

**Design Graduate Program
Doctor of Philosophy Degree**

**Coursework Planning & Clearance Sheet
Architecture**

4xxx level courses may comprise no more than 9 course credits on this program. Courses are selected with approval of adviser & committee. Courses taken on the official degree program must be taken A-F unless only offered S-N.

Student _____ Adviser _____

Doctor of Philosophy Degree-Proposed Architecture Track				
<i>Required Components</i>	<i>Foundation Level Required</i>	<i>Courses Planned/Completed</i>	<i>Credits</i>	<i>Grade*</i>
Research Ethics	1	DES 8181 Research Ethics	1	
Theory/Philosophy	6	<i>Select from:</i> DES 8112 Design Theory DES 8164 Innovation Theory and Analysis <i>Select additional course from architecture or other offerings with approval of adviser</i>	3 3	
Evaluation & Analysis	9	<i>Required:</i> DES 8102 Quantitative Research Methods (or equivalent) DES 8103 Qualitative & Mixed Methods Research (or equivalent) <i>Select additional course</i> Graduate Level Statistics Course (choose from EPSY 5261, 5262, 8252, 8266, 8267) Arch 5609- Development & Implementation of Research	3 3 3	
Concentration	12	<i>Required:</i> Arch 5451 Architecture: Defining the Discipline <i>Select additional courses for area of focus from the Architecture offerings with the approval of adviser:</i> Design, Representation, History/Theory, Technology, Architectural Practice, Urban Design & Theory	3 9	
Additional Courses		<i>Additional courses determined by adviser & committee.</i>		
Thesis Credits	24	DES 8888 Thesis Credits Doctoral	24	
Related Field or Minor	12	<i>Courses &/or a minor are selected in consultation with adviser.</i>	12	
Total Credits	64			

Note: Courses taken on the official degree program must be taken A-F unless only offered S-N.

Additional courses for area of focus from the Architecture offerings**Design**

ARCH 5101 - Architectural Design Studies
 ARCH 5110 - Architecture as Catalyst
 ARCH 5241 - Principles of Design Programming
 ARCH 8250 - Advanced Topics in Design
 ARCH 8251 - Graduate Architectural Design I
 ARCH 8252 - Graduate Architectural Design II
 ARCH 8253 - Graduate Architectural Design III
 ARCH 8254 - Technical Applications in Design
 ARCH 8255 - Graduate Architectural Design V
 ARCH 8295 - Directed Graduate Architectural Design
 ARCH 8299 - Master's Final Project

Representation

ARCH 5301 - Conceptual Drawing
 ARCH 5313 - Visual Communication Techniques in Architecture

ARCH 5321 - Architecture in Watercolor
 ARCH 5361 - 3-D Computer Architectural Modeling and Design

ARCH 5372 - Computer Methods II
 ARCH 5381 - Introduction to Computer Aided Architectural Design

ARCH 5382 - Computer Aided Architectural Design
 ARCH 5391 - Design and Representation with BIM
 ARCH 5392 - Digital Documentation: Facades
 ARCH 8333 - FTE: Master's
 ARCH 8350 - Advanced Topics in Representation

History/Theory

ARCH 5410 - Topics in Architectural History
 ARCH 5411 - Principles of Design Theory
 ARCH 5412 - Architecture: A Global and Cultural History
 ARCH 5421 - Architecture and Interpretation: The Cave and the Light

ARCH 5423 - Gothic Architecture
 ARCH 5424 - Renaissance Architecture
 ARCH 5425 - Baroque Architecture
 ARCH 5431 - Eighteenth-Century Architecture and the Enlightenment

ARCH 5432 - Modern Architecture
 ARCH 5434 - Contemporary Architecture
 ARCH 5435 - History of American Architecture
 ARCH 5441 - Minnesota: Architecture and Landscapes
 ARCH 5446 - Architecture Since World War II: Postwar Experimentation: Aesthetics and Politics of Architecture
 ARCH 5450 - Topics in Architectural Theory
 ARCH 5451 - Architecture: Defining the Discipline
 ARCH 5452 - Architecture: Design, Form, Order, and Meaning

ARCH 5461 - North American Indian Architecture
 ARCH 8450 - Topics in Theory
 ARCH 8494 - Directed Research in Architectural History

Technology

ARCH 5521 - Material Investigation: Concrete
 ARCH 5523 - Material Investigation: Steel and Glass
 ARCH 5527 - Material Investigations: Stone and Water
 ARCH 5539 - Daylighting and Architecture Design
 ARCH 5541 - Material Strategies
 ARCH 5550 - Topics in Technology
 ARCH 5561 - Tech 1, Structures for Building
 ARCH 5562 - Tech 2, Intro to Building Technology
 ARCH 5563 - Tech 3: Advanced Building Technology Integrated Building Systems
 ARCH 5564 - Tech 4: Building Structural Systems
 ARCH 8550 - Topics in Technology
 ARCH 8561 - Sustainable Design Theory and Practice
 ARCH 8563 - Energy and Indoor Environmental Quality Issues in Sustainable Design
 ARCH 8565 - Materials Performance in Sustainable Building
 ARCH 8567 - Site and Water Issues in Sustainable Design

Design Practice

ARCH 5609 - Development and Implementation of Research
 ARCH 5611 - Design in the Digital Age
 ARCH 5630 - Practicum: Advanced Issues in Practice
 ARCH 5650 - Topics in Architectural Practice
 ARCH 5651 - Building Stories
 ARCH 5671 - Historic Preservation
 ARCH 5672 - Historic Building Conservation
 ARCH 5673 - Historic Property Research and Documentation

ARCH 5677 - Preservation of the Vernacular Built Environment and Cultural Landscape
 ARCH 5678 - Preservation & Sustainability
 ARCH 5686 - Research Practices Final Project: Research into Practice

ARCH 5687 - Research Practices Final Project: Practice into Research

ARCH 5688 - Research Practices Final Project: Representation of Case Studies
 ARCH 8650 - Topics in Architectural Practice

Urban Design & Theory

ARCH 5711 - Theory and Principles of Urban Design
 ARCH 5721 - Case Studies in Urban Design
 ARCH 5731 - Territorial City
 ARCH 5750 - Topics in Urban Design
 ARCH 5756 - Public Interest Design: Principles and Practices
 ARCH 8750 - Topics in Urban Design

Other Courses

ARCH 5993 - Directed Study
 ARCH 8777 - Thesis Credits: Master's