

Architectural Modeling and Design Technology

► Contact Information

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► Delivery Methods

Face-to-Face: Wahpeton
Some Classes Available
Online

The Architectural Modeling and Design Technology program is designed to prepare students for work as technicians in construction-related industries, allowing graduates to work in a broad range of jobs, such as drafting, revit modeling, estimating, sales, construction management and project coordination. General contractors, subcontractors, home builders, architectural and engineering firms, material suppliers, steel fabricators, manufacturers and building centers all have specific areas of employment for graduates of this program.

Students are provided with classroom and laboratory experiences emphasizing computer-aided drafting (CAD) and Building Information Modeling (BIM) utilizing AutoDesk Revit software for residential and commercial buildings, estimating, structural design, mechanical and electrical systems for buildings, presentation techniques and remodeling. Students will take courses in communications, technical mathematics and business, which will provide them with career-advancing skills.

While students are fully employable upon completion of this program, some may wish to return for an additional year and earn a second major in Construction Management Technology. This program also provides transfer options to four-year colleges and universities in related fields.

Green and/or sustainable construction is specifically covered in multiple courses. Leadership in Energy and Environmental Design (LEED) certification is covered extensively. Green/sustainable construction is also discussed across the rest of the curriculum.

NOTE: This program requires a ZBOOK 15 Laptop or equivalent. Please refer to the NDSCS website for specifications. The cost will be approximately \$2100.00 if purchased through NDSCS. For further information, call Randy Stach, department chair, at 701-671-2116.

Admission Requirements*

The applicants must be high school graduates or equivalent. Students considered for acceptance must complete all admission requirements.

Please Note: Students are placed into English, math and reading courses based on ACT, ACCUPLACER or other nationally recognized tests. Please see www.ndscs.edu/current-students/student-success/test-center for the NDSCS Course Placement Policy and testing information. Students may be on an extended plan of study pending their course placement.

**Program Admission Requirements are subject to revision. Please check the department or program website under Program Admission Requirements for current information.*

Award

Upon successful completion of the required courses, students will be awarded an Associate in Applied Science degree in Architectural Modeling and Design Technology.

Course Code	Course Title	Credits
ARCT 101	Architectural Modeling I	3
ARCT 102	Architectural Modeling II	4
ARCT 110	Graphic Communications	3
ARCT 121	Revit Architecture	2
ARCT 122	Structural Modeling	2
ARCT 131	Construction Methods and Materials I	3
ARCT 144	Construction Estimating I	3
ARCT 152	MEP Modeling	2
ARCT 162	Construction Experience	1
ARCT 201	Architectural Modeling III	4
ARCT 202	Architectural Modeling IV	4
ARCT 212	Architectural Presentations	2
ARCT 214	Architectural Portfolio	1
ARCT 221	Structural Detailing	3
ARCT 223	Renovation and Design	3
ARCT 231	Construction Methods and Materials II	3
ARCT 120	AutoCAD for Architecture	2
	or CAD 120 Introduction to AutoCAD (3)	
ARCT 297	Cooperative Education	2
CMT 225	Mechanical and Electrical Systems	2

Business/Technical Elective (choose one/2 credit minimum)

BADM 240	Sales (3)	
BUSN 120	Fundamentals of Business (3)	
CMT 165	Residential and Project Experience (1)	
CMT 251	Construction Documents and Specifications (3)	
CMT 253	Construction Scheduling (3)	
CMT 265	Residential Project Experience (1)	
UAS 111	Introduction to UAS (2)	
UAS 112	Unmanned Aircraft Systems Certification (2)	

Related/General Education Courses

ENGL 110	College Composition I	3
English/Communication Elective (choose one)		3
ENGL 105	Technical Communications	
ENGL 120	College Composition II	
ENGL 125	Introduction to Professional Writing	
COMM 110	Fundamentals of Public Speaking	
MATH 130	Technical Mathematics	2
MATH 132	Technical Algebra I	2
MATH 136	Technical Trigonometry	2
Wellness Elective(s)		2
FYE 101	Science of Success	1
Social and Behavioral Sciences, Humanities, History and/or Computer Electives		4
Recommended:		
• CSCI 116 – Business Use of Computers – 3 cr		
• PSYC 100 – Human Relations in Organizations – 2 cr		

Total Required Credits **70**