

February 5, 2006

**Letter of Intent  
Doctor of Architecture (Arch. D.)**

**College of Architecture + Planning**

**10.1.1 Program description**

The College of Architecture + Planning proposes to introduce a new advanced degree, the Doctor of Architecture (Arch. D.). The Arch. D. degree is intended to be a professionally accredited degree through the National Architectural Accrediting Board (NAAB). In order to satisfy accreditation standards, the degree must satisfy all conditions of accreditation listed by the NAAB and it must carry a credit hour minimum of 90 hours of graduate study.

The Arch.D. program is designed to encourage a broader graduate education for architects, especially with a view to recognizing the increased need for interdisciplinary expertise and collaborative practice. The paradigm of professional education is moving away from "training" in a specific set of skills, to a broad-based education that recognizes leadership, creativity, research, capacity building, and interdisciplinary collaboration as important components of the professional architect's education. This degree provides more time at the graduate level for professional training, but also requires a component of graduate specialization in a non-architectural field, for example, in social science, health, or humanities. This will provide a unique perspective for each student while exposing each to different modes of reasoning, research, and technique.

Students entering the program will fulfill all the class and credit hour requirements of the current professional Master of Architecture program, except that a Doctoral Design Project will substitute for a Masters Project. Additional requirements include: 24 hours "outside" study in a field of specialization, six credit hours of graduate electives, plus 6 credit hours in doctoral seminar. (Total: 90 credit hours).

The proposed degree is not a research-oriented Ph.D. Rather, it is comparable to a Doctor of Law, Doctor of Pharmacy, etc. It contains professional accreditation requirements, but no internship credit hours, as is the tradition in architectural education (internship is a separate, post-graduate requirement of a minimum of three years in most states). Candidates for licensure must complete a professional degree and a separate internship, and they must pass a multi-part exam administered by the State Licensing Board.

The College will continue to offer the professional Master of Architecture degree as well as the preparatory degree, the Bachelor of Science in Architectural Studies.

**10.1.2 Mission Fit**

The mission statement of the University of Utah emphasizes the (1) "highest standards of scholarship and professional practice" as well as (2) "the mutual relevance and interdependence of teaching and research." It seeks to (3) "foster the discovery and humane use of knowledge and artistic creation" and to (4) "facilitate the application of research findings to the health and well-being of Utah's citizens through programs and services available to the community." The proposed degree is designed to encourage the highest standard of professional practice and at the same time interject an emphasis on interdisciplinary study and research. It will focus on the Utah community directly, increasing artistic and technology knowledge in the profession

at the highest level. The ultimate mission of the Arch. D. is to allow student to engage, anticipate, and research the profound changes in architectural practice, leading to a greater capacity in the future. It fits within the broader mission of the University of Utah to provide excellent graduate education.

### 10.1.3. Faculty Preparedness

Existing faculty resources will coordinate this program. One of the senior faculty members will act as doctoral program chair and will coordinate a doctoral seminar. There are two open faculty lines that will be used to augment design studio and add depth to the elective options. One of these lines will be assigned half time to running the doctoral project studio.

The terminal degree in architecture is the professional Master of Architecture (the Arch. D will also be a terminal degree). It is not customary for architecture design faculty to have a Ph.D., and NAAB accepts that architectural education is served well by a combination of highly talented designer-architects and more traditional scholars. Seven of the 20 full-time faculty in the College of Architecture + Planning hold the Ph.D. In addition, there is one J.D., and three faculty with more than one masters degree.

The most challenging aspect of the program for the faculty will be assisting and advising the Arch. D. students in the integration of advanced interdisciplinary work with the professional degree requirements. In this, the College is particularly prepared, having multiple degrees and a variety of specializations within the existing faculty including engineering, fine art, education, business, computer technology, economics, history, law, and urban planning, in addition to architecture. (Faculty resources are listed in **Appendix 1.**)

### 10.1.4. Market Demand

Most Arch. D. students will be seeking jobs in the profession, especially leading to leadership positions at some point. The primary market for graduates will be in forward-thinking large firms adopting new practice models, and those working in international settings where this credential is especially respected and more common.

CA+P graduates a class of 30-35 students per year with a graduate professional degree in architecture, and approximately 45 students with undergraduate (non-professional) architecture majors (most of whom continue on to graduate school rather than into the labor force). The Utah Labor Market Information System at URL <http://jobs.utah.gov/wi/pubs/Outlooks/State/> provides projections for job openings in architecture for the State of Utah (unlicensed persons include those who may hold a professional degree, but have not yet completed the internship or exam) (Table 1). These numbers indicate that the market in Utah alone could easily absorb an additional 12 graduates a year.

	Professional	Unlicensed	TOTAL
Employment 2002	730	950	1680
Employment 2012	1170	1290	2460
Annual job openings:			
Growth	40	30	70
Replacements	10	30	40
Total	50	60	110

Table 1: Market demand for architects in Utah. *source: Utah Labor Market Information System*

Anecdotally and based on the CA+P graduate job placement, it is clear that the demand for architects in Utah has been increasing for ten years, partly due to construction for the 2002 Olympics. More recently growth is related to population growth and economic growth in Utah. The Advisory Board of the College has strongly recommended an increase in the number of architecture graduates, but the College has been constrained from doing this by a limited pool of qualified applicants (hence, the desire to increase the pool). The M. Arch. degree recipients are heavily recruited, with 100% employment in the past three years, most in Utah. This past year, every M. Arch. graduate had received at least one job offer at the time of graduation. With a similar, but superior, education an excellent job placement for the Arch. D. graduates is anticipated.

### 10.1.5. Student Demand

Most architecture schools in the United States experience extremely high demand for all degree programs, including the University of Utah. (Two - three applications are received for every student accepted.) Only 12 students per year will be added to the total number of graduate students, and given the uniqueness of this degree program, a conservatively estimate is there will be three or four times the number of qualified applicants than can be admitted. Currently, applications for the M. Arch degree are overwhelmingly from Utah. In contrast, a large number of applicants for the Arch. D. are expected to come from out of state and internationally, thus increasing the pool of applications. Additionally, as a professional degree, this program will be able to draw from the WICHE states. The only other WICHE program to offer the Arch. D. degree is the University of Hawaii.

Architecture is a restricted major with enrollment limits	Current enrollment limits	2004-05 annual cr hrs	Enrollment projection 2009	Credit hr projection 2009	Net credit hr gain or (loss)2009
Undergraduate upper div majors	105	2512	105	2512	0
Master of Architecture	75	1714	65	1480	(234)
Doctor of Architecture	0	0	35	600	600
TOTAL	185	4226	205	4592	311

Table 2: Enrollment and Credit Hours Projections

The College will admit a class of about 12-13 Arch. D. students every year. Since some potential M. Arch students will elect to enter the Arch. D. instead of the M. Arch degree, there may be a reduction in the number of students in the M. Arch degree program. Overall, at full enrollment, the annual increase in students will be less than 15 net new graduate students, many of whom will be enrolled in classes other than architecture for a part of their studies.

### 10.1.6. Budget

The resources required to run this program are limited by its design, which assigns students (and 24 hours of their credit hour production) to other university departments, making use of existing capacity in graduate programs throughout the university, when such capacity is available. Departments and programs where specializations will be sought would be given the option to accept a limited number of graduate students (usually no more than one or two) and to determine prerequisites, qualifications, and a program of study. The program will also seek to take advantage of structured specializations such as the Environmental Humanities graduate certificate.

Within the College of Architecture + Planning, the Arch. D. students will be integrated into existing graduate classes with the exception of the doctoral seminar and the doctoral (studio) project. Therefore the primary costs of the program are dedication of a half-time senior professor to the seminar and a half-time junior professor to the doctoral studio project. Initially the College will offer 3 half-time teaching assistantships. At full enrollment this will increase to six half-time assistantships.

The program sources include reallocation from the current architecture program, especially for faculty resources and, initially, for TA's. The remaining costs will be covered by increases in student credit hour (SCH) allocations under the budget model (productivity) and by differential tuition, which is currently \$67 per credit hour for graduate students in architecture, but increases at the same rate that graduate tuition increases. With these assumptions the program is self-sustaining, particularly with full enrollment beginning in 2008-09.

	2007-08	2008-09	2009-10	2010-11	2011-12
<b>Expenses</b>					
Senior faculty @ 50%	37500	39,000	40,560	42,182	43,870
Junior faculty @ 50%	27500	28,600	29,744	30,934	32,171
Teaching assistantships	15000	15,000	30,000	30,000	35,000
Marginal Operating costs	5000	5,200	5,408	5,624	5,849
Benefits	17,550	18,252	18,982	19,741	20,531
<b>TOTAL COSTS</b>	<b>\$102,550</b>	<b>\$106,052</b>	<b>\$124,694</b>	<b>\$128,482</b>	<b>\$137,421</b>
<b>Assumptions</b>					
Differential tuition per SCH	71	75	80	85	90
Net new SCH (see table 2)	152	152	311	311	311
<b>Resources</b>					
Reallocation exist faculty	37,500	39,000	40,560	42,182	43,870
Reallocation new faculty	27,500	28,600	29,744	30,934	32,171
Reallocate TA	10,000	5,000	0	0	0
Reallocate benefits	17,550	18,252	18,982	19,741	20,531
Increased productivity	0	17,328	17,328	35,454	35,454
Increased differential tuition	10,795	11,443	24,817	26,306	27,885
<b>TOTAL SOURCES</b>	<b>\$103,345</b>	<b>\$119,623</b>	<b>\$131,431</b>	<b>\$154,618</b>	<b>\$159,910</b>

Table 3: Arch. D. Program projected budget 2007-12

In addition to the TA's, several Arch. D. students will be supported by research assistantships in CA+P's two research centers, the Center for Research on Multi-Dimensional Information and the Center for Integrated Design and Construction. Scholarship resources are also available.

#### 10.1.7. Similar Programs Already Offered in the USHE:

Within the Utah State Higher Education System, and in the state of Utah, the University of Utah has the only NAAB accredited program in architecture. At an undergraduate level, this program is articulated with the Associates Degree in Architectural Technology awarded by Salt Lake Community College. Currently that is the only program in the state that is articulated with the University of Utah program. Therefore, this

proposed program would be unique in the state. In fact, in the WICHE region, there are several accredited architecture schools, only one of which, the University of Hawaii, awards the Doctor of Architecture.

### **10.1.8 Institutional Priority**

This degree proposal is the number one institutional priority of the University of Utah.

### **10.1.9. Exceptional Program**

The architecture program at the University of Utah is the only NAAB accredited program in the State. The new degree will enhance the University's accreditation standing and serve as a model for other programs in the US.

## **Signatures**

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Brenda Case Scheer AIA, AICP, Dean  
College of Architecture + Planning

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Dr. John G. Francis, Sr. Associate VP

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Dr. David. W. Pershing, Senior VP  
Academic Affairs

## Appendix 1 Faculty Qualifications - College of Architecture + Planning

The full time faculty of the College is listed below. The College is organized as a single department.

name	rank	Univ of terminal degree	Terminal degree(s)	field	specialty
Agutter, Jim	Assist Prof (research)	University of Utah	M. Arch	architecture	digital technology
Atherton, Peter	Professor (lecturer)	California State Univ	MA	architectural history	19th c. arch history
Bartholomew, Keith	Assistant Professor	University of Oregon	J.D.	law	land use and transportation
Benham, Lisa	Assistant Professor	Harvard University	M. Arch	architecture	gender and race
Bermudez, Julio	Associate Professor	U Minnesota	Ph. D. and M. Arch	education, architecture	visual communication
Bradley, Martha	Associate Professor	University of Utah	Ph.D.	history	Community history
Carter, Tom •	Associate Professor	Indiana University	Ph. D.	folklore	vernacular studies
Emmi, Phil	Professor	U North Carolina	Ph.D,	economics	systems planning and environment
Forster, Craig	Assoc Prof (res)	U British Col	Ph.D.	geology	hydrology and community
Goss, Peter	Professor	Ohio University	Ph. D.	history	19th and 20th c US arch
Locher, Mira	Assistant Professor	U Pennsylvania	M. Arch	architecture	Japanese architecture
Miller, William	Professor	U Illinois – Champaign	M. Arch	architecture	Scandinavian architecture
Mooney, Anne	Assistant Professor	Southern California Inst (SCI-Arc)	M. Arch	architecture	sustainability and practice
Senbel, Maged	Assistant Professor	U British Col	Ph. D.	urban planning	sustainable design
Scheer, Brenda	Professor and Dean	Rice University	M. Arch	architecture	urban design
Scheer, David	Assoc Prof (lecturer)	Yale University	M.S. and M. Arch	architecture, physics	design theory and technology
Serrato-Combe, Antonio	Professor	Texas A & M	M. Arch and MS.	architecture	animation and urban design
Smith, Ryan	Assistant Professor	UC Berkeley	M. Arch	architecture	materials and technology
Tripeny, Patrick	Assoc Professor	Cal Poly	M. Arch	engineering, architecture	special structures
Young, Robert	Assoc Professor	E. Mich, U Mich, PennSt	MS, MBA, and MS	preservation, business, arch. engineering	preservation and sustainability

Table 4. Faculty degrees and specializations