

# Architectural Drafting and Design, AAS

## School of Technology

Students in the Architectural Drafting and Design AAS program learn to translate the ideas, rough sketches, specifications and calculations of architects into working drawings for production and construction.

### Career Opportunities

Graduates of this program will accept jobs with the following titles: architectural drafter, architectural drafting technician, architectural drafting technician trainee and first-level CADD operators.

### Program Learning Outcomes

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

- Analyze and translate architectural and construction problems by presenting them visually as working drawings.
- Develop the ability to execute quantitative design of construction.

- Apply concepts from physics, engineering, architectural mechanics, mathematics and drafting and apply them to the synthesis of construction.
- Communicate effectively and appropriately; record and report information significant to the job.
- Perform an infinite number of two-dimensional drawings using a stand-alone mini-computer.
- Identify the basic components of a CADD system.
- Perform an infinite number of 2-D design math computations necessary to produce drafting design.
- Implement the basic commands necessary to apply the operational skills needed to affect a 2-D CADD system.
- Utilize construction industry vocabulary.
- Originate and interpret drawings using these construction industry standards.
- Determine cost estimates utilizing appropriate construction materials.
- Apply appropriate specifications, building codes and local ordinances in a job assignment.
- Network with building inspectors, architects, engineers, designers and clients.

| Sugg. Term | Seq # | Course ID | Course Title   | Cr. | Prereq/Coreq(Co)               | Options Available  |
|------------|-------|-----------|--|-----|--------------------------------|--------------------|
| 1st Fall   | 1     | PDV 101   | First Year Seminar   | 1   |                                |                    |
|            | 2     | ARC 101   | Building Materials & Estimating                              | 3   |                                |                    |
|            | 3     | ARC 105   | Architectural Drafting I                                     | 4   |                                |                    |
|            | 4     | ENG 161   | College Writing  | 3   | ENG 085 or Placement           |                    |
|            | 5     | MTH 104   | Introduction to Applied Mathematics                          | 4   | MTH 050, MTH 050A or Placement |                    |
| 1st Spring | 6     | ARC 102   | Contracts and Specifications                                 | 3   |                                |                    |
|            | 7     | ARC 106   | Architectural Drafting II                                    | 4   | ARC 105                        |                    |
|            | 8     | ARC 210   | Architectural AutoCAD I                                      | 4   |                                |                    |
|            | 9     | ENG 162   | Technical Communication                                      | 3   | ENG 161                        |                    |
|            | 10    | MTH 108   | Mathematics for Technologies I                               | 4   | MTH 104                        |                    |
| 2nd Fall   | 11    | ARC 119   | Introduction to Surveying                                    | 3   | MTH 104                        |                    |
|            | 12    | ARC 211   | Architectural AutoCAD II                                     | 4   | ARC 210                        |                    |
|            | 13    | EGR 221   | Statics and Strength of Materials                            | 4   | PHY 107 or 155 (Co)            |                    |
|            | 14    | PHY 107   | Applied Physics  | 4   | MTH 108, MTH 100, or MTH 100A  |                    |
| 2nd Spring | 15    | ARC 215   | Architectural Presentation                                   | 4   | ARC 210                        |                    |
|            | 16    | ARC 262   | Piping, Structuring Detailing and Electromechanical Drafting | 4   | ARC 210 or DFT 258             |                    |
|            | 17    | Elective  | Restricted Elective  | 3-4 |                                | See List           |
|            | 18    | Elective  | Social Science Elective                                      | 3   |                                | Page 43 Column III |

Total Program Credits

61-62

ADD

Restricted Electives: Courses with ARC, DFT, EGR or HAC Prefix