

Architectural & Engineering Technology (AAS)



EXPLORE YOUR OPPORTUNITIES

The Architectural and Engineering Technology (AET) program provides entry-level skills, continuing education, and advanced technical skills including computer-aided design and drafting (CADD) and building information modeling (BIM). AET graduates are employed as drafters or technicians and work in private industry as well as municipal, state, or federal agencies. Drafters and technicians support professional architects and engineers in producing technical drawings used to build homes, roads, bridges, and pipelines.

Educational Pathway Options

	Recommended Preparation	Occupational Endorsement Certificate	Certificates	Associate of Applied Science (AAS)	Bachelor of Science (BS)
High School	<ul style="list-style-type: none"> • Reading & Writing Skills • Basic Computer Skills • Algebra <p>Also Helpful:</p> <ul style="list-style-type: none"> • Computer-Aided Drafting (CAD)* • Geometry • Trigonometry <p>*Students may earn college credit through Tech Prep, uaa.alaska.edu/techprep.</p>	<p>1/2-1 Year</p> <p>CAD for Building Construction</p>	<p>1-1 1/2 Years</p> <ul style="list-style-type: none"> • Architectural Drafting • Civil Drafting • Mechanical & Electrical Drafting • Structural Drafting 	<p>2-3 Years</p> <p>Architectural & Engineering Technology</p>	<p>4-5 Years</p> <ul style="list-style-type: none"> • Technology (with or without business emphasis) • Construction Management

APPLICATION PROCESS

OFFICE OF ADMISSIONS

- 1 Apply for admission at www.uaa.alaska.edu/admissions.
- 2 Review admission requirements for your student type.
- 3 Submit required documents to UAA Office of Admissions (see below).
- 4 Take the SAT, ACT, or Accuplacer test for English and math course placement. Call the UAA Advising & Testing Center at 907.786.4500 for testing information.
- 5 Make an appointment for academic advising at 907.786.6465 and meet regularly with an advisor.
- 6 Access the Future Student Checklist online at <http://www.uaa.alaska.edu/futurestudents/checklist.cfm> to stay on track.

The University of Alaska Anchorage has been continuously accredited by the Northwest Commission on Colleges and Universities since 1974. This brochure is for information purposes only and does not constitute a contract. UAA is an EO/AA employer and educational institution.

ARCHITECTURAL & ENGINEERING TECHNOLOGY (AAS)

These are the course requirements based on the 2008-2009 UAA Course Catalog. Please refer to the current catalog for complete information.

<p>▶ WRITTEN COMMUNICATION (6 credits)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">ENGL 111</td> <td style="width: 40%;">Methods of Written Communication* (3)</td> <td style="width: 10%;">Semester</td> <td style="width: 10%;">Grade</td> <td style="width: 10%;"></td> </tr> <tr> <td>ENGL 212</td> <td>Technical Writing [recommended] (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> </table> <p>▶ ORAL COMMUNICATION (3 credits)</p> <p><i>Choose one of the following:</i></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">COMM 111</td> <td style="width: 40%;">Fundamentals of Oral Communication (3)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> <tr> <td>COMM 235</td> <td>Small Group Communication (3)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>COMM 237</td> <td>Interpersonal Communication (3)</td> <td></td> <td></td> <td></td> </tr> <tr> <td>COMM 241</td> <td>Public Speaking (3)</td> <td></td> <td></td> <td></td> </tr> </table> <p>▶ GENERAL REQUIREMENTS (6 credits)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">MATH 105</td> <td style="width: 40%;">Intermediate Algebra* (3)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> </table> <p><i>Choose one course from:</i></p> <p>Humanities, Math, Natural Sciences, or Social Sciences</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">GEOL 111</td> <td style="width: 40%;">Physical Geology [recommended] (4)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> </table>	ENGL 111	Methods of Written Communication* (3)	Semester	Grade		ENGL 212	Technical Writing [recommended] (3)	_____	_____		COMM 111	Fundamentals of Oral Communication (3)	_____	_____		COMM 235	Small Group Communication (3)				COMM 237	Interpersonal Communication (3)				COMM 241	Public Speaking (3)				MATH 105	Intermediate Algebra* (3)	_____	_____		GEOL 111	Physical Geology [recommended] (4)	_____	_____		<p>▶ MAJOR REQUIREMENTS (42 credits)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">AET 101</td> <td style="width: 40%;">Fundamentals of CADD for Building Construction** (4)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> <tr> <td>AET 102</td> <td>Methods of Building Construction** (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 111</td> <td>Civil Drafting (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 121</td> <td>Architectural Drafting (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 123</td> <td>Codes & Standards (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 131</td> <td>Structural Drafting (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 142</td> <td>Mechanical & Electrical Technology (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 143</td> <td>Mechanical & Electrical Drafting (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 181</td> <td>Intermediate CADD for Building Construction (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 213</td> <td>Civil Technology (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 231</td> <td>Structural Technology (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 286</td> <td>Design Project (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> </table> <p>▶ ELECTIVE (3 credits)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">AET 295</td> <td style="width: 40%;">AET Internship [recommended] (1-3)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> </table>	AET 101	Fundamentals of CADD for Building Construction** (4)	_____	_____		AET 102	Methods of Building Construction** (3)	_____	_____		AET 111	Civil Drafting (3)	_____	_____		AET 121	Architectural Drafting (3)	_____	_____		AET 123	Codes & Standards (3)	_____	_____		AET 131	Structural Drafting (3)	_____	_____		AET 142	Mechanical & Electrical Technology (4)	_____	_____		AET 143	Mechanical & Electrical Drafting (3)	_____	_____		AET 181	Intermediate CADD for Building Construction (4)	_____	_____		AET 213	Civil Technology (4)	_____	_____		AET 231	Structural Technology (4)	_____	_____		AET 286	Design Project (4)	_____	_____		AET 295	AET Internship [recommended] (1-3)	_____	_____	
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A total of 60 credits is required for this degree.

DRAFTING (CERTIFICATES)

Note: Core requirement courses must be completed for all drafting certificates: Architectural, Mechanical & Electrical, Civil, and Structural. Courses indicated at right are those specific to each type of drafting certificate.

<p>▶ CORE REQUIREMENTS (24 credits)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">AET 101</td> <td style="width: 40%;">Fundamentals of CADD for Building Construction** (4)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> <tr> <td>AET 102</td> <td>Methods of Building Construction** (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 181</td> <td>Intermediate CADD for Bldg Construction (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 286</td> <td>Design Projects (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>ENGL 111</td> <td>Methods of Written Communication* (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>MATH 105</td> <td>Intermediate Algebra* (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> </table> <p><i>Choose one of the following:</i></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">COMM 111, 235, 237, or 241</td> <td style="width: 40%;">(3)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> </table>	AET 101	Fundamentals of CADD for Building Construction** (4)	_____	_____		AET 102	Methods of Building Construction** (3)	_____	_____		AET 181	Intermediate CADD for Bldg Construction (4)	_____	_____		AET 286	Design Projects (4)	_____	_____		ENGL 111	Methods of Written Communication* (3)	_____	_____		MATH 105	Intermediate Algebra* (3)	_____	_____		COMM 111, 235, 237, or 241	(3)	_____	_____		<p>▶ SPECIFIC REQUIREMENTS (6-7 credits)</p> <table border="0" style="width: 100%;"> <tr> <td colspan="5">▶ Architectural Drafting</td> </tr> <tr> <td style="width: 30%;">AET 121</td> <td style="width: 40%;">Architectural Drafting (3)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> <tr> <td>AET 123</td> <td>Codes & Standards (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td colspan="5">▶ Mechanical & Electrical Drafting</td> </tr> <tr> <td>AET 142</td> <td>Mechanical & Electrical Technology (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 143</td> <td>Mechanical & Electrical Drafting (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td colspan="5">▶ Civil Drafting</td> </tr> <tr> <td>AET 111</td> <td>Civil Drafting (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 213</td> <td>Civil Technology (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td colspan="5">▶ Structural Drafting</td> </tr> <tr> <td>AET 131</td> <td>Structural Drafting (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> <tr> <td>AET 231</td> <td>Structural Technology (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> </table>	▶ Architectural Drafting					AET 121	Architectural Drafting (3)	_____	_____		AET 123	Codes & Standards (3)	_____	_____		▶ Mechanical & Electrical Drafting					AET 142	Mechanical & Electrical Technology (4)	_____	_____		AET 143	Mechanical & Electrical Drafting (3)	_____	_____		▶ Civil Drafting					AET 111	Civil Drafting (3)	_____	_____		AET 213	Civil Technology (4)	_____	_____		▶ Structural Drafting					AET 131	Structural Drafting (3)	_____	_____		AET 231	Structural Technology (4)	_____	_____	
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A total of 30 credits is required for the Architectural Drafting Certificate.

A total of 31 credits is required for the Mechanical & Electrical Drafting, Civil Drafting, and Structural Drafting certificates.

COMPUTER AIDED DRAFTING FOR BUILDING CONSTRUCTION (OEC)

<p>▶ CORE REQUIREMENTS (8 credits)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">AET 101</td> <td style="width: 40%;">Fundamentals of CADD for Building Construction (4)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> <tr> <td>AET 181</td> <td>Intermediate CADD for Bldg Construction (4)</td> <td>_____</td> <td>_____</td> <td></td> </tr> </table>	AET 101	Fundamentals of CADD for Building Construction (4)	_____	_____		AET 181	Intermediate CADD for Bldg Construction (4)	_____	_____		<p>▶ COURSE OPTIONS (3-4 credits)</p> <p><i>Choose one of the following:</i></p> <table border="0" style="width: 100%;"> <tr> <td style="width: 30%;">AET 282</td> <td style="width: 40%;">Advanced CADD Techniques (4)</td> <td style="width: 10%;">_____</td> <td style="width: 10%;">_____</td> <td style="width: 10%;"></td> </tr> <tr> <td>AET 283</td> <td>CADD Software Customization (3)</td> <td>_____</td> <td>_____</td> <td></td> </tr> </table>	AET 282	Advanced CADD Techniques (4)	_____	_____		AET 283	CADD Software Customization (3)	_____	_____	
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AET 181	Intermediate CADD for Bldg Construction (4)	_____	_____																		
AET 282	Advanced CADD Techniques (4)	_____	_____																		
AET 283	CADD Software Customization (3)	_____	_____																		

A total of 11 credits is required for this occupational endorsement certificate.

* Placement test required

** Placement in ENGL 111 and MATH 105 is required at time of registration

01-2009

