

Mechanical Engineering Technology Associate of Applied Science

November 16, 2020

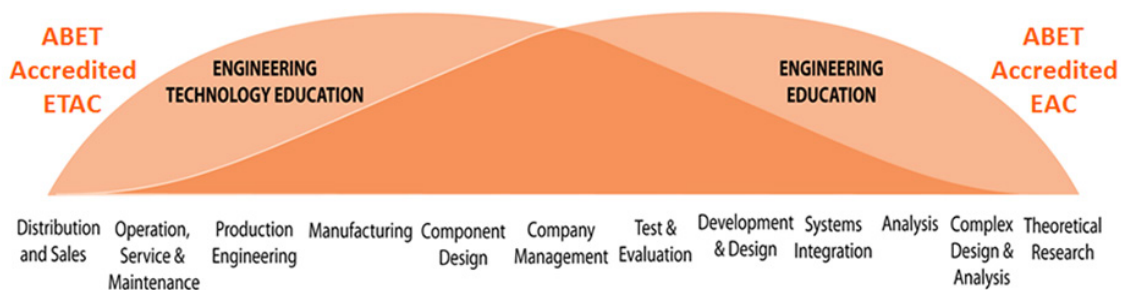
“Engineering and engineering technology are separate but closely related professional areas that differ in:

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 EDUCATION REQUIREMENTS		Credit Hours
English Composition:	Any OTM approved First Writing (TME001) course	3
Mathematics, Statistics, and Logic:	Precalculus (TMM002) or College Algebra (TMM001) and Trigonometry (TMM003) ¹	5-8
Arts & Humanities:	Any OTM approved Arts and Humanities course	3
Social & Behavioral Sciences:	Any OTM approved Social and Behavioral Sciences course	3
Natural Sciences:	Algebra-based Physics I (OSC014)	4-5
Natural Sciences:	Algebra-based Physics II (OSC015) (preferred) or other OTM Natural Sciences course	4-5
English Composition & Oral Communication:	Public Speaking (OCM013), Oral Communication (TMOC), Technical Writing, or Second Writing (TME002) course	3
General Education Electives:	General Education Electives (if needed)	0-5
GENERAL EDUCATION TOTAL:		25-30
<p>Advising Notes: Where it indicates "Any OTM 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.</p>		

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TECHNICAL, PRE-MAJOR, BEGINNING MAJOR		Credit Hours
Course 1:	Statics (OET007)	3
Course 2:	Strength of Materials (OET008)	3
Course 3:	Fluid Mechanics (OET009)	3
Course 4:	Manufacturing Processes (OET010)	3
Course 5:	CAD (OET012)	3
Course 6:	Engineering Materials (OET013)	3
TECHNICAL, PRE-MAJOR, BEGINNING MAJOR TOTAL:		18

ADDITIONAL COURSEWORK	Credit Hours
Technical Electives (Recommended: Engineering Graphics (highly recommended), Programming Languages, Machine Design, and/or a second Manufacturing Processes course)	12-18
ADDITIONAL COURSEWORK TOTAL:	12-18

APPLIED ASSOCIATE DEGREE	Total Credit Hours
APPLIED ASSOCIATE DEGREE TOTAL:	60-65

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 Module by following this pathway and will take these courses upon transfer.