



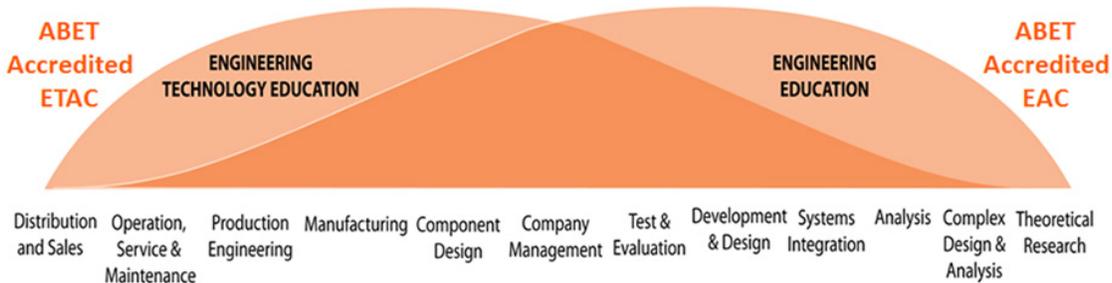
“Engineering and engineering technology are separate but closely related professional areas that differ in:

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).



GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		COURSE NUMBER	CREDIT HOURS
<b>ENGLISH COMPOSITION AND ORAL COMMUNICATION</b>			<b>3</b>
Course 1:	Any Ohio Transfer 36 approved First Writing (TME001) course	ENG 1010/101H	3
<b>MATHEMATICS, STATISTICS, AND LOGIC</b>			<b>5-7</b>
Course 1:	Precalculus (TMM002) or College Algebra (TMM001) and Trigonometry (TMM003) <sup>1</sup>	MATH 1580, or 1530/153H & 1540/154H <sup>2</sup>	5-7
<b>ARTS AND HUMANITIES</b>			<b>3</b>
Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	OT36 Elective (see page 5 for list)	3
<b>SOCIAL AND BEHAVIORAL SCIENCES</b>			<b>3</b>
Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	OT36 Elective (see page 6 for list)	3
<b>NATURAL SCIENCES</b>			<b>4</b>
Course 1:	Algebra-based Physics I (OSC014)	PHYS 1210	4
<b>GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:</b>			<b>18-20</b>

Advising Notes:

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

<sup>1</sup> 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.

<sup>2</sup> MATH 1580 or 1610/161H can be taken in place of MATH 1530/153H and 1540/154H.

ADDITIONAL/APPLIED GENERAL EDUCATION REQUIREMENTS		COURSE NUMBER	CREDIT HOURS
Course 1:	Algebra-based Physics II (OSC015) (preferred) or other Ohio Transfer 36 Natural Sciences course	PHYS 1220	4
Course 2:	Public Speaking (OCM013), Oral Communication (TMOC), Technical Writing, or Second Writing (TME002) course	ENG 1020/102H or ENG 2151	3
<b>ADDITIONAL/APPLIED GENERAL EDUCATION TOTAL:</b>			<b>7</b>



LAST REVISED: April 4, 2025

PRE-MAJOR/BEGINNING MAJOR		COURSE NUMBER	CREDIT HOURS
Course 1:	Statics (OET007)	MET 1601	3
Course 2:	Strength of Materials (OET008)	MET 2200	3
Course 3:	Fluid Mechanics (OET009)	MET 2300	3
Course 4:	Manufacturing Processes (OET010)	MET 1240	3
Course 5:	CAD (OET012)	MET 2041	3
Course 6:	Engineering Materials (OET013)	MET 1300	3
<b>PRE-MAJOR/BEGINNING MAJOR TOTAL:</b>			<b>18</b>

ADDITIONAL COURSEWORK	COURSE NUMBER	CREDIT HOURS
Technical Electives (Recommended: Engineering Graphics, Programming Languages, Machine Design, and/or a second Manufacturing Processes course)	HLTH 1230	1
	MET 1100	2
	MET 1120	2
	MET 1230	3
	MET 1621	3
	MET 2240	1
	MET 2601	3
	MET 2700	3
<b>OTHER RECOMMENDATIONS TOTAL:</b>		<b>18</b>

APPLIED ASSOCIATE DEGREE	Total Credit Hours
<b>APPLIED ASSOCIATE DEGREE TOTAL:</b>	<b>61-63</b>

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: Transfer Center <a href="mailto:transfercenter@tri-c.edu">transfercenter@tri-c.edu</a> 216-987-3841 <a href="https://www.tri-c.edu/transfer/transfer-resources/ohio-guaranteed-transfer-pathways.html">https://www.tri-c.edu/transfer/transfer-resources/ohio-guaranteed-transfer-pathways.html</a>



SAMPLE DEGREE MAP

FIRST YEAR

Table with 4 columns: SEMESTER 1, COURSE NAME & NUMBER, CREDIT HOURS, SEMESTER 2, COURSE NAME & NUMBER, CREDIT HOURS. Lists courses like ENG 1010/101H, MATH 1530, MET 1100, etc.

SECOND YEAR

Table with 4 columns: SEMESTER 3, COURSE NAME & NUMBER, CREDIT HOURS, SEMESTER 4, COURSE NAME & NUMBER, CREDIT HOURS. Lists courses like MET 1300, MET 1621, MET 2041, etc.



OHIO TRANSFER 36 ELECTIVES

Please work closely with your advisor when selecting courses.

Table with 3 columns: ARTS AND HUMANITIES, Course Number, Credit Hours. Lists 36 courses including Art Appreciation, Survey of Non-Western Art, Art History Survey, Dance Appreciation, Women Writers, American Literature I/II, British Literature I/II, Introduction to Literature (Poetry, Fiction, Drama, Science Fiction), African-American Literature I/II, Literature for Children & Adolescents, World Literature, Shakespeare, Exploration of World Mythology, Rhetorics of Gaming, Islam to the Modern Middle East, African American History to 1877, African American History 1877-Present, Hitler and the Holocaust, Women in American History.

Table with 3 columns: ARTS AND HUMANITIES, CONTINUED, Course Number, Credit Hours. Lists 20 courses including Introduction to Humanities, The Individual Society, Community Engagement Through the Humanities, Culture and Belief, Film Appreciation, Survey of European Classical Music, Survey of Jazz, Survey of Rock and Roll, Survey of African-American Music, Survey of World Music, Jazz History, Critical Thinking, Introduction to Philosophy, Ethics, Bioethics, Business Ethics, Honors Social Justice, Introduction to Religious Studies, Comparative World Religions, Religious Traditions of Western Christianity, African-American Religious Experience, Theatre Appreciation, History of Theatre and Drama I, History of Theatre and Drama II.



OHIO TRANSFER 36 ELECTIVES

Please work closely with your advisor when selecting courses.

Table with 3 columns: Course Name, Course Number, Credit Hours. Includes courses like Cultural Anthropology, Survey of Economics, History of Civilization I, etc.

Table with 3 columns: Course Name, Course Number, Credit Hours. Includes courses like Life Span Development, Social Psychology, Introductory Sociology, etc.