

# **Architecture, Undergraduate Bachelor of Architecture**

## **I. Mission Statement**

The Department of Architecture advances the study of architecture as a cultural discipline. Architecture is a cultural phenomenon arising from the aspirations that individuals and groups have for their quality of life and the environment that supports it, and from the social enterprise of designing and building for the future. The practice of architecture is a demanding discipline, requiring a broad range of continually growing knowledge and skills. We view architecture through the lens of culture and recognize that the future of architecture depends upon the advancement of practice.

The academic programs are grounded in the requisites of the discipline and profession. The educational philosophy is inclusive, seeking to instill individual motivation, critical ability, social responsibility, and the formation of personal values and convictions as students learn to design, to communicate ideas, and to undertake the complexity of architecture.

## **II. Assessment Goals, Measures, Results and Changes**

### **A. Goals: Intended learning outcomes**

It is our intent: that our students develop the skills with which to critically assess and research architectural questions and to invent architectural designs through which those questions are addressed; that they develop a working method for designing and that they have the communication, graphic, modeling and computational skills to support designing and to represent their design ideas to others; that they master basic knowledge of architectural technologies through which buildings are given form, of which they are constructed and by which they are environmentally tempered; that they thoroughly understand architectural history, that they understand the theoretical and diverse cultural underpinnings of the discipline of architecture, that they are able to reference architectural precedents and know how to utilize all of these in the development of their ideas; and that they have grounding in the ethical and practical aspects of the architectural profession in society.

### **B. Measures**

Student outcomes assessment is guided by the Undergraduate Program and Graduate Programs Committees. They are chaired respectively by the Associate Chair for the Undergraduate program, and the Director of Graduate Education for the department. Together with the Associate Chair for Academic Affairs, they meet weekly with the department Chair at administrative meetings which cover a wide range of issues including student performance and curricular issues. The avenues and instruments for assessment are diffuse, as is indicated in the following.

#### **Review of Student Design Work**

The review and assessment of student work and mastery of curricular content is inherent in the pedagogy of architecture. Fully one-third of student credit hours the final four years of study are taken in design studios. There are two principle methods of student demonstration and evaluation. The first are the daily pedagogical processes of studio work. Studios are small

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classes (10-15) that meet for 14 hours a week. As noted above, the studio is viewed as the primary integrative performance arena for architectural studies, and within which the results of studies in other areas of the curriculum are made manifest. Students carry out analytical, syncretical and critical judgment exercises throughout each semester as they conduct research and develop design proposals. The studio professors meet with students in a tutorial style for extended discussions and desk crits, and conduct seminar discussions relevant to the projects for the semester.

The second takes place in public reviews during which panels of faculty members formally examine each student's work. The process includes student oral and graphic presentations and engaged dialog with the faculty and classmates. At least once a semester, all members of the faculty, regardless of area of specialization, are engaged in the review of student design work.

### Selective Admissions and Senior Projects

There are two benchmarking episodes in the assessment of student work. Admission to the four year professional sequence is selective, based upon enrollment management. Pre-architecture students prepare a portfolio, an admission essay, and are ranked based upon their performance in required courses. Several faculty members take part in this process each year. Because the reviews of student work are blind, we have a fair amount of confidence in student mastery of material based upon their work.

During the first semester of the fifth year, each student designs and carries out an independent studio project (6 cr). A team of faculty are assigned to the year level, and all faculty in the department are involved in the end-of-semester review. Both of these procedures help the faculty to determine student performance.

### Student Exhibitions and Awards

The department as well as the college have awards programs that recognize outstanding student performance in a number of curricular and leadership areas. By definition, these awards define excellence in student performance that is most often publicly known and acknowledged by their peers.

Each year there is at least one public exhibition of selected work performed by each student in our foreign studies program (which is participated in by 75% of our students). The outstanding undergraduate Senior Projects are briefly on display in the spring during the judging of the RDG Prize. An exhibition and jury of third year studio work is held to begin each spring semester in conjunction with the endowed Hansen Lecture program. A new CSI award and exhibition has just begun for 4<sup>th</sup> year work. These exhibitions and awards are a celebration, a definition of excellence, and an opportunity for critical assessment of student performance.

### Professional Licensing Examination

Architects are licensed professionals. After graduation from an accredited program, intern-architects spend approximately three years obtaining practice experience before taking a nationally administered examination. While preparation for the examination includes both the accredited degree and internship, the pass rates of Iowa exam takers are consistently 25-50% above the norm in the various examination categories: pre-design, site design, building design, general and lateral structures, building systems and materials. Records show that the vast majority of examinees in Iowa are ISU graduates.

### Student Outcomes Assessment

### **C. Relevant Required Courses**

See table below.

### **D. Results**

Due to the internal public review processes, student work evidence based external peer evaluations, regular faculty review processes, regular strategic planning, the faculty members collectively and individually are in a position to assess student performance. Because studios are small, 17 or fewer, and most seminars are small, fewer than 15, and lectures modest in size, usually about 65, with the exception of a few history courses, the relationships between students and faculty, and students and their advisors are close – and faculty are well informed on student progress.

Despite the level of oversight and involvement, and perhaps because of it, faculty are keenly aware of certain recurring problems in a percentage of student work: 1) the ratio of poor quality integrative work in studios; 2) the weak mastery and utilization of prior work to inform more advance studies; 3) the quality of collective work across several areas of study at each year level. This is why we are working assiduously on curricular issues!

As a result of these types of review processes, the faculty has routinely tested various experimental courses, and modified course pedagogy. As a review of catalogs will show, we have selectively introduced or culled required courses from the curriculum. More faculty define course objectives and grading standards today than did so five years ago.

The faculty are intensely involved in the evaluation of student performance based upon student work and preparedness for progressively advanced complex studies, and are self-conscious in modifying curricula to improve student performance.

**Summary of Outcomes Assessment for B.Arch.**

<b>Intended Outcomes</b>	<b>Measures</b>	<b>Relevant Req. Arch Courses<sup>1</sup></b>	<b>Results</b>	<b>Changes Based Upon Results<sup>2</sup></b>
<b>1)</b> That our students develop the skills with which to critically assess and research architectural questions and to invent architectural designs through which those questions are addressed.	a. Accreditation b. Portfolio & essay review for enrollment mgt. c. Arch 403 Diploma Project	DsnS 183X, 271, + studios at all levels	a. Accreditation commentary <sup>3</sup>	1. New introductory course, DsnS 183X 2. Arch 401 3. New elective senior seminar, Arch 528G in parallel w/Arch 401 comprehensive design studio 4. Arch 404 interdisciplinary option studio
<b>2)</b> That students develop a working method for designing and that they have the communication, graphic, modeling and computational skills to support designing and to represent their design ideas to others	a. Accreditation b. Portfolio & essay review for enrollment mgt. c. Arch 403 Diploma Project d. Licensing examination	Studios at all levels, DsnS 131X 230, 232	d. Iowa exam pass rates 30-50% above Nat'l average	1. Enriched electives in media 2. DsnS 131X new first year drawing/representation class
<b>3)</b> That students master basic knowledge of architectural technologies through which buildings are given form, of which they are constructed and by which they are environmentally tempered	a. Accreditation b. Licensing examination	240, 242, 344, 346, 357, 448, 458 + studio integration	b. Iowa exam pass rates 30-50% above Nat'l average	1. Expansion of 'design-build' studio options 2. Revisions in sequence to reinforce earlier integration in design •See 3 at 1) above
<b>4)</b> That students thoroughly understand architectural history, that they understand the theoretical and diverse cultural underpinnings of the discipline of architecture, that they are able to reference architectural precedents and know how to utilize all of these in the development of their ideas	a. Accreditation b. Arch 403 Diploma Project	DsnS 183X, 221, 222, 271, + 12 (see chart) cr. req. of SAC options + studio integration		1. New introductory course, DsnS 183X survey & added recitation sections •See 3 at 1) above
<b>5)</b> That students have grounding in the ethical and practical aspects of the architectural profession in society	a. Accreditation b. Licensing examination	482 + 9 cr. req. of professional options	b. Iowa exam pass rates 30-50% above Nat'l average	1. Advisory Com. Seminars 2. 482 in 4 <sup>th</sup> rather than 5 <sup>th</sup> year

Notes for preceding table:

1. Because changes in curriculum emerge over time, are evaluated and refined, changes the past five years have been included here. All are the direct result of assessment.
2. In 2001 the B. Arch. Program received a 6 year full-term of accreditation; another accreditation site visit will be held spring 2007.

### **III. Assessment Processes**

#### **The Collective Faculty**

The faculty of the DoA meets regularly to discuss curricular, student performance and other academic issues. Periodically, the full faculty meets in special sessions to review student work examples from studio (the armature through which all aspect of the curriculum are integrated). Through participation in the public design reviews each semester mentioned previously, strategic planning efforts and these periodic closed reviews, the full faculty is abreast of student accomplishment and curricular design.

#### **The Undergraduate Program Committee**

In the departmental Governance Document, the Undergraduate Program Committee is charged with “implementation of the undergraduate curriculum through the coordination of studio and lecture courses, program development, and the recommendation of curriculum changes to the departmental curriculum committee.” In carrying out our mission, we regularly discuss student performance progress, the design of the curriculum, seek better coordination among the courses at each level, and seek to refine the progressive aspects of the curriculum design. The undergraduate committee also instigates semester reviews of selective student work, to which the full faculty is invited. The Year Level Coordinators who comprise the committee regularly shape and reshape the work of each studio level based partly upon the outcomes of student.

#### **Faculty Interest Areas and Curriculum Committee**

The faculty self-select participation in one or more interest areas: technology studies, design, professional practice, history/culture studies, and design communication. One member from each group is elected to the curriculum committee. Each group periodically (usually less frequently than the full faculty or the standing committees) meets to assess curricular design in their area of study and to discuss student performance. Members of Faculty Interest Areas, as can the Program Committees make suggestions to the DoA Curriculum Committee regarding curricular improvements. The Curriculum Committee meets regularly to consider undergraduate and graduate program issues. Curricular changes often involves review of student work as a basis for change.

#### **Course Procedures**

Virtually all course syllabi in the DoA define course objectives, expected learning outcomes, and grading standards. Often, the work of students with low performance or those at risk of failing in studio is reviewed with other faculty peers prior to issuing final grades.

#### **Departmental Advisory Committee**

During the middle 1990’s the DoA re-established its Departmental Advisory Committee. This Committee includes graduates of the school, others who have accepted an invitation to

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participate, and the president-elect of the Iowa AIA. They have visited the school 3 times each year, have participated in formal reviews, have visited studios, and held forums that include faculty and students. After each meeting, they meet with the Chair to discuss their observations regarding continuing student performance.

## Specialized Accreditation

In addition to internal reviews, regular external accreditation reviews (not less frequently than every six years) are student performance evidence based. Specific criteria of assessment are defined by the National Architectural Accrediting Board (Appendix X). At these intervals, course syllabi, copies of student examinations, seminar presentations, lecture notes, and design work are collected for external peer review and measurement against those criteria.

Table of assessment processes, B.Arch:

Assessment Activity	Period or Cycle of Activity	Record of Activity
Selective Admission to the Professional Program	Annual	Scores are recorded and kept on file in the Advising Office
Undergraduate Program Committee	Meets quarterly	Key topics, particularly student performance issues and curricular changes are well covered.
In-Studio Reviews of student design work	The studio process involves regular daily and weekly contact in a critical teaching feedback pedagogy.	Many professors keep daily logs; written results are sometimes provided when students are having difficulty. These practices are irregular from a formal recording perspective.
Public Reviews of student design work	Usually 2-4 per semester for all studios	Students are often asked to keep notes or journals; professors usually keep written notes; some record results in writing at the end of public reviews. Again, these practices are irregular from a formal recording perspective.
Diploma Project Reviews	The first week of classes for Arch 404. And at Mid-semester.	Faculty individually approve each student's project proposal; faculty collectively review the work and grading for students who are having difficulty.
Collective faculty End of Semester Reviews	Usually happens about once a year rather than once a semester	There is active discussion; minutes are not typically kept; notes regarding major issues that come to the fore are distributed to the Undergraduate Program Committee
Awards	Annual cycle for two dozen or so awards and scholarships	Faculty are invited to nominate students for various awards. The Advising Office tracks all grade point averages which are the basis for a number of awards. There is a published awards program.
Specialized Accreditation	Every 6 years	A report is issued that becomes a public document. There are direct actions taken to remedy problem areas noted in the report, and the faculty takes suggestions for opportunities under advisement.