

# ARCHITECTURAL ENGINEERING

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## Degree Requirements

All students in the M.Eng., M.S., and Ph.D. programs must also attend a minimum of 10 approved lectures during their degree program.

### M.Eng. in Architectural Engineering

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Policies (<https://gradschool.psu.edu/graduate-education-policies/>).

The M.Eng. in Architectural Engineering degree is a non-thesis professional master's degree. Candidates for the M.Eng. degree are required to complete 30 credits of course work. A minimum of 18 credits must be at the 500 level. Students must follow the approved program of courses for one of the four available specialty areas. Minor modifications to these programs are permitted, with approval of the Graduate Program Officer. Each student must also complete a capstone project supervised by a member of the Graduate Faculty, completed while enrolled in AE 596. The capstone project requires students to work individually or within a group on an aspect of architectural engineering of their choosing. The project should demonstrate the ability of the student to integrate and apply concepts and techniques learned in the program courses.

### M.S. in Architectural Engineering

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Policies. (<https://gradschool.psu.edu/graduate-education-policies/>)

A thesis is required for the M.S. degree, which consists of a minimum of 30 credits: 24 credits of course work and a 6-credits of thesis research, either AE 600 or AE 610. A minimum of 12 of the course credits must be completed at the 500 level. A student's program of courses in the M.S. program is developed in cooperation with the student's academic adviser.

### Ph.D. in Architectural Engineering

Requirements listed here are in addition to Graduate Council policies listed under GCAC-600 Research Degree Policies. (<https://gradschool.psu.edu/graduate-education-policies/>)

For the Ph.D. degree, a dissertation that displays a student's ability to conduct high-quality original scholarly work is required of all Ph.D. students. The dissertation must be accepted by the Ph.D. committee, the head of the graduate program, and the Graduate School. Each student accepted into the Ph.D. degree program must pass the Ph.D. Qualifying Examination, which requires students to display an understanding of basic material in all AE option areas, along with an in-depth understanding of material covered in the AE undergraduate courses within their area of focus. This examination must be taken no later than the beginning of the student's second year in the program. Each Ph.D. student must also pass an English Proficiency Examination that is administered by the department, typically during the first semester. The English Proficiency Examination must be passed before scheduling the Comprehensive Examination. The student's program of courses is developed in cooperation with the student's Ph.D. committee. It is recommended that this consist of approximately 30 credits of courses beyond the master's degree, although there is no established minimum or maximum. At the conclusion of the student's course work, the Ph.D. student must pass a two-day written comprehensive examination

that is developed by the student's Ph.D. committee. Following the comprehensive exam, continuous registration is required for all Ph.D. graduate students until the dissertation is approved. Each student presents a comprehensive dissertation proposal to his/her committee prior to starting his/her dissertation research and must present the results of this research in a final oral examination.