

**Academic Prioritization Plan
School of Architecture and Construction Management
Architecture Program
Teaching and Learning**

The Architecture program in the School of Architecture and Construction Management offers three degrees. The undergraduate degree is a four- year non- accredited Bachelor of Science in Architectural Studies. The program has two graduate degrees. The first is the Master of Architecture which is the professional accredited degree. The second is the Master of Science in Architecture which is offered at the Spokane campus exclusively. The architecture program has an enrollment of approximately 300 students. There are 18 full time tenured or tenure track faculty members including four at the Spokane campus. The school also has a series of adjunct faculty who are hired from the profession each semester. The school has one cohort of fourth- year undergraduate students as well as a cohort of 1.5 year and 2.5 year Master of Architecture students at the Spokane campus.

Data that is presented in the following report comes from our internal statistics, WSU IR and the 2006 edition of the Greenways Almanac of Architecture and Design.

Centrality - *Advancement of WSU's vision, mission, and strategic goals; relationship to areas of academic excellence; a unit of this kind should be present in every land-grant university; necessity of unit based on statute, government regulation or other internal or external mandates; number of other units of the same or similar kinds in Washington or in the Pacific Northwest; potential impact on other WSU units.*

Response: Growth and Investment: Architecture is one of two nationally accredited architecture programs in the state of Washington. There is one in Montana, Idaho and Oregon. Architecture falls under the statute of protecting the life safety and welfare of the general public and architects must pass a national exam to become licensed in their respective states. The following statistics relate to architecture in the state and at WSU.

- Washington ranks ninth in the nation in number of licensed architects and architectural firms.
- The school offers courses in support of graduation requirements for construction management and interior design.
- The architecture program through the Design Institute provides an important link to community and urban projects (in Spokane).

Productivity – *Credit hours taught(majors, GERs, other service courses), degrees granted (graduate and undergraduate), student retention, time-to-degree, number of majors, minors, undergraduate and graduate enrollments (metrics per faculty FTE); student faculty ratio; faculty advising within and outside of program; ratio of credit hours offered to majors versus non-majors*

Response: Maintenance: Internal demand for architecture is such that we have consistently had many more applicants than we can admit. The following metrics apply to the architecture program. **Note: Internal Data indicates the separation of metrics for architecture and construction management.**

- Total student credit hours taught in AY 2006 was 5,500. (internal data)
- The average contact hours per faculty per week were 9.0. (internal data)
- The average number of courses taught per year per faculty is 4.06. (internal data)
- The average number of students served per semester was 1226. (internal data)
- Total number of courses taught for the year was 65. (internal data)
- Architecture undergraduate majors for 2007 – 2008 is 235. (internal data)

- Average GR AAFTE is 51. (IR data)
- Five year total degrees is 583 (IR data)
- Five year total average degrees per faculty is 27 (IR data).
- School UG SCH/ TT Faculty is 186. National average is 134. Peer average is 154 (IR Data).
- School GR SCH / TT Faculty is 26. National average is 39. Peer average is 31. (IR Data: this includes CM which does not have a graduate program at this time).

Demand – external - Present and future demand for program output as measured by market demand for graduates, economic/scientific/social trends; partnerships with external stakeholders; the uniqueness of the program.

Response: Maintenance: The program has consistently seen full employment of students upon graduation. Required internships in the M Arch program allow potential employers to “test” graduates prior to full employment. The school has had 25 – 30 architecture firms call and come to campus to interview students for employment. Students have been typically receiving a minimum of two job offers or have made commitments to an employer prior to graduation.

- For 2007 – 2008 we had 90 applications and admitted 60 into the certified program. This ratio has been the pattern in the school for the past twenty years. Employers are very active in recruitment on campus.
- For the past several years all students graduating have received employment with many having several job offers.
- Growth in population and business in Spokane provides new demands and opportunities
- Global warming and other environmental concerns at the societal level also underline the need for architectural education.
- A projected need for the Master of Architecture for a place-bound returning students in Spokane.

Demand – internal – Student demand and degree to which other units rely on this program for instruction or support including courses required by majors in other units, general education offerings.

Response: Growth and Investment: The school is in an excellent position to increase enrollment in the Master of Architecture program. Current applications for fall 08 are at 58 with an enrollment goal of admitting 40 new graduate students. At the undergraduate level we would be in position to increase enrollment at the second year another 10 students to 70 based upon available resources.

- Architecture has five courses that serve majors outside of the discipline. These are Arch 202, 209, 220, 324 and 428.
- Total non- arch majors enrolled in these courses for 2007-2008 is 150.
Students outside the discipline supported by these courses are:
Business, Chemistry, Communications, Engineering, General Studies, Horticulture, Hospitality, Interior Design, Landscape Architecture, Math, Movement Studies, Neuroscience, Psychology, Sport Management, Undecided (SALC). (internal data)
- Interdisciplinary-based courses under ARCH headings are taught by architecture faculty in Spokane (Arch 530 Research Theory and Arch 540 Research Methods).

Quality – National and international reputation of the program; faculty recognition; comparisons with peers; student experiences; faculty achievements in teaching, success in establishing and meeting learning goals.

Response: Maintenance:

The architecture program has received full term accreditations from the initial accreditation in the early 1980's. The following accomplishments acknowledge quality of the program.

- For 2008 the architecture undergraduate program ranks fifth in the western region (13 states which includes 21 programs). Design Intelligence national survey.

- For 2008 the architecture graduate program ranks fourth in the west (13 states which includes 21 programs). The graduate program has only been in existence since 2002. Design Intelligence national survey.
- In 2007 the undergraduate program in architecture tied for fourth with USC in the Western Region (13 states). Design Intelligence national survey.
- In 2005 the architecture program was ranked third of ten ranked schools in the western US. Design Intelligence national survey.
- Four faculty members have received national awards for teaching.
- One faculty member has received the Sahlin Award for teaching.
- For fall 07 average evaluations for the school were 4.14. (internal data)
- The Master of Architecture program has specific benchmarks and learning guidelines that students must meet before degrees are conferred. This process has increased the quality of the graduate work which was acknowledged in the recent accreditation visit.
- The school has a requirement that all graduate students participate in international learning experiences. These have included study tours to China, Netherlands, Spain and Germany.
- All undergraduates must participate in domestic off campus experiences.
- Graduate students are allowed to work with faculty for graduate credit on research projects that lead to publications and conference presentations.
- Over the past several years we have had approximately 20 - 25 of our graduate and undergraduate students working in conjunction with researchers at the WMEL for new product applications.
- Interdisciplinary activities occur at both the Pullman and Spokane campus. These include the Institute for Sustainable design which merges architecture, construction management, civil engineering, the WMEL as well as the community service component at the WSU Spokane campus.
- Design Research week at the IDI exposes students to national and international scholars through lectures, seminars, charrettes and competitions.

Faculty members have won regional and American Institute of Architects awards including: *Sounding Spokane* (book), *Public Markets - Civic Streets* (design monograph), *EDS Report* (design monograph).

Size – *Critical mass of faculty, students, curricular offerings.*

Response: Maintenance:

The size of the architecture program (approx 300) is comparable to all other programs in the northwest region. While the demand indicates that growth would be possible at the undergraduate level our plans are to maintain our current level. Expansion in the graduate program is a priority with an enrollment goal of 50 new graduate students each year. With the increase in graduate applications for 2008 achieving this goal over the next several years will be achieved.

Cost Effectiveness-*Operational expenditures compared to comparable institutions; unit efficiency; investment in facilities and equipment; potential economies of scale, proportion of administrative to total costs; self-sustaining and revenue generating activity.*

Response: Maintenance:

Cost effectiveness of the program is measured through the following:

- 60 – 70% of graduate students receive partial support through external funds.
- Start up funds for new faculty is less than \$5,000 per faculty.
- DIE _ FTE_ WSU \$6,779. (Delaware Data).
- DIE _ FTE_ Natl_ 50th \$7,120. (Delaware Data).
- DIE _ FTE_ Peer \$7,238. (Delaware Data).
- Facilities do not require extensive lab equipment.

Academic Prioritization Plan

School of Architecture and Construction Management
Architecture Program
Scholarship and Research

Scholarship and research is a significant component to the architecture program. Research and scholarship in architecture is measured through creative endeavors such as built works, exhibitions, presentations, publications, national committees and national and international conferences lectures and symposia. The discipline of architecture is mostly aligned with fine arts and liberal arts in terms of funded research. As noted in the recent accreditation visit the team acknowledged the high level of research produced by the faculty in the school.

Centrality - *Advancement of WSU's vision, mission, and strategic goals; research results are adopted by constituencies within the State; contribution to overall research profile of WSU and contribution to sustaining like work elsewhere in the university*

Response: Growth and Investment:

- With the institute for Sustainable of Design the school along with the other partners in the institute are poised to develop research that will both generate funding as well as provide economic development for the state of Washington.
- Due to the unique alliance of the Institute we have the opportunity to provide research and products that other universities are not capable of providing. Collaboration with other faculty occurs at many different levels. This occurs at the Spokane campus through the disciplines of Architecture, landscape architecture and interior design.
- The annual design research week in Spokane offers an international venue for interdisciplinary collaborations. Community based work with the city of Spokane and other government agencies provide direct application research to specific projects and neighborhoods.
- In Pullman the Integrated Education Series between architecture, construction management and the professions integrates the academy with industry.
- The school has scholarship and research collaborations with the WSU WMEL, civil engineering, Museum of Art and the IDI in Spokane and Technical University of Delft, the Netherlands.
- Critical collaborations are with the Institute for Sustainable Design. This collaborative endeavor between architecture, construction management, WMEL and the IDI addresses issues of sustainability in our environment.
- METRICS OF SUSTAINABILITY for the Institute
 - ENERGY
 - WATER
 - GREEN HOUSE GASES
 - ECONOMIC
 - SOCIAL CAPITAL
 - PUBLIC HEALTH
- Recent accomplishments such as the Solar Decathlon fit with priorities for green development established through priorities of legislature and governor. The Institute is one of the three critical components driving the strategic plan of the college.

Productivity – Grant expenditures and/or awards; publications, works, performances; citations of faculty (metrics per faculty FTE)

Response: Maintenance:

Faculty in architecture is highly engaged in research.

- 90% of faculty produces scholarly papers and publications each year. These include international and national conferences and journals.
- One faculty is internationally known for work in forensic structures and is often solicited by the national press on these matters.

- There are currently six books written by faculty that are under various stages of review for publication with publication due within the next two years.
- Ten faculty members have active research collaborations with individuals at other institutions.
- One faculty member serves as Editor-in-chief ASCE journal since 1986 (88 issues)
- Three keynote papers during 2007 at international conferences.
- International conference organizer (India, 2 London).
- 10 international refereed papers and conferences.
- Two faculty members are engaged in international architectural projects.
- Invited and received stipend for five international conferences in 2007.
- Two faculty books are used by graduate architecture programs in schools in Asia, Europe, Africa, and the US.
- 50% of faculty lectures at universities throughout the US and globally.
- 20% of faculty serving as national and international reviewers for journals, conferences and book reviewers.
- Faculty members have won local, regional, national and international funding awards including:
 - (German Academic Exchange and Technical University at Delft.
 - Sahlin Foundation, Spokane Washington.
 - AIA Northwest Education Foundation Grant.
 - Cheney Cowles Museum in Spokane
 - Spokane Downtown Spokane Partnership Ventures Board.
 - City of Spokane.
 - National Institute of Justice
- Faculty have published with the premiere presses and journals in the field including:
 - Routledge
 - Journal of Architectural Education
 - Journal of the Society of Architectural Historians
 - Architecture Annual
 - The Art Book.

Demand – external - Present and future demand for services as measured by contribution to resolving societal issues/problems, and economic/scientific/social trends, by the willingness of others to pay for WSU work, and other factors; partnerships with external stakeholders; the uniqueness of the program.

Response: Growth and Development:

- With the Institute for Sustainable Design current collaborations between the college and industry will be developed.
- The clean energy and design demand is a growth industry and the product development and application processes will create external demand for the work developed from the institute.
- Additionally, in Spokane the increasing relationship between health care and physical planning through initiatives at the Spokane campus such as specific design studios and the Research Focus Week validate the research dependencies between architecture and health care.

Demand – internal – Degree to which other units rely on this program for research collaboration.

Response: Maintenance:

Over the past three years faculty have collaborated with the following units on campus to produce exhibitions, seminars symposia and projects.

- Museum of Art
- Fine Arts
- English
- WMEL
- Landscape Architecture

- Interior Design
- Interdisciplinary Design Institute
- Health care in Spokane

Quality – National and international reputation of the program; faculty recognition; comparisons with peers; student experiences; faculty achievements in teaching, research and scholarship, and service.

Response: Maintenance: (See productivity above)

Faculty receives national recognition through the following activities:

- Recognition of design work through national awards.
- Recognition of design work through national publications.
- Recognition of scholarship through international invitations for keynote speakers.
- Recognition of scholarship through publication of books at prestigious publishers and journals.
- International research on materials development.
- Interdisciplinary research between 2 faculty members and the WMEL.
- Recognition of design work through international publications.

Cost Effectiveness: *Operational expenditures compared to comparable institutions; unit efficiency; investment in facilities and equipment; potential economies of scale, proportion of administrative to total costs; self-sustaining and revenue generating activity. All data should be compared on a per faculty member and as raw data basis.*

Response: Maintenance:

Cost effectiveness of the program is measured through the following:

- 60 – 70% of graduate students receive partial support through external funds. (internal data)
- Start up funds for new faculty is less than \$5,000 per faculty. (internal data)
- Average courses taught per year per faculty is 4.06 (internal data)
- The average number of students served per semester is 1226. (internal data)
- Total number of courses taught for 2006 academic year was 77. (internal data)
- Total student credit hours taught in AY 2006 was 5,500. (internal data)
- The discipline does not require extensive laboratory space or equipment.
- DIE _ FTE_ WSU \$6,779. (Delaware Data).
- DIE _ FTE_ Natl_ 50th \$7,120. (Delaware Data).
- DIE _ FTE_ Peer \$7,238. (Delaware Data).

**Academic Prioritization Plan
School of Architecture and Construction Management
Architecture
Outreach and Engagement**

The outreach component of the school is demonstrated through a number of important initiatives. A significant component of our dual approach to outreach is the Institute for Sustainable Design. This program will reach out to stakeholders throughout Washington State providing valuable information to business and citizens. The Institute will also be an important element in providing economic development. A second way outreach is achieved is through the Design Institute in Spokane where curriculum is focused upon community initiatives. This is most often achieved through the design studio courses although it also occurs in lecture and seminar courses. Fourth- year studios are particularly focused on these issues and graduate projects are directed towards community issues. The third way outreach is developed is through specific courses at the

Pullman campus. Projects such as the solar decathlon, as well as a minimum of ten design studios over the past two years have been directly focused on community outreach issues.

Centrality Alignment with the University's mission and priorities and addresses important societal issues

Response: Growth and Investment:

The program represents a significant component of the university mission for improvement of society.

- The issue of energy and environment is significant for the nation and northwest in as much as buildings represent 48% of CO2 emissions in the US and that buildings consume 78% of the electricity generated in the US architecture and the education of future architects becomes a significant aspect to our educational mission. Our Institute of Sustainable Design has a significant outreach component particularly as it relates to product development and public information.
- The Institute will continue and develop stakeholders such as builders, contractors, manufacturers, producers and suppliers that are engaged in energy technology and material development throughout the state.
- FOCAL POINTS FOR THE INSTITUTE
 - Water dependence
 - Multi-generational
 - Pedestrian friendly
 - Aesthetics
 - Lighting
 - Energy needs
 - Life-safety vs. sustainability
 - Facilitate design
 - Construction
 - Embodied energy
 - Green materials
- The architecture program at the IDI links architecture student's to the second largest urban population in Washington.
- Faculty members have conducted funded research for both the City and County of Spokane related to growth management).
- Architecture faculty were involved in the Manito/Cannon Hill Neighborhood Specific plan (grant from City of Spokane), also a Criminal Justice Grant to study West Central Neighborhood
- Architecture faculty and studios were part of the conception of the Spokane University District, supported by US Senator Patty Murray.
- Involvement with WSU campus design and Pullman city design as consultants etc.
- Faculty members volunteer to work with children in the public schools on an annual basis.

Impact – Demonstrates positive change in behavior and condition of priority stakeholders.

Response: Growth and Investment

Our quality of our built environment is one of the most influential issues that humans will face in the next 50 years. The profession of architecture which has the responsibility for the planning and development of our future environments is one of the key professions that will help in determining future solutions. Our success in projects such as the solar decathlon and the work with the WMEL illustrates how the school can be instrumental in developing creative solutions for the future. In addition the following impacts of the school in Spokane.

Productivity: Number of events (workshops, conferences, field days, etc), number of persons reached, caseloads, number of scholarly products.

Response: Maintenance

The following outreach events have occurred in the School over the last three years.

- Four integrated education Symposia (fifth scheduled for spring 08). This program has reached 30 practicing architects and construction professionals as well as 400 students.
- Integrated theory Symposium: This collaboration between architecture and liberal arts integrated 20+ faculty from each discipline as well as 200 students from multiple disciplines.
- Ceramic Cements Symposium: This symposium integrated about 20 manufactures, 50 + students and faculty for discussions, demonstrations and applications for this material.
- Design Research Week: This event occurs each year at the Spokane campus and is a collaborative event which merges faculty, design professional and students in interactive workshops and seminars on issues such as health and environment. Total participation over the last several years has been 400 students, faculty and professionals.
- Architecture students regularly involved in city-related projects, among them: funded design studies for work-force housing in Spokane (RenCorp, Inc), also a funded study for City of Coeur d'Alene street car feasibility.
- Collaboration with City of Spokane for Sprague Street Corridor housing.
- West Hills Neighborhood Community Group study to revitalize Sunset and Government Way area
- Annual Design Charrettes in the past have engaged these Spokane constituents: Gorge Park (Friends of the Park), St. Lukes Rehabilitation Hospital, Spokane Farmer's Market, Spokane Gateway (department of transportation), Hotel for downtown Spokane.
- Montana Historical Society: The school is collaborating with the history department at WSU to work with the Montana Historical Society to survey historical buildings during the summer of 2008.

Quality: National or international reputation of the program (faculty recognition, comparisons with peers, etc.)

Response: Maintenance:

Faculty receives national recognition through the following activities:

- Recognition of design work through national awards.
- Recognition of design work through national publications.
- Recognition of scholarship through international invitations for keynote speakers.
- Recognition of scholarship through publication of books at prestigious publishers.

Cost Effectiveness: Operational expenditures compared to comparable institutions, extramural funding relative to permanent budget line.

Response: Maintenance:

All of the above programs have been accomplished through outreach activities that included fundraising gifts in kind and or volunteer participation.