RESIDENTIAL CONSTRUCTION, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

The objective of the Residential Construction Minor is to provide an opportunity for students to gain an understanding of the residential building construction topics and issues with emphasis on sustainable land development, design and construction of residential buildings, as well as construction management of residential projects. Residential building construction is a unique interdisciplinary field that draws upon civil and architectural engineering, architecture, real estate, management, finance, and marketing disciplines, and design principles including economical, safe, and serviceable structural design, green building systems design, sustainable land development, and construction management. This minor is expected to be primarily of interest to students from Civil and Environmental Engineering, Architectural Engineering, and Architecture majors, but students from other majors can also enroll in this minor. This minor will help students to increase their competitiveness for employment in residential market and construction industry.

What is Residential Construction?

Residential Construction is the building of single- and multi-family single-units, manufactured, duplex and quad-plex homes and apartments and condominiums.

You Might Like This Program If...

- You have an interest in architectural engineering, civil engineering, or architecture.
- You want to build residential homes.
- You have an interest in real estate.

Program Requirements

**Requirements for the Minor**

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10. (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/#59-10).

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AE 470</td>
<td>Residential Building Design and Construction</td>
<td>3</td>
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<tr>
<td>AE 471</td>
<td>Construction Management of Residential Building Projects</td>
<td>3</td>
</tr>
<tr>
<td>ARCH 412</td>
<td>Integrative Energy and Environmental Design</td>
<td>3</td>
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<tr>
<td>CE 411</td>
<td>Residential Construction Design Project</td>
<td>1</td>
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</tbody>
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**Additional Courses**

Additional Courses: Require a grade of C or better

Select 12 credits from one of the following tracks:

**Architecture Track**

- AE 211 Introduction to Environmental Control Systems
- AE 421 Architectural Structural Systems I
- AE 422 Architectural Structural Systems II
- FIN 100 Introduction to Finance
- RM 303 Real Estate Fundamentals

**Architectural Engineering Track**

- AE 202 Introduction to Architectural Engineering Concepts
- AE 372 Introduction to the Building Industry
- AE 402 Design of Concrete Structures for Buildings
- AE 404 Building Structural Systems in Steel and Concrete
- AE 454 Advanced Heating, Ventilating, and Air Conditioning
- AE 456 Solar Energy Building System Design
- AE 542 Building Enclosure Science and Design
- BE 462 Design of Wood Structures

**Civil Engineering Track**

- AE 432 Design of Masonry Structures
- AE 542 Building Enclosure Science and Design
- BE 462 Design of Wood Structures
- CE 332 Professionalism, Economics & Construction Project Delivery
- CE 341 Design of Concrete Structures
- CE 410 Sustainable Residential Land Development

Academic Advising

The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee’s unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (http://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy)

University Park

Ali Memari
Professor and Bernard and Henrietta Hankin Chair in Residential Building Construction
222 Sackett Building
University Park, PA 16802
814-863-9788
amm7@psu.edu

Career Paths

Students with a minor in Residential Construction serve in a variety of roles relating to design, construction, research and education.
MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A MINOR IN RESIDENTIAL CONSTRUCTION (http://www.ae.psu.edu/industry/career-fair)

Opportunities for Graduate Studies
Students with a minor in Residential Construction may be interested in graduate studies in architectural engineering, facilities engineering and management or civil engineering.

MORE INFORMATION ABOUT OPPORTUNITIES FOR GRADUATE STUDIES (http://www.ae.psu.edu/academics/graduate)

Contact
University Park
DEPARTMENT OF ARCHITECTURAL ENGINEERING
104 Engineering Unit A
University Park, PA 16802
814-865-6394
lrd20@engr.psu.edu

http://www.ae.psu.edu