

Architecture Engineering Drafting AAS – 798A

Requirements Effective Fall 2011

Program Planning Guide

Program Description: The Architectural Engineering Drafting AAS Degree prepares students for the growing number of entry-level jobs in engineering, construction, and architectural firms. Our laboratory is equipped with industry-standard Computer-Aided Design (CAD) and Building Information Modeling (BIM) systems to provide state-of-the-art graphics training. Coursework includes instruction and hands-on training in: computer and conventional drafting, construction materials and processes, basic engineering mechanics, and architectural cost estimating.

Prerequisites: Many classes have prerequisites. Prerequisites are those classes that prove eligibility for entry-level classes by testing or by having satisfied prior course work. Course work earned at other institutions must be unofficially evaluated or approved by a program advisor before registering. Courses in this degree with pre-requisites are marked with an asterisk (*). See catalog for more information.

Architecture Engineering Drafting AAS Prerequisites: none

Note: Advanced placement testing, work experience, and transfer of credits may result in course waivers, credit transfer, and advanced placement.

Program Requirements		
Course Number	General Education/Related Instruction Requirements (28 credits)	Credit Hours
ENGL&101*	Composition	5
ENGL&230*	Technical Writing	3
EET 109* or MATH&141*	Mathematical Applications for Circuit Analysis or Pre-Calculus I	5
BUS 169 or IT 101 or CSC 111*	Using Computers in Business or Software Applications or Computers for Math and Science	5
BUS 236	Interpersonal Communications for the Workplace	5
Elective	Five credits must be selected from a list of approved US Cultures or Global Studies courses.	5
Course Number	Degree Requirements (65 credits)	Credit Hours
TDR 100	Basic BIM for Design & Construction	5
TDR 101	Intermediate BIM for Design & Construction	5
TDR 102	Advanced BIM for Design & Construction	5
TDR 109	AED Lab (110 total lab hours, quarter repeated for 5 quarters)	5
TDR 111	Basic CAD Drafting for Construction & Design	5
TDR 112	Intermediate CAD Drafting for Construction & Design	5
TDR 113	Basic Drafting	5
TDR 124	Materials and Methods of Construction	5
TDR 134	Systems in Buildings	5
TDR 144	Design and Construction Environments	5
TDR 160	Applied Mechanics I	5
TDR 161	Applied Mechanics II	5
TDR 269	Construction Estimating	5
Total Credits: 93		
(excluding prerequisites)		

Program Outcomes:

- Demonstrate knowledge of drafting conventions including symbols, linetypes, lineweights, and dimension styles as applicable to the design discipline.
- Read architectural prints, solve common architectural problems, and produce 2-D and 3-D drawings by hand and using CAD software.
- Complete a comprehensive design project using architectural drawings suitable for planning division approval and structural drawings to industry standards.
- Describe the role and purpose of building codes and standards as they pertain to the life, health, and safety of the public.
- Illustrate the construction process from the transformation of an idea or need into a completed project.
- Perform and support estimating functions, including national quantity, types, costs, labor requirements, equipment, and scheduling functions.

What Skills do I need to be successful in this field?

- <http://www.onetonline.org/link/summary/17-3011.01>

What are some potential job titles?

- CAD Technician
- Drafter
- Architectural Drafter

Wages, employment trends and pathways:

- <http://www.onetonline.org/link/summary/17-3011.01#WagesEmployment>

Course Sequence: This program of study is outlined by quarter, and courses should be taken in the indicated sequence. However, it should not be concluded that students will always proceed through their program of study exactly as prescribed here. The number of quarters listed here is minimal. Not all courses are offered every quarter. Individual student experiences, educational and training background, and personal schedules and demands all may affect the time it takes to finish this program. Also, in general, summer quarter is not considered one of the full-time quarters in the program.

1st quarter: TDR 109, TDR 111, TDR 124, TDR 113

2nd quarter: EET 109 or MATH&141, TDR 109, TDR 112, TDR 134

3rd quarter: ENGL&101, TDR 109, TDR 144, TDR 176

4th quarter: TDR 100, TDR 109, TDR 160, BUS 169 or IT 101 or CSC 111

5th quarter: ENGL&230, BUS 236, TDR 101, TDR 161

6th quarter: TDR 102, TDR 109, TDR 269, US Culture or Global Studies course

Program Contact: Stephen Simmons (206) 934-0085 stephen.simmons@seattlecolleges.edu

NSC Advising Office: (206) 934-3658 <https://northseattle.edu/advising>

Program Website: <https://northseattle.edu/career/degrees/architectural-engineering-drafting-aas>

For more information about our graduation rates, the median debt of students who have completed these program, and other important information, please visit our website at <https://northseattle.edu/about-north/gainful-employment-information>