## Doctor of Philosophy in Architecture

### DEGREE REQUIREMENTS-84 CREDITS MINIMUM

#### Individual requirements are determined by the transcript evaluation.

Students must complete a series of common core requirements that develop a knowledge base and skills for conducting original research within an area of concentration. Requirements for the area of concentration courses are designed to provide both depth and breadth of knowledge in an area of study relevant to sustainable design, and to draw on the frameworks and methodologies of related disciplines that support the student's dissertation research. Over the course of at least three years, the minimum course requirement is 66 credits with an additional 18 credits for dissertation work (a total minimum of 84 graduate-level credits).

Research and Investigation (24 credits minimum)

ARCH 601	Research (4–8)
ARCH 620	Research Methods in Sustainable Design (4)
PPPM 656	Quantitative Methods (or equivalent) (4)
ARCH 678	Advanced Research in Sustainable Design (4)
ARCH 695	Advanced Dissertation Proposal Development (4)

#### Primary Focus Area (22 credits minimum)

ARCH 617	Built Environment Design and Theory (3)
ARCH 633	History of Sustainable Design (4)
ARCH 608	Colloquium (1)
ARCH 500+	Advanced electives (13+ credits)

# Dissertation (18 credits minimum)ARCH 603DissertationSecondary Focus Area (16 credits minimum)

Selected nonarchitecture courses in other departments

#### Supervised College Teaching (4 credits minimum)

ARCH 602	Supervised College Teaching
ARCH 661	Teaching Technical Subjects in Architecture

This sequence serves as a sample guide for how a student might progress toward candidacy over a two-year period. The exact sequence of courses taken will depend on the program of study by each student, course availability, and teaching commitments.

	FALL		WINTER		SPRING	
YEAR 1	ARCH 620 Research Methods in Sustainable Design ARCH 633 History of Sustainable Design ARCH 661 Teaching Technical Subjects in Architecture	4 4 2	ARCH 601 Research ARCH 617 Built Environment Design and Theory Elective (primary focus area) Elective (secondary focus area)	4 4 3 4	ARCH 678 Advanced Research in Sustainable Design ARCH 695 Advanced Dissertation Proposa Development Elective (primary focus area) Elective (secondary focus area)	4 1 3 4
	Total Credits	10		15	1	15
YEAR 2	ARCH 601 Research Elective (primary focus area) Elective (secondary focus area) Statistical methods course	4 3 4 4	ARCH 602 Supervised College Teaching Elective (primary focus area) Elective (secondary focus area)	2 4 4	ARCH 605 Reading and Conference: Comprehensive Exams ARCH 608 Colloquium	8 1
Ц	Total Credits	15		10		9
	Abstract Due		Prospectus Due		Advance to Candidacy	
	Abstract	Due	Prospectus D	Due	Advance to Candidad	сy
YEAR 3	Abstract I	Due	Prospectus D	Due	Advance to Candidad	:у
		Due	•	Due		су 

# Doctor of Philosophy in Architecture

## PROFESSIONAL CORE COURSE DESCRIPTIONS

#### **RESEARCH AND INVESTIGATION (24 CREDITS)**

To prepare students for performing rigorous and original research, a series of core courses provide a foundation in the culture and conduct of research. The primary difference between master's and doctoral methods courses is that the courses are open to advanced master's students for fewer credits. Master's students would receive an introduction to a broad application of qualitative research and quantitative methods with assignments geared toward an "understanding" level. For PhD students, courses include analysis and evaluation for collecting data (phenomenology, case-study research, critical reasoning), critical considerations on measurement, evaluation, and feedback loops, with assignments geared toward an "ability" level.

#### ARCH 601. Research. 4-8 Credits.

Involves working on an active research project conceived and directed by a faculty member. The mentorship through participation in a faculty member's current research is intended to help students gain experience in the identification of researchable questions, conceptually constructing research postulates and designs, and executing productive research. The time commitment by the instructor to the student is balanced by the contributions the student can make to ongoing research.

#### ARCH 620. Research Methods in Sustainable Design. 4 Credits.

Focuses on research issues and an overview of methods common to environmental design. Assignments relate to the framing of researchable questions.

**ARCH 678. Advanced Research Methods in Sustainable Design.** 4 Credits. Focuses on qualitative and quantitative methods applicable to the design of sustainable buildings and communities. Emphasizes more specific qualitative and quantitative methodologies, while students continue to explore a topic and frame a researchable problem through literature reviews and proposal development. The supervising faculty member will spend one to two extra hours per week with the doctoral students. The course will also be used to incorporate further assignments that deepen the doctoral student's knowledge of targeted research topics through comprehensive reviews of, respectively, the literature and research methods related to their topic or question of interest.

**ARCH 695.** Advanced Dissertation Proposal Development. 4 Credits. Focuses on the preparation and presentation of a research program and dissertation proposal. Building on initial courses in research methods and content, this course has as its object the writing and revision of a dissertation proposal that meets departmental formats and requirements.

#### **Statistical Methods Course**

Quantitative Methods (PPPM 656, 4 credits) or an equivalent course. This may include the following with department or instructor approval:

EDUC 614 Educational Statistics EDUC 642 Multiple Regression in Educational Research GEOL 518 Earth and Environmental Data Analysis MATH 525/526 Statistical Methods I, II PS 545 Methods for Politics and Policy Analysis I PSY 512 Applied Data Analysis

#### PRIMARY (INSIDE) FOCUS AREA (22 CREDITS)

Students select courses within the School of Architecture and Allied Arts that are aligned with their research interests. Students may focus on sustainable building design, preservation and sustainability, sustainable communities, or other related areas. All students will be required to take the following two courses:

#### ARCH 617. Built Environment Design and Theory. 4 Credits.

Presents key design and planning theories. This foundational scholarship course is also open to advanced master's students.

#### ARCH 633. History of Sustainable Design. 4 Credits.

Presents historical and theoretical issues that have shaped sustainable design specifically as it relates to the built environment. This foundational scholarship course is also open to advanced master's students.

Electives in the inside focus area are intended to provide both breadth and depth of knowledge. Below is a list of advanced courses currently offered that may satisfy this requirement. Our faculty members currently distinguish between undergraduate and graduate courses in many of these courses, so they are accustomed to making modifications based on appropriate levels of learning. Modifications of these courses for PhD students include one or more of the following: additional readings, end-of-term paper requirements, comprehensive analysis, research presentations, and/or additional time with the instructor.

ARCH 535 Principles of Urban Design ARCH 537 Theory of Urban Design II ARCH 595 Daylighting ARCH 596 The Window ARCH 598 Energy Scheming ARCH 510 Experimental Course: Housing Design ARCH 510 Experimental Course: High-Performance Buildings ARCH 510 Experimental Course: Postoccupancy Evaluation ARCH 605 Reading and Conference **ARCH 606 Special Problems** ARCH 608 Colloquium AAAP 510 Experimental Course: Adaptive Reuse Seminar (Portland only) AAAP 510 Experimental Course: Preservation and Transportation AAAP 510 Experimental Course: Preservation Economics (Portland only) AAAP 510 Experimental Course: Preservation Technology: Masonry AAAP 510 Experimental Course: Preservation Technology: Woods and Metals AAAP 510 Experimental Course: Historic American Buildings Survey-Historic American Engineering Record Documentation AAAP 510 Experimental Course: American Architecture from a Preservation

#### **SECONDARY (OUTSIDE) FOCUS AREA (16 CREDITS)**

Perspective I, II, III

These courses are selected in consultation with the faculty advisor to provide sufficient depth in the student's area of research. The courses are typically taken outside of architecture and are intended to develop knowledge of a second discipline that supports the student's research. Examples of outside focus areas include anthropology, architectural history, biology, business, ecology, economics, education, environmental studies, historic preservation, landscape architecture, planning, planning theory, transportation planning, urban geography, and urban sociology.

#### SUPERVISED COLLEGE TEACHING (4 CREDITS MINIMUM)

Courses within the School of Architecture and Allied Arts

ARCH 602 Supervised College Teaching ARCH 661 Teaching Technical Subjects in Architecture ARCH 690 Teaching Technology in Architectural Design