

ARCHITECTURAL TECHNOLOGY

Fall 2014

- **Spokane Community College**
- 1810 North Greene Street
- Spokane, WA 99217-5399
- <http://www.scc.spokane.edu/>

Degrees and Certificates

- [AAS - SCC](#)

Tuition and Fees

<http://www.ccs.spokane.edu/TuitionFees>

Program Description

The Architectural Technology program prepares students to become CAD drafters for the building design industry. Students focus on gaining proficiency with Computer Aided Drafting (CAD), 3-D modeling and Building Information Modeling (BIM) applications utilizing principles of design, the design process, building codes and building materials as they relate to building projects. This program prepares the drafter to translate ideas, rough sketches, specifications, calculations and existing drawings into drawings used within each phase of the design and construction process.

Students enter the program in the fall quarter. Program classes are typically held 7:30 a.m. –2:30 or 3:30 pm, Monday through Thursday. Please note that the classes listed below are intended for program students only. Other students are only allowed to register upon the approval of the instructor after prerequisites have been met. Students are expected to do a significant amount of reading and should be able to work at a computer for seven hours per day.

The first year consists of developing residential building design drawings and documents used by architects and building design engineers. Students use the most commonly used software utilized in the building design industry to gain proficiency in 2-D and 3-D Computer Aided Drafting (CAD). In addition, the first year consists of manual drafting, orthographic projections, freehand sketching, presentation graphics (isometric and perspective pictorial drawing), light construction principles (materials and methods), use of drafting expressions, international residential codes and sustainability issues. Emphasis is placed on architectural construction documents, which include site plans, floor plans, roof plans, footing and foundation plans, framing plans, exterior elevations, building and wall sections, window and door schedules, stair design, interior elevations, details and plumbing, HVAC, electrical and lighting plans. Graphic representation using computer software is used in the production of documents of the common phrases of

architectural design including programming, schematic design, design development and construction documents. Utilization of the above is finalized in the development of residential working drawings.

Students will receive a Residential Architectural Technology Certificate after completing the first three quarters of the AAS degree. Prior to taking courses in this program, students in this program who intend to further their education at a university should consult an academic advisor at SCC or their future university to determine which of the courses in this program are transferable to their intended university. Students who want to continue on in the second year will be permitted to do so and upon successful completion of the second year, will receive an AAS degree. Additionally, students who want an AAS-T transfer degree may take five additional SCC courses and are eligible to apply for acceptance into Washington State University Architecture program with a junior standing. A 3.0 GPA or higher is required in all courses for acceptance at WSU. Prior to taking courses in this program, students in this program who intend to further their education at a university should consult an academic advisor at SCC or their future university.

The second year consists of developing architectural working drawings using Computer Aided Drafting (CAD) and Building Information Modeling (BIM) related to commercial building design. Class projects will be developed from a preliminary design utilizing drafting techniques, standards and practices of the profession, including office procedure knowledge, use of building materials; structural framing systems as used in the building industry and study of the International Building Code.

AAS - SCC

Offered at Locations: Spokane Community College

First Quarter

ARCHT112 Introduction to Architectural Drafting	5
ARCHT120 Residential Architecture Theory 1	5
ARCHT126 Introduction to Computer Aided Drafting	5
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Second Quarter

ARCHT114 Architectural Math 4	3
ARCHT122 Architectural Design 1 1	7
ARCHT130 Residential Building Materials 1	4
ARCHT134 Electrical and Mechanical Systems 1	4
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Third Quarter

ARCHT124 Advanced Architectural Math 4	2
ARCHT125 Residential Building Codes 1	2
ARCHT132 Introduction to Construction Documents/CAD	8
ARCHT139 Delineation	5
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Fourth Quarter

ARCHT238 Introduction to Commercial Drafting/Design	6
ARCHT242 Commercial Construction Documents/CAD	4
ARCHT246 Commercial Architecture Theory	5
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Fifth Quarter

ARCHT240 Commercial Building Codes	3
ARCHT250 Introduction to Commercial Building Materials	4
ARCHT252 Advanced Commercial Construction Documents/CAD	8
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Sixth Quarter

ARCHT215 Issues in Sustainable Architecture	5
ARCHT262 Electrical Mechanical Systems Application/CAD ³	6
ARCHT263 Advanced Commercial Building Materials ²	4
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95 credits are required for the AAS

Elective

ARCHT266 Cooperative Education Seminar	1-2
ARCHT267 Cooperative Education Work Experience	1-18

- ¹ *This related education requirement may be met by any course or combination of courses approved by the instructional dean.*
- ² *ARCHT 266 and ARCHT 267 or ARCHT 288 (no seminar) may be substituted for one or more of these courses with permission of the instructor.*
- ³ *Select ARCHT 262 for either 6 credits and no elective credits or 2-4 credits with the remainder of the 6 credits from the elective group consisting of: ARCHT 266,267 for a total of 15 required credits for the sixth quarter.*
- ⁴ *ARCHT 114 and ARCHT 124 may be substituted with COMPASS score of M2=77, M3=60, and M4=44.*

*Disclaimer: The college cannot guarantee courses will be offered in the quarters indicated. During the period this guide is in circulation, there may be curriculum revisions and program changes. **Students are responsible for** consulting the appropriate academic unit or adviser for more current and specific information. the information in this guide is subject to change and does not constitute an agreement between the college and the student.*