Academic Plan - Certificate Computer Aided Drafting - Architecture

**Catalog Year: 2019/2020**

**Total Credits:32**

The Computer Aided Drafting certificate prepares the students for advanced levels of computer aided design within industry, utilizing the latest hardware and software releases. The certificate may be completed within one year. This certificate prepares students to perform 2D and 3D design including customization and AutoLISP programming with their CAD system. Students may choose from an area of design concentration including architecture, mechanical design or interior design.

# Required Courses

3 Credits, AEC 116 - Building Materials\*, available fall spring

3 Credits, CAD 101 - Computer Aided Drafting/2D I, available fall spring summer

3 Credits, CAD 102 - Computer Aided Drafting/2D II, available fall spring summer

3 Credits, CAD 201 - Computer Aided Drafting / Custom, available fall spring

3 Credits, CAD 202 - Computer Aided Drafting / 3D, available fall spring

3 Credits, CAD 224 - Revit Architecture, available fall spring summer

3 Credits, CAD 249 - AutoLISP Programming, available fall

3 Credits, CIS 118 - Intro to PC Applications, available fall spring summer

4 Credits, AEC 110 - Architectural Design & Modeling\*, available fall spring

4 Credits, MAT 108 - Technical Mathematics\*, available fall spring summer

# Pre-Requisites, Co-Requisites, and Recommendations

CAD 101 - Computer Aided Drafting/2D I

Requirement: Students must have Windows File Management skills to create file folders, rename files, delete

CAD 102 - Computer Aided Drafting/2D II

Co-Requisite: CAD 101 - Computer Aided Drafting/2D I OR CAD 105 - AutoCAD for Interiors

Requirement: Students must have Windows File Management skills to create file folders, rename files, delete

CAD 201 - Computer Aided Drafting / Custom

Pre-Requisite: CAD 102 - Computer Aided Drafting/2D II

CAD 202 - Computer Aided Drafting / 3D

Pre-Requisite: CAD 102 - Computer Aided Drafting/2D II

CAD 249 - AutoLISP Programming

Pre-Requisite: CAD 102 - Computer Aided Drafting/2D II

CIS 118 - Intro to PC Applications

Requirement: Students must have Windows file management skills to create file folders, rename files, delete

# Notes

Course availability is subject to change.

Refer to 19/20 catalog for specific requirements and important information about this certificate.

Recommended courses may be listed above for certain electives; consult with the Academic Advising Office (advising@arapahoe.edu or 303.797.5664) for additional elective recommendations.

\*This course requires college level readiness as measured by Accuplacer, ACT, or SAT scores; approved high school course work that is less than five years old; or successful completion of appropriate college-readiness course.

# Graduation Requirements

To graduate, students must apply for graduation (form available at www.arapahoe.edu/departments-and-programs/graduation) by the deadline and meet all degree requirements.

# RECOMMENDED COURSE SEQUENCE FULL-TIME TRACK

## Year 1: Fall

4 Credits, AEC 110 - Architectural Design & Modeling

3 Credits, CAD 101 - Computer Aided Drafting/2D I

3 Credits, CAD 102 - Computer Aided Drafting/2D II

3 Credits, CAD 224 - Revit Architecture

3 Credits, CIS 118 - Intro to PC Applications

## Year 1: Spring

3 Credits, AEC 116 - Building Materials

3 Credits, CAD 201 - Computer Aided Drafting / Custom

3 Credits, CAD 202 - Computer Aided Drafting / 3D

4 Credits, MAT 108 - Technical Mathematics

## Year 2: Fall

3 Credits, CAD 249 - AutoLISP Programming

# RECOMMENDED COURSE SEQUENCE PART-TIME TRACK

## Year 1: Fall

4 Credits, AEC 110 - Architectural Design & Modeling

3 Credits, CIS 118 - Intro to PC Applications

## Year 1: Spring

3 Credits, AEC 116 - Building Materials

3 Credits, CAD 101 - Computer Aided Drafting/2D I

3 Credits, CAD 102 - Computer Aided Drafting/2D II

## Year 1: Summer

3 Credits, CAD 224 - Revit Architecture

4 Credits, MAT 108 - Technical Mathematics

## Year 2: Fall

3 Credits, CAD 201 - Computer Aided Drafting / Custom

3 Credits, CAD 202 - Computer Aided Drafting / 3D

3 Credits, CAD 249 - AutoLISP Programming