



EFFECTIVE BEGINNING ACADEMIC YEAR 2025-26

LAST REVISED: May 6, 2025

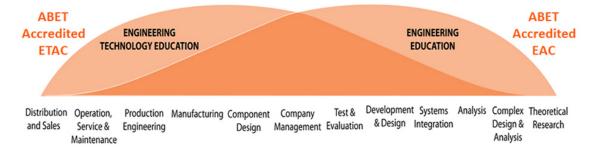
"Engineering and engineering technology are separate but closely related professional areas that differ in:

Curricular Focus – Engineering programs often focus on theory and conceptual design, while engineering technology programs usually focus on application and implementation. Engineering programs typically require additional, higher-level mathematics, including multiple semesters of calculus and calculus-based theoretical science courses, while engineering technology programs typically focus on algebra, trigonometry, applied calculus, and other courses that are more practical than theoretical in nature.

Career Paths – Graduates from engineering programs are called engineers and often pursue entry-level work involving conceptual design or research and development. Many continue on to graduate-level work in engineering. Graduates of four-year engineering technology programs are called technologists, while graduates of two-year engineering technology programs are called technicians.

These professionals are most likely to enter positions in sectors such as construction, manufacturing, product design, testing, or technical services and sales. Those who pursue further study often consider engineering, facilities management, or business administration.

There is much overlap between the fields. Engineers may pursue MBAs and open their own consulting firms, while technologists may spend their entire careers in design capacities."



Students who earn an Associate of Applied Science (AAS) degree in Mechanical Engineering Technology are able to enter the workforce. However, those who are interested in also earning a bachelor's degree at some point in time may use the Ohio Guaranteed Transfer Pathway, detailed below, to transfer and apply the credits earned during their AAS program toward a bachelor's degree in Engineering Technology at a public four-year institution of higher education in Ohio.

Sources: Definition comes from the Accreditation Board for Engineering and Technology (ABET), and the graphic comes from the American Society of Mechanical Engineers (ASME).



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GENERAL E	DUCATION REQUIREMENTS/OHIO TRANSFER 36	COURSE NUMBER	CREDIT HOURS
ENGLISH CO	MPOSITION AND ORAL COMMUNICATION		3-5
Course 1:	Any Ohio Transfer 36 approved First Writing (TME001) course	ENG 1020 or ENG 1050	3-5
MATHEMATI	CS, STATISTICS, AND LOGIC		5-6
Course 1:	Precalculus (TMM002) or College Algebra (TMM001) and Trigonometry (TMM003) ¹	MTH 2351 or MTH 2310 & MTH 2320	5-6
ARTS AND HUMANITIES			3
Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	HUM 1010	3
SOCIAL AND BEHAVIORAL SCIENCES		3	
Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	ECO 2010	3
NATURAL SCIENCES		5	
Course 1:	Algebra-based Physics I (OSC014)	PHY 1310/PHY 1315	5
GENERAL E	DUCATION/OHIO TRANSFER 36 TOTAL:		19-22

Advising Notes:

Where it indicates "Any Ohio Transfer 36 approved," students should work closely with their advisors.

¹ Calculus (TMM005) is recommended, either in fulfillment of the mathematics requirement or as an elective course, since certain bachelor degree programs prefer that Calculus be taken prior to transfer in order to allow students to complete the program most efficiently. However, there are also bachelor degree programs that will incorporate Calculus into the remaining coursework upon transfer. Students should work with their academic advisor and their intended receiving institution to determine the best program of study.

ADDITION	AL/APPLIED GENERAL EDUCATION REQUIREMENTS	COURSE NUMBER	CREDIT HOURS
Course 1:	Algebra-based Physics II (OSC015) (preferred) or other Ohio Transfer 36 Natural Sciences course	PHY 1320/ PHY 1325	5
Course 2:	Public Speaking (OCM013), Oral Communication (TMOC), Technical Writing, or Second Writing (TME002) course	SPE 2010 or ENG 1060	3
	General Electives (up to 6 credit hours)	GEN 1000	1
Courses:		Choose two: MFG 1030, QCT 2300, ENG 1900, MFG 1030, or MFG 1020	6
ADDITIONA	L/APPLIED GENERAL EDUCATION TOTAL:		15



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PRE-MAJO	R/BEGINNING MAJOR	COURSE NUMBER	CREDIT HOURS
Course 1:	Statics (OET007)	MET 2110	3
Course 2:	Strength of Materials (OET008)	MET 2150	3
Course 3:	Fluid Mechanics (OET009)	MET 2100 (To be submitted)¹	3
Course 4:	Manufacturing Processes (OET010)	MET 1130/ MET 1140 (To be submitted) ¹	3
Course 5:	CAD (OET012)	CAD 1110	3
Course 6:	Engineering Materials (OET013)	MFG 1080	3
PRE-MAJO	R/BEGINNING MAJOR TOTAL:		18

Advising Notes

¹ "To be submitted" indicates that the course does not currently carry the statewide course equivalency guarantee. However, the institution is working toward this goal. Students should consult this institution's contact indicated below for guidance on enrollment in this course.

ADDITIONAL COURSEWORK	COURSE NUMBER	CREDIT HOURS
Technical Electives (Recommended: Engineering Graphics, Programming Languages, Machine Design, and/or a second Manufacturing Processes course)	Choose three: CAD 1320, MET 1320, MET 2210, or MET 2500	9
OTHER RECOMMENDATIONS TOTAL:		9

APPLIED ASSOCIATE DEGREE	Total Credit Hours
APPLIED ASSOCIATE DEGREE TOTAL:	61-64

SPECIAL NOTES

Some bachelor-degree granting programs may be competitive and admission into the program is not guaranteed. Students should check with individual institutions for their program admission requirements.

Bachelor-degree granting institutions may require additional general education courses since students will not complete the Ohio Transfer 36 by following this pathway and will take these courses upon transfer.

For additional information, please contact:

Academic Advising

academicadvising@terra.edu

419-559-2345

https://terra.edu/degrees_programs/academic_services/academic_advising/



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SAMPLE DEGREE MAP

FIRST YEAR

SEMESTER 1	
COURSE NAME & NUMBER	CREDIT HOURS
GEN 1000 First-Year Seminar	1
MET 1130 Introduction to Machine Processes	2
MET 1140 Introduction to Machine Processes Lab	1
MTH 2310 College Algebra	3
ENG 1020 Introductory College Composition OR ENG 1050 College Composition I	3-5
MFG 1030 Print Reading for Industry	3
Total SEMESTER 1 Credit Hours	13-15

SEMESTER 2		
COURSE NAME & NUMBER	CREDIT HOURS	
CAD 1110 CAD I	3	
MET 2100 Fluid Power	3	
MFG 1080 Materials	3	
QCT 2300 Process Improvement and Lean Manufacturing	3	
SPE 2010 Effective Speaking OR ENG 1060 College Composition II	3	
MTH 2320 College Trigonometry	3	
Total SEMESTER 2 Credit Hours	18	

SECOND YEAR

SEMESTER 3		
COURSE NAME & NUMBER	CREDIT HOURS	
ECO 2010 Macroeconomics	3	
CAD 1320 CAD II	3	
MET 1320 CNC I	3	
MET 2110 Statics	3	
PHY 1310 General Physics I	4	
PHY 1315 General Physics I Lab	1	
Total SEMESTER 3 Credit Hours	17	

SEMESTER 4		
COURSE NAME & NUMBER	CREDIT HOURS	
HUM 1010 Critical Thinking	3	
MET 2150 Strength and Materials	3	
MET 2210 Machine Design	3	
PHY 1320 General Physics II	4	
PHY 1325 General Physics II Lab	1	
Total SEMESTER 4 Credit Hours	14	