

ENGINEERING TECHNOLOGY, ASSOCIATE OF APPLIED SCIENCE

Associate in Applied Science : AAS 3187

61-70 Credits

Program Contact

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Program Description

The Associate in Applied Science (AAS) in Engineering Technology program prepares students as entry-level engineering technicians. They will apply basic engineering principles and technical skills to support engineers engaged in a wide variety of projects. Includes instruction in various engineering support functions, including preparation in the areas of research, production, and operations. This degree will prepare highly skilled and needed workers for area manufacturers and the tech industry.

Program Notes

Students must earn a grade of C or better in all courses within the program.

++ indicates any suffixed course may be selected.

Program Requirements

Program Prerequisites: None

Code	Title	Credits	Semester
Required Courses			
CHM130	Fundamental Chemistry	3	
CHM130LL	Fundamental Chemistry Laboratory	1	
OR			
CHM150	General Chemistry I	4	
or CHM151	General Chemistry I		
CHM151LL	General Chemistry I Laboratory	1	
OR			
CHM130AA	Fundamental Chemistry with Lab	4	
or CHM140AA	General Chemistry for Engineers with Lab		
or CHM150AA	General Chemistry I with Lab		
or CHM151AA	General Chemistry I with Lab		
CIS105	Survey of Computer Information Systems	3	
Select one of the following:			

CIS150	Programming Fundamentals		
CIS150AB	Object-Oriented Programming Fundamentals		
CIS156	Python Programming: Level I		
CIS159	Visual Basic Programming I		
CIS162AB	C++: Level I		
CIS162AD	C#: Level I		
CIS163AA	Java Programming: Level I		
CSC100	Introduction to Computer Science (C++)		
CSC100AA	Introduction to Computer Science (C++)		
CSC100AB	Introduction to Computer Science (C++)		
CSC110	Introduction to Computer Science (Java)		
CSC110AA	Introduction to Computer Science (Java)		
CSC110AB	Introduction to Computer Science (Java)		
ECE102	Engineering Analysis Tools and Techniques	2	
ECE103	Engineering Problem Solving and Design	2	
ECE216	Computer-Aided Engineering	2	
ECE216LL	Computer-Aided Engineering Laboratory	1	
or ECE216AA	Computer-Aided Engineering		
ECE104	EPICS Gold I	0.5-4	
or ECE294AA	Special Topics in Engineering		
or ECE294AB	Special Topics in Engineering		
or ECE294AC	Special Topics in Engineering		
or ECE296WA	Cooperative Education		
or ECE296WB	Cooperative Education		
or ECE296WC	Cooperative Education		
or ECE296WD	Cooperative Education		
or ECE298AA	Special Projects		
or ECE298AB	Special Projects		
or ECE298AC	Special Projects		

FYE101	Introduction to College, Career and Personal Success	1	_____
or FYE103	Exploration of College, Career and Personal Success		_____
PHY111	General Physics I	4	_____
or PHY121	University Physics I: Mechanics		_____
PHY112	General Physics II	4	_____
or PHY131	University Physics II: Electricity and Magnetism		_____

Restricted Electives

In consultation with an Academic, Faculty, or Program Advisor, complete 10-14 credits of coursework from any of the areas below that best align with academic and professional goals. Students may select courses from multiple areas.

General Application

Select one of the following programming courses not already taken in required courses:

CIS150	Programming Fundamentals		_____
CIS150AB	Object-Oriented Programming Fundamentals		_____
CIS156	Python Programming: Level I		_____
CIS159	Visual Basic Programming I		_____
CIS162AB	C++: Level I		_____
CIS162AD	C#: Level I		_____
CIS163AA	Java Programming: Level I		_____
CSC100	Introduction to Computer Science (C++)		_____
CSC100AA	Introduction to Computer Science (C++)		_____
CSC100AB	Introduction to Computer Science (C++)		_____
CSC110	Introduction to Computer Science (Java)		_____
CSC110AA	Introduction to Computer Science (Java)		_____
CSC110AB	Introduction to Computer Science (Java)		_____

Select one of the following courses not already taken in required courses:

ECE104	EPICS Gold I		_____
or ECE294	Special Topics in Engineering		_____
or ECE294A	Special Topics in Engineering		_____
or ECE294AE	Special Topics in Engineering		_____
or ECE294AC	Special Topics in Engineering		_____
or ECE296W	Cooperative Education		_____
or ECE296WI	Cooperative Education		_____
or ECE296W	Cooperative Education		_____
or ECE296WI	Cooperative Education		_____
or ECE298A	Special Projects		_____
or ECE298AE	Special Projects		_____
or ECE298AC	Special Projects		_____

ECE105	MATLAB Programming	1	_____
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ECE106	Survey of Nanotechnology	1	_____
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GTC/MIT/OSH106		0-3	_____
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or AIT100	Industrial Safety		_____
or CON271	Construction Safety		_____

MAT206	Elements of Statistics	3	_____
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Biomedical Engineering Technician

BIO160	Introduction to Human Anatomy and Physiology	4	_____
or BIO201	Human Anatomy and Physiology I		_____

ABS175	Research Methods in Biology	1	_____
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BIO211AA	Biotechnology Seminar: Biomedical Applications	1	_____
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ECE111	Bioengineering Systems	3	_____
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Civil Engineering Technician

CET211		0-3	_____
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or CON223	Strength of Materials		_____
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CON241	Surveying	3	_____
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ECE216	Computer-Aided Engineering	2	_____
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ECE216LL	Computer-Aided Engineering Laboratory	1	_____
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OR

ECE216AA	Computer-Aided Engineering	3	_____
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GLG101	Introduction to Geology I - Physical Lecture	3	_____
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GLG103	Introduction to Geology I - Physical Lab	1	_____
OR			_____
GLG101IN	Introduction to Geology I - Physical	4	_____
Drafting for Engineering Technician			
CAD100	Fundamentals of 2D Autocad	3	_____
CAD101	Elements of CAD Graphics (AutoCAD)	3	_____
CAD145	Design Principles for Industry	3	_____
DFT110	Introduction to Drafting	3	_____
DFT126	Building Trades Blueprint Reading	3	_____
ECE216	Computer-Aided Engineering	2	_____
ECE216LL	Computer-Aided Engineering Laboratory	1	_____
OR			_____
ECE216AA	Computer-Aided Engineering	3	_____
General Education			
Core			
<i>First-Year Composition</i>			
ENG101	First-Year Composition	3	_____
or ENG107	First-Year Composition for ESL		_____
ENG102	First-Year Composition	3	_____
or ENG108	First-Year Composition for ESL		_____
<i>Oral Communication</i>			
COM100	Introduction to Human Communication (Recommend COM225 or COM230)	3	_____
or COM110	Interpersonal Communication		_____
or COM225	Public Speaking		_____
or COM230	Small Group Communication		_____
<i>Critical Reading</i>			
CRE101	College Critical Reading and Critical Thinking	3	_____
or equivalent as indicated by assessment			
Mathematics			
MAT187	Precalculus	5	_____
or MAT220	Calculus with Analytic Geometry I		_____

or MAT221	Calculus with Analytic Geometry I	_____
General Education		
<i>Humanities, Arts and Design</i>		
Any approved general education course(s) from the Humanities, Arts and Design area		
Social and Behavioral Sciences		
Any approved general education course(s) in the Social and Behavioral Sciences area		
Recommend ECN211 or ECN212		
<i>Natural Sciences</i>		
Met by CHM or PHY in Required Courses		
Total Credits	61-70	_____