

# DOCTOR OF PHILOSOPHY IN ARCHITECTURE WITH SPECIALIZATION IN TECHNOLOGIES OF THE BUILT ENVIRONMENT

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52 credit hours beyond the master's degree

Written qualifying examination

Comprehensive examination

Dissertation and oral defense

The Doctor of Philosophy (Ph.D.) in Architecture program is for those individuals who desire to pursue careers in academia and/or in research-based professional practice. As the most advanced academic degree, the Ph.D. recognizes both the highest level of expertise and the production of significant novel work. The program, which is offered in two tracks, Technologies of the Built Environment (TBE) and History, Theory, and Criticism (HTC), demands a deep understanding of the related theories in contemporary intellectual terrain, a command of advanced research methodologies, and a commitment to critical inquiry that extends the frontiers of knowledge.

The program begins with advanced coursework and culminates in a dissertation that is the result of extensive, original, and rigorous research and thought. The Ph.D. program grows out of the school's collective commitment to progressive research that is grounded in the realities of the workplace and devoted to contesting existing values and ideologies. Doctoral students also have the opportunity to participate in the experiments of design studios and later help guide these efforts in mentoring roles, helping to shape the debate within the college through their involvement in the college's "advanced studio."

## Admission Requirements

An applicant to the doctoral program generally must hold a professional Master of Architecture degree (M.Arch.), or Master of Science in Architecture (M.S.Arch.) from a NAAB-accredited U.S. university or Master of Landscape Architecture (M.L.A.) from an LAAB-accredited U.S. university or the equivalent. Students with graduate degrees in allied fields, such as engineering and art history, are also eligible. Students holding a Bachelor of Architecture (B.Arch.) can apply through the Master of Science program at the College of Architecture.

The applicant should meet all entrance requirements of the university's Graduate College, plus a minimum cumulative grade point average of 3.5 on a 4.0 scale, a TOEFL score of at least 80/550, and at least three letters of recommendation from immediate supervising professors. The applicant should also submit a statement of purpose indicating a subject of study or research work and should provide a portfolio demonstrating the qualities of their accomplishments and expertise.

## Degree Requirements

The program requires a minimum of 52 credit hours usually completed in three-and-a-half to four years beyond the M.Arch. degree. The majority of the coursework will be selected from the curriculum within the College of Architecture, though students are encouraged to have their research find connections to other doctoral programs at the university.

Upon completion of the first academic year, the candidate will be required to pass a qualifying examination in both written and oral formats. The student is also required to take and pass a comprehensive examination, often at the end of the second year, before they will officially be admitted to Ph.D. candidacy. At the end of the program, the candidate will take a final examination which will consist of an oral presentation and defense of the dissertation. Current areas of study include urban energy modeling, high-rise and long-span buildings, technology applications, energy conscious design, emerging urbanisms, housing, history/theory, and advanced computer applications. Work for the Ph.D. must be completed within six years after admission to doctoral candidacy.

## Specialization in Technologies of the Built Environment

Architecture is a discipline encompassing both theory and practice. Engineering is a science applied to many industries of design and the construction trades, including energy systems, materials, structural efficiencies, acoustics, lighting, etc. Thus the professional reach of the two fields overlap in many ways. This joint specialization between the College of Architecture and the Department of Civil, Architectural, and Environmental Engineering provides a new pathway for qualified architecture and engineering students with suitable backgrounds to pursue doctoral research in various fields of building technologies, which span subjects including building physics, architecture, structural engineering, design, and others.

## Curriculum

The program requires a minimum of 52 credit hours, usually completed in three-and-a-half to four years beyond the master's degree, which will include thirteen credit hours of required courses and fifteen credit hours of elective courses. Students must also complete at least 24 credit hours of dissertation research courses (ARCH 691 or CAE 691).

Code	Title	Credit Hours
<b>Required Courses</b>		<b>(13)</b>
CAE 513	Building Science	3
ARCH 595	Research in Progress Forum <sup>1</sup>	4
ARCH 601	Research Methodologies	3
ARCH 602	Crafting a Dissertation	3
<b>Elective Courses</b>		<b>(15)</b>
Select 15 credit hours <sup>2,3</sup>		15
<b>Ph.D. Research</b>		<b>(24)</b>
ARCH/CAE 691	Doctoral Research	24
<b>Master's Transfer Coursework</b>		<b>(32)</b>
A maximum of 32 credit hours may be transferred from master's degree. In certain cases, 10 additional semester credits of applicable graduate transfer work may be considered. It is the responsibility of the student to initiate this consideration, which requires a full course-to-course articulation (using eForms for Graduate Degree Works).		32
<b>Total Credit Hours</b>		<b>84</b>

- <sup>1</sup> The one credit ARCH 595 course must be taken four times (usually during the first four semesters).
- <sup>2</sup> Elective coursework should be taken within the student's field of concentration and/or to supplement their research interests. 400 level and above courses within ARCH, CAEE, MMAE, and a number of other departments (with eForms exception) are with adviser approval.
- <sup>3</sup> With eForms approval a qualified student may use ten applicable credits beyond the Master of Science Degree in lieu of 10 elective credits. See Master's transfer credits details.