditures

Because of the shared-service model the College of Design operates under, costs for administrative support within and adjacent to the Department of Architecture are not directly assessed, and an appropriate "split" among serviced units may be impossible to determine. However, total School of Architecture & Environment administrative spending is provided as a parallel field for the past three years to indicate overall resource availability, as increases and decreases in spending in this area impacts all supported units proportionally.

Expense	FY 19	FY 20	FY 21
TTF Salary	\$2,424,534	\$2,296,737	\$2,267,701
Other Faculty Salary (inc. Tenure-	\$868,729	\$792,728	\$561,473
Red.)			



All Faculty Benefits	\$1,557,456	\$1,543,336	\$1,435,141
Total Faculty Expense	\$4,850,719	\$4,632,801	\$4,264,315
Graduate Employee Salary	\$288,432	\$275,853	\$264,607
Graduate Employee Benefits	\$595,255	\$601,756	\$574,591
Total Grad Employee Expense	\$883,687	\$877,609	\$839,198
Administrative Salary	\$299,703	\$438,477*	\$379, 629
Administrative Benefits	\$229,285	\$338,477*	\$336,083
Total Admin Expense	\$528,988	\$776,954	\$715,712

*The salary for the School Director, a tenure-track Architecture faculty member, was fully moved into Administrative costs for FY 20, along with the addition of a full-time graduate recruiter. The following year, this distribution was adjusted so only 40% of the School Director position was covered under administration. This adjustment disguises the actual reduction in net TTF expenditures we see from FY 20 to FY 21, as 60% of the position returns to the TTF salary line yet the total expense still decreases by \$29,036.

Considerations for Current Financial Conditions

As previously mentioned, the lack of control over tenure-track faculty replacement hiring at the departmental level has had a substantial impact on resources allocated to instruction. While some allowances have been made for temporary hiring to backfill vacant TTF roles, in general there has been substantial downward pressure at the University level on instructional spending. This is evident when reviewing the "Other Faculty Salary" expense line, which has dropped by roughly 43% over the past two fiscal years. A primary driver of this reduction is ongoing increases in benefits expense—FY 22 is the first year since the adoption of a new method of Other Payroll Expense (OPE) calculation that has not resulted in an increase between 3% and 11% in OPE per dollar of salary, and ballooning OPE costs were causing budget overruns across campus.

During this period of central funding contraction, the Spatial Justice Initiative has provided some relief on instructional needs, augmenting general fund spending with over \$200,000 over the past two years, mainly from philanthropic gifts to the UO Foundation that support faculty work.

At the same time, Graduate Employee resources have slightly declined. In February 2021, the UO initiated a campus-wide reduction in those resources as well, and we anticipate an approximate 15% decrease in GE expenditures for the Department of Architecture in FY 22.

Planning for the Future

Despite the institutional funding challenges the Department of Architecture has faced in recent years, it has remained flexible and is modifying its program delivery to maximize the benefit of all its resources—this includes elimination of "duplicate" course offerings between the two campus locations, adjustments to the teaching delivery of resource-intensive courses in the core curriculum, and expanding partnerships with other units such as the Office of Admissions and the Departments of Interior Architecture and Landscape Architecture to maximize the use of shared resources.

In the current year's Institutional Hiring Plan process, the Department of Architecture was successful in securing two new TTF hires, which should be completed by Spring 2022. As mentioned previously, this would stabilize TTF instructional effort in line with FY20 levels, and we anticipate that additional searches will become available for FY 23 and beyond as the Department demonstrates the stability of its new graduate enrollment profile, having recently weathered a period of instability and reduction in graduate student numbers.

In June, 2021, the University also announced the rollout of a new budget model that will allow increased flexibility across expense categories and thus reduce the near-term impact of TTF departures. Many of the details of this new model are still to be articulated and fully understood at the academic unit level, but we are excited about its flexibility in deployment of resources for units that maintain fiscal solvency based on robust graduate enrollment. Because the Department of Architecture has ably and responsibly met its various cost-reduction goals over the past several years, increasing enrollment numbers will position it to take best advantage of that flexibility within



the next two to three years to build on program strengths and rebuild in areas that have been hampered by faculty departures.

Other Financial Resources

In addition to general fund resources to support the department's academic mission, a number of other ongoing, stable categories of resources are also available.

- 1. The Department of Architecture holds over \$3.5M in student scholarship endowments via the UO Foundation. This allows the department to offer over \$100,000 in scholarships annually to incoming and returning students.
- The Department of Architecture offers general-fund subsidized tuition remission awards to graduate students to improve recruitment. This investment is approximately \$200,000 annually.
- 3. Each Tenure-Track faculty member receives \$1,500 in professional development funding annually.
- 4. The Department holds over \$4.8M in faculty support and related endowments via the UO Foundation to hire visiting faculty, support faculty research and professional development, and augment studio experiences, with another \$1.6M of endowments intended to support designated faculty research activities. Additionally, \$1M of endowments are jointly held with other academic programs for these purposes.

5.8 Information/Library Resources

The program must demonstrate that all students, faculty, and staff have convenient and equitable access to architecture literature and information, as well as appropriate visual and digital resources that support professional education in architecture.

Program Response:

Computing resources

Students learn to explore new ideas through a combination of traditional methods and experimental techniques. Through work in virtual reality, animation, multimedia, graphics, computer-aided design, geographic information systems, and web publishing, students see how computer technology can extend capabilities and enhance understanding. Instructional spaces and lounge areas are networked with reliable high-speed wireless access to the UO network. Instructional technology is supported on both PC and Apple computers. Students are provided with the Office 365 suite of applications, giving them access to email, Office applications, Teams chat and video calls, OneDrive data storage, and a host of other applications. They also have access to the University's Canvas LMS, UOBlogs for website creation, and server space provided for storing course work. A single user account, called a DuckID, allows access to all of these technology resources as well as a wide range of online services including registration, courseware, grades, accounts payable, and course evaluations.

The University of Oregon has a site license with Adobe for the Adobe Suite of software tools. This license allows faculty and staff to have the software installed on up to two devices at any one time. The license structure for computing labs is such that individuals need to use their university login credentials to access the software while in a lab. There is no site-license available for students so they are only able to install and use the software on their personal devices with a purchase of a "student" subscription to the Adobe Suite, through Adobe.

Other software such as Rhino, Revit, Sketchup, etc. are purchased and installed in the computing labs so that students can use them when on-site. The decisions on to which software packages to have available is made by faculty in the College of Design.

Hardware in the labs is purchased based on input from faculty. For example, due to the increasing use of graphic processing units, the computer lab located in Lawrence 383 is being configured this year with new computers that have this specific hardware component. This will allow for the use of more graphic intensive programs to be used by students and taught by faculty



in that lab space. Upgrades to the labs is done on a rotating basis as computers "age out" and new computers are needed.

Technology support for students, faculty, and staff is provided by a central support organization called User Support Services (USS), part of Information Services. USS operates a service desk in Lawrence Hall for students and faculty who are associated with the school. Students also have access to the main student support desk located in the Erb Memorial Union, centrally located on campus. Support is available either via telephone, walk up (limited during COVID-19), and also the UO Service Portal. USS provides support for a host of core and common services as well as some that are specific to the school.

Students are provided access to a full array of computing applications through various computer labs associated with the school and college. Physical labs, consisting of PC and Mac computers, are located in Lawrence Hall, the North Site complex, and 940 Olive Street in Eugene. In Portland, students have access to the computer lab located in the Skidmore Building, part of the White Stag Block of the UO Portland campus. The Design Computing Lab (DCL), located in 283 Lawrence Hall, is a centrally located open hours lab available to students of the school 24/7 during academic terms. It consists of a mix of PC and Apple computers, as well as access to scanners and printing. The remaining physical labs are all for instructional purposes and scheduled through the registrar or through a representative from the College of Design Technology Service Desk. It should also be mentioned that there are various research-oriented labs, of different sizes and scope, associated with various disciplines and faculty within the school.

With the advent of the COVID-19 pandemic and the push to teach remotely, User Support Services created the <u>UO Virtual Labs</u>. The UO Virtual Labs consists of a main lab, available to all UO faculty and students across the university and consists of 200 virtual seats, and also a High Performance Lab consisting of 80 virtual seats which is capable of running graphic intensive programs such as AutoCAD and Rhino. The High Performance lab is available to students and faculty of the school upon request. It is expected that the UO Virtual Labs are here to stay as they have been very popular and are a nice complement to the physical computer labs available to the students.

The University of Oregon provides personal "cloud" storage services through Microsoft's OneDrive software and Sharepoint, as well as through DropBox. Students, faculty and staff have access to these tools to use for teaching, research, and projects. The College of Design has a fileserver set up for faculty to access and use as well. In addition, there is a College of Design share located on the university fileserver.

More than just this though is the ability to request storage through university resources through Information Services. (See this <u>link</u> for information on specific offerings.

The University of Oregon has a robust network connection as well. Students, faculty and staff can connect to the wireless network, UO Secure, with their UO credentials for reliable connectivity and speed. Guests have the option of using the "UO Guest" network while on campus as well. Labs are hardwired into the campus network offering gigabit speeds to end users.

Large format printing is available to students via the <u>Output Room</u>, located in Lawrence Hall next to the DCL lab. Also supported and run by User Support Services, it provides students, staff and faculty with affordable access to color laser printing, large format printing and large format scanning. In Portland, similar services are provided by User Support Services. The Portland Output Room also functions as a faculty and student services center where students can check out equipment, including video and digital cameras, tripods, and hand-held audio recorders.

To participate effectively in the department's computer-integrated instruction, every student is required to have unlimited access to a <u>personal laptop computer</u>. The school's computing specialists, in consultation with the department's digital media faculty, prepare recommended computer hardware and software packages and negotiates reduced rates for the department.



Students who are eligible for financial aid can also receive aid toward computer purchase expenses.

For Digital Fabrication Resources see 5.6 Physical Resources.

In the fall of 2009, the school opened a new 1,020 square-foot Studio Shop in Lawrence Hall near design studios for student use. The Studio Shop is in an accessible location adjacent to the loading dock and freight elevator. It is open every day school is in session, as well as evenings and weekends that are convenient for students. In order to improve the performance and safety of our shops, we created a new staff position for a fabrication lab technician who oversees equipment selection, set up, maintenance, operation and safety of all of the department's shops. Tom Coates, who was hired in 2009 for this position, has reorganized and outfitted our shops and developed equipment use protocols and safety training including the addition of instructional videos available online and accessible to students in both Eugene and Portland. Part-time shop technicians assist him. Details about shop equipment and services can be found here: https://designtech.uoregon.edu/woodshops.

The Portland Studio Shop and Fabrication Laboratory, located in the lower level of the White Stag, is equipped with manual and digital tools including computer controlled routers, 3D printers and laser cutters. A full-time shop manager supports this shop. John Leahy is the shop manager and also teaches courses in fabrication methods and oversees all aspects of shop management with the assistance of part- time and student staff. The lab, which is fully accessible, is scheduled to accommodate the needs of students in the architecture program. Safety protocols have been established and all students who use the shop are required to complete safety training.

Further, the program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resource professionals who provide discipline-relevant information services that support teaching and research.

Program Response:

The following is a brief overview of information resources. Please click here for more a more detailed description of how the UO Libraries support the architecture program. There are two design libraries for UO architecture students – the Design Library in Eugene and the UO Portland Library in the White Stag building on the Portland campus.

Facilities, Staff & Equipment

The University of Oregon Design Library, located inside the College of Design building, and UO Portland Library are the primary locations for information services and resources that serve the architecture program. The Design Library branch is part of a system of libraries including five other branches and a large main library (Knight Library) within which staff work collaboratively to deliver services such as interlibrary loan, reference, and library instruction and provide access to collections within the larger group of UO Libraries which serves to increase resources available to researching architecture students and faculty. The Design Library is staffed by one Art and Architecture Librarian, one library manager, one full-time staff person, and six part-time student assistants. It is equipped with study rooms, 28 computers and several scanning workstations. Just before the pandemic, in February 2020 the Library had just over 9,000 visitors, with 83,000 visitors during calendar year 2019.

Library and information resource collections: Books, Serials, Databases, Images and Rare Materials

The book and serial collections of the University of Oregon Libraries have sufficient scope and coverage to serve architecture program needs. The UO Libraries collections hold more than four million volumes, subscriptions to 74,000 print serials, 157,000 electronic serials and 477 databases including thousands of units of archives, documents, microforms, and audiovisual materials. The Design Library holds approximately 63,000 monographs on architecture topics and has current subscriptions to 65 percent of the core list of fundamental and recommended periodicals titles compiled by the Association of Architecture School Librarians (AASL). The library subscribes to several databases that provide access to periodicals of interest to



architecture researchers such as Art Full Text, Avery Index to Architectural Periodicals, and Web of Science. When full-text is unavailable, links are provided to interlibrary loan/document delivery service forms to request the materials. Digital images are also accessible through commercial sources such as ARTstor and via unique holdings, such as the digitized slide collections of UO architecture faculty and architectural historians. One example is *Building Oregon: Architecture of Oregon and the Pacific Northwest*, a resource with over 20,000 images.

The Design Library's rare book rooms contain approximately 2,100 items of unique historical value of interest to researching architecture students and faculty including student architectural drawings going back to the 1920s. Special Collections and Archives (SCUA) is the primary repository for the University of Oregon's archives, rare books, historic photographs, and one of the largest, historical manuscripts collections in the Pacific Northwest. Of interest to architecture students and faculty are drawings, photographs, renderings, project files, and specifications of architects and historic preservationists, with an emphasis on the built environment in Oregon.

Services: Reference & Library Instruction

Basic reference service is delivered online and face to face by onsite staff. The Art & Architecture Librarian provides intermediate and advanced reference and library instruction services online and onsite and maintains online resource guides on architecture topics. Library instruction sessions have been provided to undergraduate and graduate courses such as ARCH 201 and ARCH 4/507 among others. In addition, architecture students and faculty have access to library workshops on data management, GIS, citation management, and data visualization among other topics. Information about these workshops is on the library's main web page and with links also on the Design Library's web page.

6—Public Information

The NAAB expects accredited degree programs to provide information to the public about accreditation activities and the relationship between the program and the NAAB, admissions and advising, and career information, as well as accurate public information about accredited and non-accredited architecture programs. The NAAB expects programs to be transparent and accountable in the information provided to students, faculty, and the public. As a result, all NAAB-accredited programs are required to ensure that the following information is posted online and is easily available to the public.

6.1 Statement on NAAB-Accredited Degrees

All institutions offering a NAAB-accredited degree program or any candidacy program must include the exact language found in the NAAB Conditions for Accreditation, 2020 Edition, Appendix 2, in catalogs and promotional media, including the program's website.

Program Response:

The "statement on NAAB-Accredited Degrees" is printed in the "<u>Architecture" section of the UO Catalog</u> and also on the Architecture Department website at the bottom of the main architecture page, linking to the <u>accreditation page</u>.

6.2 Access to NAAB Conditions and Procedures

The program must make the following documents available to all students, faculty, and the public, via the program's website:

- a) Conditions for Accreditation, 2020 Edition
- b) Conditions for Accreditation in effect at the time of the last visit (2009 or 2014, depending on the date of the last visit)
- c) Procedures for Accreditation, 2020 Edition
- d) Procedures for Accreditation in effect at the time of the last visit (2012 or 2015, depending on the date of the last visit)



Program Response:

Public access to Accreditation Conditions and Procedures have been made available via the Department of Architecture's page on accreditation.

These are links to the 2012 Conditions and Procedures and 2020 Conditions and Procedures

6.3 Access to Career Development Information

The program must demonstrate that students and graduates have access to career development and placement services that help them develop, evaluate, and implement career, education, and employment plans.

Program Response:

Through the Department of Architecture website, students and graduates have access to career development resources and placement services via the <u>Academics</u> and <u>Student Career Services</u> pages.

6.4 Public Access to Accreditation Reports and Related Documents

To promote transparency in the process of accreditation in architecture education, the program must make the following documents available to all students, faculty, and the public, via the program's website:

- All Interim Progress Reports and narratives of Program Annual Reports submitted since the last team visit
- b) All NAAB responses to any Plan to Correct and any NAAB responses to the Program Annual Reports since the last team visit
- c) The most recent decision letter from the NAAB
- d) The Architecture Program Report submitted for the last visit
- e) The final edition of the most recent Visiting Team Report, including attachments and addenda
- f) The program's optional response to the Visiting Team Report
- g) Plan to Correct (if applicable)
- h) NCARB ARE pass rates
- i) Statements and/or policies on learning and teaching culture
- j) Statements and/or policies on diversity, equity, and inclusion

Program Response:

Public Access to Accreditation Reports and Related Documents available via the School of Architecture accreditation page website.

ARE Pass Rates are available through NCARB at this <u>link</u> and made available to the University community and general public via the above-linked page on accreditation.

6.5 Admissions and Advising

The program must publicly document all policies and procedures that govern the evaluation of applicants for admission to the accredited program. These procedures must include first-time, first-year students as well as transfers from within and outside the institution. This documentation must include the following:

- a) Application forms and instructions
- Admissions requirements; admissions-decisions procedures, including policies and processes for evaluation of transcripts and portfolios (when required); and decisions regarding remediation and advanced standing
- c) Forms and a description of the process for evaluating the content of a non-accredited degrees



- d) Requirements and forms for applying for financial aid and scholarships
- e) Explanation of how student diversity goals affect admission procedures

Program Response:

An overview of admissions for the unit, including application policies and procedures and evaluation of candidates, has been made available to the University community and public via the Department of Architecture's <u>page on admissions</u>. Further detail on student services with the School of Architecture and Environment, including detail on financial aid and scholarships can be found on the departmental <u>page for academic advising</u>.

RECRUITMENT STRATEGIES

The Department of Architecture works to recruit a robust population of applicants both around the nation and internationally. We offer GRE waivers and application-fee waivers to reduce barriers to application for students.

- We also offer a <u>First Year Interest Group</u> (FIG) for first term/year undergraduate students not admitted into the program but are admitted to UO, small class size and one-on-one mentorship from faculty/advisors. Doing a FIG is not guaranteed admission but it is a pathway for students who would have not otherwise had exposure to the field to help them prepare a good application.
- We offer advising visit events (Duck Days, Duck Preview) to help High School students learn more about the program, understand admissions requirements, connect with financial aid and scholarships, meet faculty and advisors, and tour facilities.

Our program seeks to attract as diverse a population as possible to our programs to increase the breadth of knowledge and experiences within our classroom. Upon admission, merit scholarships are offered for strong applicants whose diverse professional, personal, or education background will strengthen our incoming cohorts.

6.6 Student Financial Information

6.6.1 The program must demonstrate that students have access to current resources and advice for making decisions about financial aid.

Program Response:

All students have access to financial aid advisors and can email or call the Financial Aid Office during their open hours for quick questions (Monday – Thursday, 11 am - 3 pm). Students can find this information <u>here</u>.

Because of our tuition guarantee, which means tuition is stabilized after an incoming student's first term, financial aid is easy to estimate for the duration of a student's enrollment. Students have access to estimated costs of tuition, fees, books, and living expenses on their DuckWeb (student portal) and through this <u>webpage</u>.

We encourage students to apply for scholarships and frequently direct them towards open applications. We also have a webpage dedicated to <u>student scholarships</u>.

6.6.2 The program must demonstrate that students have access to an initial estimate for all tuition, fees, books, general supplies, and specialized materials that may be required during the full course of study for completing the NAAB-accredited degree program.

Program Response:

As an institution and a department, we are transparent about the cost of attendance, including specialized course materials that are specific to architecture.



Financial aid estimates are publicly available through the <u>Office of Student Financial Aid & Scholarships</u>, which provides detailed financial information to current and prospective students, including a <u>net price calculator</u>.

The College of Design also offers a <u>link</u> specifically made for prospective, future, and current architecture students to address technology and material requirements. This webpage offers an estimate for studio supplies costs, which are meant to be calculated in addition to textbooks and other expenditures. Students can also look at the cost of studio supplies at any time on the <u>Duck</u> Store website.