

# ARCHITECTURAL DRAFTING / CONSTRUCTION TECHNOLOGY

## Overview

**Architectural Drafting / Construction Technology Associate of Applied Science Degree**

**Program Code: 10-614-5**

For more information: [wctc.edu/architectural-tech](http://www.wctc.edu/architectural-tech) (<http://www.wctc.edu/architectural-tech/>)

Architectural drafters work with engineers or architects to create technical design solutions as they relate to a building's functionality, performance and aesthetics. In this program, develop knowledge of building materials, systems and construction technology to produce drawings for construction from computer-aided drafting (CAD) applications or cutting-edge, computer-generated virtual models.

**The minimum required course grades and program grade point average (GPA) for students under this catalog are:**

Core Courses = C

General Studies Courses = C-

Program GPA = 2.0

## Learning Outcomes

### Program Outcomes

1. Produce construction documents with AutoCAD.
2. Produce construction documents through the assembly of a Building Information Model in Revit.
3. Develop building details.
4. Assist with development of the building aesthetic design.
5. Assist with the technical development of the building design.

## Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.
- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

## Required Courses

Listed below are the required courses for the program. To view the recommended sequence for taking courses click on the plan of study tab(s) above. Work with your Academic Advisor to design a program plan!

View your **Program Matrix** to find out when each course will be offered (term and time of day).

| Code                                     | Title                         | Credits   |
|--|-------------------------------|-----------|
| <b>Core Courses</b>                      |                               |           |
| 304-127                                  | ID/Arch Internship            | 1         |
| Approved Substitute: 304-126             |                               |           |
| 304-129                                  | Sales & Professional Develop  | 2         |
| 304-132                                  | Manual Design Presentation    | 1         |
| Approved Substitute: 304-128             |                               |           |
| 304-133                                  | Digital Design Presentation   | 1         |
| Approved Substitute: 304-128             |                               |           |
| 614-104                                  | Architectural History         | 3         |
| Approved Substitute: 304-101 OR 304-130  |                               |           |
| 614-107                                  | Intro to Drafting             | 3         |
| 614-110                                  | Architectural AutoCAD         | 3         |
| Approved Substitute: 304-116             |                               |           |
| 614-131                                  | Introductory Revit            | 3         |
| 614-135                                  | Construction Technology       | 3         |
| 614-128                                  | Architectural Design Elements | 2         |
| 614-132                                  | Advanced AutoCAD              | 3         |
| 614-134                                  | Architectural Building Codes  | 1         |
| 614-138                                  | Structural Concepts           | 2         |
| 614-139                                  | MEP Systems                   | 1         |
| Approved Substitute: 455-109 OR 614-149  |                               |           |
| 614-141                                  | Advanced Revit                | 3         |
| 614-146                                  | Architectural Design Studio   | 4         |
| 614-151                                  | Building Materials & Methods  | 2         |
| Approved Substitute: 614-149             |                               |           |
| 614-152                                  | Sustainable Building Concepts | 3         |
| Approved Substitute: 614-137             |                               |           |
| 614-159                                  | Advanced Digital Presentation | 2         |
| <b>General Studies</b>                   |                               |           |
| 801-136                                  | English Composition 1         | 3         |
| Approved Substitute: 801-223             |                               |           |
| 801-196                                  | Oral/Interpersonal Comm       | 3         |
| Approved Substitute: 801-198             |                               |           |
| 804-114                                  | College Technical Math 1B     | 2         |
| Approved Substitute: 804-115             |                               |           |
| 806-143                                  | College Physics 1             | 3         |
| Approved Substitute: 806-187             |                               |           |
| 809-195                                  | Economics                     | 3         |
| Approved Substitutes: 809-143 OR 809-287 |                               |           |
| 809-199                                  | Psychology of Human Relations | 3         |
| Approved Substitute: 809-198             |                               |           |
| <b>Total Credits</b>                     |                               | <b>60</b> |

## Full-time Plan

### First Year

| Fall Term 1    |                           | Credits  |
|----------------|---------------------------|----------|
| 614-107        | Intro to Drafting         | 3        |
| 804-114        | College Technical Math 1B | 2        |
| <b>Credits</b> |                           | <b>5</b> |

### Fall Term 2

|         |                              |   |
|---------|------------------------------|---|
| 614-151 | Building Materials & Methods | 2 |
|---------|------------------------------|---|

|                      |   |           |
|----------------------|---|-----------|
| 801-136              | English Composition 1   | 3         |
| 806-143              | College Physics 1   | 3         |
| <b>Credits</b>       |   | <b>8</b>  |
| <b>Spring Term 1</b> |   |           |
| 614-104              | Architectural History   | 3         |
| 614-110              | Architectural AutoCAD   | 3         |
| <b>Credits</b>       |   | <b>6</b>  |
| <b>Spring Term 2</b> |   |           |
| 614-131              | Introductory Revit  | 3         |
| 614-138              | Structural Concepts   | 2         |
| 614-139              | MEP Systems   | 1         |
| <b>Credits</b>       |   | <b>6</b>  |
| <b>Second Year</b>   |   |           |
| <b>Summer Term</b>   |   |           |
| 304-129              | Sales & Professional Develop  | 2         |
| 614-135              | Construction Technology   | 3         |
| 809-199              | Psychology of Human Relations   | 3         |
| <b>Credits</b>       |   | <b>8</b>  |
| <b>Fall Term 1</b>   |   |           |
| 304-132              | Manual Design Presentation  | 1         |
| 614-132              | Advanced AutoCAD  | 3         |
| 801-196              | Oral/Interpersonal Comm   | 3         |
| <b>Credits</b>       |   | <b>7</b>  |
| <b>Fall Term 2</b>   |   |           |
| 304-133              | Digital Design Presentation   | 1         |
| 614-141              | Advanced Revit  | 3         |
| 614-152              | Sustainable Building Concepts   | 3         |
| <b>Credits</b>       |   | <b>7</b>  |
| <b>Spring Term 1</b> |   |           |
| 304-127              | ID/Arch Internship <small>This course will run 16 weeks.</small>          | 1         |
| 614-128              | Architectural Design Elements   | 2         |
| 614-134              | Architectural Building Codes  | 1         |
| 614-146              | Architectural Design Studio <small>This course will run 16 weeks.</small> | 4         |
| <b>Credits</b>       |   | <b>8</b>  |
| <b>Spring Term 2</b> |   |           |
| 614-159              | Advanced Digital Presentation   | 2         |
| 809-195              | Economics   | 3         |
| <b>Credits</b>       |   | <b>5</b>  |
| <b>Total Credits</b> |   | <b>60</b> |

## Architectural Drafting + Interior Design Dual Plan

### First Year

| <b>Fall Term 1</b> |                               | <b>Credits</b> |
|--------------------|-------------------------------|----------------|
| 614-107            | Intro to Drafting             | 3              |
| 304-100            | Principles of Interior Design | 3              |
| 804-114            | College Technical Math 1B     | 2              |
| <b>Credits</b>     |                               | <b>8</b>       |

### Fall Term 2

|         |                |   |
|---------|----------------|---|
| 304-121 | Space Planning | 2 |
|---------|----------------|---|

|                |                              |          |
|----------------|------------------------------|----------|
| 614-151        | Building Materials & Methods | 2        |
| 806-143        | College Physics 1            | 3        |
| <b>Credits</b> |                              | <b>7</b> |

### Spring Term 1

|  |                               |          |
|--|-------------------------------|----------|
| 304-103  | Appl Textiles Interior Design | 3        |
| 614-104  | Architectural History         | 3        |
| OR 304-101 History of Furniture                              |                               |          |
| 614-110  | Architectural AutoCAD         | 3        |
| OR 304-116 AutoCAD for Interior Designers (offered Spring 2) |                               |          |
| <b>Credits</b>   |                               | <b>9</b> |

### Spring Term 2

|                |                    |          |
|----------------|--------------------|----------|
| 614-131        | Introductory Revit | 3        |
| 614-139        | MEP Systems        | 1        |
| <b>Credits</b> |                    | <b>4</b> |

### Second Year

|                    |                         |          |
|--------------------|-------------------------|----------|
| <b>Summer Term</b> |                         |          |
| 614-135            | Construction Technology | 3        |
| 801-196            | Oral/Interpersonal Comm | 3        |
| <b>Credits</b>     |                         | <b>6</b> |

### Fall Term 1

|                |                  |          |
|----------------|------------------|----------|
| 614-132        | Advanced AutoCAD | 3        |
| 809-195        | Economics        | 3        |
| <b>Credits</b> |                  | <b>6</b> |

### Fall Term 2

|                |                               |          |
|----------------|-------------------------------|----------|
| 614-141        | Advanced Revit                | 3        |
| 614-152        | Sustainable Building Concepts | 3        |
| <b>Credits</b> |                               | <b>6</b> |

### Spring Term 1

|                |                               |          |
|----------------|-------------------------------|----------|
| 614-128        | Architectural Design Elements | 2        |
| 614-134        | Architectural Building Codes  | 1        |
| 809-199        | Psychology of Human Relations | 3        |
| <b>Credits</b> |                               | <b>6</b> |

### Spring Term 2

|                |                           |          |
|----------------|---------------------------|----------|
| 304-117        | Kitchen and Bath Planning | 3        |
| 614-138        | Structural Concepts       | 2        |
| 801-136        | English Composition 1     | 3        |
| <b>Credits</b> |                           | <b>8</b> |

### Third Year

|                       |                          |          |
|-----------------------|--------------------------|----------|
| <b>Summer Interim</b> |                          |          |
| 304-124               | Interior Design Software | 1        |
| <b>Credits</b>        |                          | <b>1</b> |

### Summer Term

|                |                              |          |
|----------------|------------------------------|----------|
| 304-129        | Sales & Professional Develop | 2        |
| <b>Credits</b> |                              | <b>2</b> |

### Fall Term 1

|                |  |          |
|----------------|--|----------|
| 304-112        | Intro to Commercial Design   | 4        |
| 304-132        | Manual Design Presentation   | 1        |
| 304-134        | Interior Design Internship <small>This course will run 16 weeks.</small> | 1        |
| <b>Credits</b> |  | <b>6</b> |

### Fall Term 2

|         |                             |   |
|---------|-----------------------------|---|
| 304-133 | Digital Design Presentation | 1 |
|---------|-----------------------------|---|

|                               |   |           |
|-------------------------------|---|-----------|
| 304-118                       | Advanced Commercial Design  | 3         |
| OR 304-119 Residential Design |   |           |
| <b>Credits</b>                |   | <b>4</b>  |
| <b>Spring Term 1</b>          |   |           |
| 304-127                       | ID/Arch Internship <small>This course will run 16 weeks.</small>          | 1         |
| 304-111                       | Applied Interior Design   | 3         |
| 614-146                       | Architectural Design Studio <small>This course will run 16 weeks.</small> | 4         |
| <b>Credits</b>                |   | <b>8</b>  |
| <b>Spring Term 2</b>          |   |           |
| 614-159                       | Advanced Digital Presentation   | 2         |
| <b>Credits</b>                |   | <b>2</b>  |
| <b>Total Credits</b>          |   | <b>83</b> |