

RESIDENTIAL CONSTRUCTION, A.O.S.

Major Code: 0463

The Residential Construction curriculum is designed for students that wish to develop skills and knowledge in the residential construction industry. Students in the program will develop technical skill sets through coursework and experiential learning laboratories. Students will engage in a broad range of construction disciplines, including masonry, carpentry, plumbing, HVAC, electrical, design, planning, estimating, and worksite management.

In addition to technical courses, students will take business, accounting, and composition courses. These courses allow students develop communication and soft skills that are required in the field and accelerate advancement in the construction industry.

Career Opportunities

Employment opportunities are as numerous as the various segments of the home-building industry. Employment directly related to residential construction could include entrepreneurship, materials purchasing, or working with a contractor as an estimator, foreman, or project manager.

Graduates with a comprehensive knowledge of construction and business are well-suited for careers in sales. These careers might include real estate, development, retail and wholesale building materials sales and management, and product manufactures representatives.

Student Learning Outcomes

Upon successful completion of this program, students will be able to:

- Develop estimates, construction contracts, and material lists for typical residential structures.
- Design and build masonry systems including foundations, concrete and masonry unit structures for residential applications.
- Estimate, plan schedule and complete building projects with minimal supervision for residential construction.
- Demonstrate best practices and safety while constructing wood framing for residential structures.
- Apply a working knowledge of a rough-in and devise installation for utilities for residential dwellings.
- Interpret and interpolate working drawings used for construction of residential commercial structures.
- Estimate the major material components and standards of workmanship for the home building industry.

Curriculum Requirements

A minimum of 60 credits is required for degree completion.

| Code | Title | Credits |
|----------|------------------------------|---------|
| RESC 106 | Graphic Communications | 3 |
| RESC 130 | Light Framing | 3 |
| RESC 160 | Intro Bldg Materials & Estim | 3 |
| RESC 201 | Estimating And Planning | 3 |
| RESC 211 | Masonry And Foundations | 3 |
| RESC 221 | Plumbing | 3 |
| RESC 260 | Heating And Energy Systems | 3 |

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| RESC 270 | Construction Planning & Mgt | 4 |
| CAD 181 | Intro To Computer-Aided Drftng | 1 |
| WOOD 101 | Wood Products and Processes | 3 |
| RESC 180 | OSHA 30 Hour Construction Indu | 3 |
| AGEN 125 | Residential Electrification | 3 |
| AGEN 135 | Construction Surveying | 3 |
| BSAD 108 | Business Law 1 | 3 |
| BSAD Business Elective as advised | | 3 |
| ACCT Accounting Elective as advised | | 3 |
| SUNY General Education Communication Written and Oral as advised | | 6 |
| Additional General Elective Credits as advised | | 8 |
| Total Credits | | 61 |

Suggested Course Sequence

| Course | Title | Credits |
|--|--------------------------------|-----------|
| Year 1 | | |
| Fall | | |
| RESC 130 | Light Framing | 3 |
| SUNY General Education Communication Written and Oral as advised | | 3 |
| WOOD 101 | Wood Products and Processes | 3 |
| RESC 106 | Graphic Communications | 3 |
| CAD 181 | Intro To Computer-Aided Drftng | 1 |
| BSAD Business Elective as advised (ex. BSAD 117) | | 3 |
| | Credits | 16 |
| Spring | | |
| RESC 160 | Intro Bldg Materials & Estim | 3 |
| AGEN 125 | Residential Electrification | 3 |
| SUNY General Education Communication Written and Oral as advised | | 3 |
| ACCT 100 | Accounting Info & Mgt Decision | 3 |
| General Elective as advised | | 3 |
| | Credits | 15 |
| Year 2 | | |
| Fall | | |
| RESC 221 | Plumbing | 3 |
| AGEN 135 | Construction Surveying | 3 |
| RESC 211 | Masonry And Foundations | 3 |
| RESC 201 | Estimating And Planning | 3 |
| General Elective as advised (ex. RENG 231) | | 2 |
| | Credits | 14 |
| Spring | | |
| RESC 270 | Construction Planning & Mgt | 4 |
| BSAD 108 | Business Law 1 | 3 |
| RESC 260 | Heating And Energy Systems | 3 |
| RESC 180 | OSHA 30 Hour Construction Indu | 3 |
| General Elective as advised (ex. RENG 221) | | 3 |
| | Credits | 16 |
| | Total Credits | 61 |