

## **M.Arch.2 ADVANCED PROFESSIONAL STUDIES**

*Offered at: Blacksburg Campus and Alexandria (National Capital Region - NCR) Campus*

The M.Arch.2, Advanced Professional Studies program is a professional (NAAB-accredited) graduate degree program intended for the student who has previously obtained a pre-professional (four year) baccalaureate degree in Architecture. The first year of the program continues the student's professional education. The second year is reserved for preparation of a design thesis demonstrative of the student's academic accomplishment and professional potential. Students in this program typically complete 54 credit hours, normally requiring at least two academic years (4 semesters) of study. Students in the M.Arch.2 program may elect to enroll at the Washington-Alexandria Architecture Center (National Capital Region - NCR) for all or a portion of their required studies. Students in the M.Arch.2 program may also spend a semester participating in the Europe Study Abroad Travel or Residency programs.

### **ARCHITECTURE AND URBANISM LABORATORY**

This design laboratory emphasizes problem definition and operational design methodologies across an expanded range of environmental scales. The scope of design investigations includes the relation of individual buildings to the environment in comprehensive terms, with particular emphasis on the complexity that exists at the urban scale. Also studied are methods for identification of needs and the coordination of complex variables, information, and resources, leading to the conceptualization and development of the design of components of the built environment.

Students in the M.Arch.2, Advanced Professional Studies Program must complete two semesters (12 credit hours) of Architecture and Urbanism Laboratory (ARCH 5715-16). This lab may not be taken concurrently with Research and Thesis (ARCH 5994).

### **ARCHITECTURE AND URBANISM SEMINAR/URBAN DESIGN SEMINAR**

This seminar reviews contemporary concepts in architecture and urban design. Significant works of architecture and the theories of their authors are evaluated critically through precedent studies supported by readings of the architects' ideas informing the work. The purpose is to assist students in articulating their own positions within the discipline of architecture.

Students in the on-campus M.Arch.2, Advanced Professional Studies program must complete two semesters (6 credit hours) of Architecture and Urbanism Seminar (ARCH 5705-5706) or Urban Design Seminar (ARCH 5624). Extended-campus students at the Washington-Alexandria Architecture Center must complete two semesters (6 credit hours) of Architecture and Urbanism Seminar (ARCH 5705-5706), one semester (3 credit hours) of Theory of Urban Form (ARCH 5614), and one semester (3 credit hours) of Topics in Architectural History and Theory (ARCH 5134).

### **COMPUTER APPLICATIONS IN DESIGN**

This course seeks to introduce the computer as a medium for visualizing the consequences of design decisions in architectural applications. Utilizing a diverse computing environment based on multiple platforms, software, and data formats, exercises are intended to aid students in the initial comprehension of the construction, manipulation, and representation of information related to architectural design.

Extended-campus students in the M.Arch.2, Advanced Professional Studies program must complete at least one semester (3 credit hours) of Computer Applications in Design (ARCH

5064). On-campus students may take ARCH 5064 for elective credit. ARCH 5064 may be taken multiple times with different topics for credit up to a maximum of 12 credit hours.

### PROFESSIONAL PRACTICE

This course concentrates on the work of the architect in professional practice with regard to the forces of economics, management, and law, as well as related ethical and societal issues.

Students in the M.Arch.2, Advanced Professional Studies program must complete one semester (3 credit hours) of Professional Practice (ARCH 5044G). Elective coursework may be substituted for the Professional Practice course requirement if an equivalent course was taken as an undergraduate.

### BUILDING SCIENCE COURSES

Building Science Courses provide students with advanced study in the principles of environmental science and building systems technologies. Core courses which are regularly offered on the main campus in Blacksburg, based on staff availability, are:

ARCH 5035, 5036 Advanced Environmental Controls  
ARCH 5045 Environmental Design Research  
ARCH 5055, 5056 Advanced Building Structures  
ARCH 5565, 5566 Building Materials and Construction

Multiple sections of each of the above courses, comprised of separate, but related subject areas, may be offered each year. On-campus students in the M.Arch.2, Advanced Professional Studies Program are required to complete two semesters (6 credit hours) of coursework in Building Science. Additional Building Science Courses may be used for elective credit.

### ELECTIVES

Elective course offerings are intended to reinforce and support the student's professional development and the broad scope of individual interests students bring to the program. In addition to the elective course offerings in other departments within the College of Architecture and Urban Studies, students are encouraged to study in other disciplines in other Colleges within the University. Although students may define their own areas of interest, regularly offered graduate elective courses in Architecture include but are not limited to:

ARCH 5115, 5116 Media and the Environment Workshop  
ARCH 5125, 5126 Materials Processes Workshop  
ARCH 5134 Topics in Architecture History and Theory  
ARCH 5064 Computer Applications in Design  
ARCH 5624 Urban Design Seminar

Each year Special Study options (ARCH, 5984) are offered with varying content. Subject to the limits outlined in the Graduate Catalog, these courses, as well as ARCH 5974, Independent Study, may also be used for Elective credit.

### THESIS

Each candidate for the M.Arch. degree is required to produce a design thesis to demonstrate their contribution to the investigation of complex questions inherent in the discipline of architecture. In terms of faculty and facilities, the full resources of the College and University are available to the student in support of the thesis effort. Faculty from other disciplines, normally outside of involvement in the environmental design process, are encouraged to participate. The thesis year should provide the opportunity for maturation of those skills and attitudes students

have acquired. The thesis culminates in a final examination (defense), in which the student's architectural design work, research, body of scholarship, and professional inquiry are presented to the advisory committee and student colleagues, and in the thesis document, which should demonstrate each student's academic accomplishment and professional potential.

Research and Thesis (ARCH 5994) is offered every academic term and the credit is variable. M.Arch. students must complete a minimum of six total credit hours of Research and Thesis; a maximum of 10 total credit hours of Research and Thesis may count toward the 54 minimum graduate credit hours required on the Plan of Study (9 credits of Research & Thesis recommended). Additional guidance for thesis scheduling, review, and format is available from the Master of Architecture Program faculty. (Please see graduate program policy: Thesis and Graduation Policies, Procedures, and Guidelines.)

M.ARCH.2 - ADVANCED PROFESSIONAL STUDIES  
 TYPICAL PROGRAM OF STUDY (On-campus)

FIRST YEAR

Fall

- (6) ARCH 5715 (Required)  
Arch. & Urbanism Lab
- (3) ARCH 5705 Arch. & Urbanism  
Seminar  
OR  
ARCH 5624 Urban Design Seminar
- (3) Bldg. Science Course  
(Required)
- (3) Elective, 5000  
level

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15

Spring

- (6) ARCH 5716 (Required)  
Arch. & Urbanism Lab
- (3) ARCH 5624 Urban Design Seminar  
OR  
ARCH 5706 Arch. & Urbanism  
Seminar
- (3) Bldg. Science Course  
(Required)
- (3) Elective, 5000 level

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- ~~6) ARCH 5994~~ (Required)  
 Fall Research & Thesis
- (3) Elective, 5000 level
  - (3) ARCH 5044G (Required)  
Professional Practice

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12

Spring

- (3) ARCH 5994 (Required)  
Research & Thesis
- (3) Elective, 5000 level
- (3) ARCH 5134 Topics in Arch.  
History & Theory
- (3) Elective, 5000 level

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12

Total Graduate Credit Hours

54 (min.)

Summer (optional - may be substituted for elective courses)

- ARCH 5755, 1st Summer - Var. Credit
- ARCH 5756, 2nd Summer - Var. Credit  
(Advanced Design Lab)

The previous coursework of students in the M.Arch.2 program will be reviewed by the academic advisor. Additional courses may be required to comply with NAAB accreditation criteria. In some cases, the Advanced Design Lab may be required if the student has not successfully completed a comprehensive design project.

M.ARCH.2 - ADVANCED PROFESSIONAL STUDIES  
TYPICAL PROGRAM OF STUDY (Extended-campus: Washington-Alexandria Architecture Center)

FIRST YEAR

Fall

- (6) ARCH 5715 (Required)  
Arch. & Urbanism Lab
- (3) ARCH 5705 (Required)  
Arch. & Urbanism Seminar
- (3) ARCH 5134 (Required)  
Topics in Arch. History  
& Theory
- (3) Elective, 5000 level

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Spring

- (6) ARCH 5716 (Required)  
Arch. & Urbanism Lab
- (3) ARCH 5706 (Required)  
Arch. & Urbanism Seminar
- (3) ARCH 5064 (Required)  
Computer Applications  
in Design
- (3) Elective, 5000 level  
ARCH 5134 (Recommended)  
Topics in Arch. History  
& Theory

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SECOND YEAR

Fall

- (3) ARCH 5994 (Required)  
Research & Thesis
- (3) ARCH 5044G (Required)  
Professional Practice
  
- (3) ARCH 5614 (Required)  
Theory of Urban  
Form (3) Elective, 5000 level

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12

Spring

- (6) ARCH 5994 (Required)  
Research & Thesis
- (3) Elective, 5000 level  
ARCH 5624 (Recommended)  
Urban Design Seminar
- (3) Elective, 5000 level

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12

Total Graduate Credit Hours

54 (min.)

Summer (optional - may be substituted for elective courses)

- ARCH 5755, 1st Summer - Var. Credit
- ARCH 5756, 2nd Summer - Var. Credit  
(Advanced Design Lab)

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