

Pre-Engineering Technology

Associate of Applied Science

Minimum of 70 Credits

The Associate of Applied Science Degree in Pre-Engineering Technology will provide a student with the first two years of a four-year program in Engineering Technology. This degree will allow the student to begin a bachelor's degree in a variety of technical fields by completing the first two years of the Pre-Engineering Technology program at CMN and then finishing a bachelor's degree either at CMN or at another four-year college or university.

An A.A.S. degree in Pre-Engineering Technology will promote a student's ability to support a career path in an entry level technology team role, such as scientist, engineer, technologist, technician, or skilled trades.

CORE REQUIREMENTS		(19 CREDITS)	COMPLETED	GRADE
COM100	*Introduction to Oral Communication	3 cr.	_____	_____
EDU100	Student Success Strategies	3 cr.	_____	_____
EDU295	*Student Portfolio Seminar	1 cr.	_____	_____
ENG100	*Introduction to College English Foundations or	3 cr.	_____	_____
ENG101	*Introduction to College English			
ENG102	*College English and Research	3 cr.	_____	_____
MAT104	*College Algebra Foundations or	3 cr.	_____	_____
MAT106	*College Algebra (or higher level math course)			
SDE100	*Introduction to Sustainable Development	3 cr.	_____	_____
GENERAL EDUCATION REQUIREMENTS		(11-12 CREDITS)		
Natural Science				
CHM101	*Introduction to Chemistry	5 cr.	_____	_____
Social Sciences				
Humanities				
	*American Indian History or Language	3-4 cr.	_____	_____
Fine Arts				
	Elective	3 cr.	_____	_____
EMPHASIS COURSE REQUIREMENTS		(40 CREDITS)		
EGR101	Introduction to Engineering	3 cr.	_____	_____
MAT120	*Elementary Functions: Algebra and Trigonometry	4 cr.	_____	_____
MAT231	*Calculus and Analytical Geometry I	4 cr.	_____	_____
MAT232	*Calculus and Analytical Geometry II	4 cr.	_____	_____
MAT260	*Introductory Statistics	4 cr.	_____	_____
PHY203	*Physics I	5 cr.	_____	_____
BIO110	Introduction to Human Biology or	3 cr.	_____	_____
BIO202	Principles of Biology or	5 cr.	_____	_____
PHY204	*Physics II	5 cr.	_____	_____
ENV150	Introduction to Environmental Science	3 cr.	_____	_____
CHM205	*Chemistry I	5 cr.	_____	_____
CHM207	*Chemistry II	5 cr.	_____	_____

Pre-Engineering Technology Program Outcomes

Upon completion of this program, the graduate will be able to:

1. Solve engineering problems by applying knowledge, modern instrumentation and techniques, and technical skills;
2. Apply appropriate mathematical, scientific, engineering, and technological practicum and methodology to problems;
3. Conduct, analyze, and interpret standard tests, measurements, and experimental results;
4. Apply appropriate technical literature to written, oral, and graphical communication; and
5. Apply knowledge of the impact of engineering technology solutions in local, regional, national, and global contexts.

Standard Ideal Course Sequence:

Semester 1		Semester 2	
EDU100	3	COM100	3
ENG101	3	SDE100	3
MAT106	3	MAT120	4
ENV150	3	ENG102	3
Fine Arts Elective	3	CHM101	5
Humanities Elective	3		
Total	18	Total	18
Semester 3		Semester 4	
		EDU295	1
MAT260	4	EGR101	3
MAT231	4	MAT232	4
CHM205	5	CHM207	5
PHY203	5	BIO110 or BIO202	3-5
Total	18	Total	16-18

Foundations Ideal Course Sequence:

Semester 1		Semester 2		Semester 3	
EDU100	3	COM100	3	MAT231	4
ENG100	3	SDE100	3	CHM205	5
MAT104	3	MAT120	4	PHY203	5
ENV150	3	ENG102	3		
		CHM101	5		
Total	12	Total	18	Total	14
Semester 4		Semester 5			
MAT232	4	EDU295	1		
CHM207	5	Fine Arts Elective	3		
BIO110 or BIO202	3-5	Humanities Elective	3-4		
EGR101	3	MAT260	4		
Total	15-17	Total	11-12		