



## Transfer Credit Ohio

Ohio Guaranteed Transfer Pathways

CUYAHOGA COMMUNITY COLLEGE

# Mechanical Engineering Technology

## Associate of Applied Science

EFFECTIVE BEGINNING ACADEMIC YEAR 2024-25

LAST REVISED: April 4, 2025

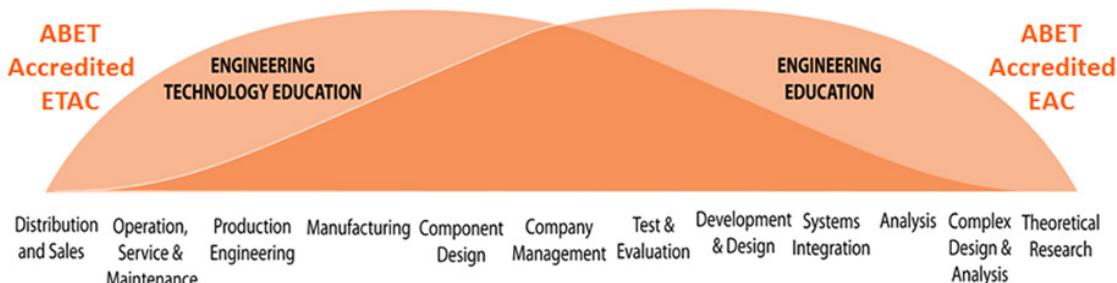
“Engineering and engineering technology are separate but closely related professional areas that differ in:

**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).



## Transfer Credit Ohio

Ohio Guaranteed Transfer Pathways

CUYAHOGA COMMUNITY COLLEGE

# Mechanical Engineering Technology

Associate of Applied Science

EFFECTIVE BEGINNING ACADEMIC YEAR 2024-25

LAST REVISED: April 4, 2025

GENERAL EDUCATION REQUIREMENTS/OHIO TRANSFER 36		COURSE NUMBER	CREDIT HOURS
ENGLISH COMPOSITION AND ORAL COMMUNICATION			3
Course 1:	Any Ohio Transfer 36 approved First Writing (TME001) course	ENG 1010/101H	3
MATHEMATICS, STATISTICS, AND LOGIC			5-7
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
ARTS AND HUMANITIES			3
Course 1:	Any Ohio Transfer 36 approved Arts and Humanities course	OT36 Elective (see page 5 for list)	3
SOCIAL AND BEHAVIORAL SCIENCES			3
Course 1:	Any Ohio Transfer 36 approved Social and Behavioral Sciences course	OT36 Elective (see page 6 for list)	3
NATURAL SCIENCES			4
Course 1:	Algebra-based Physics I (OSC014)	PHYS 1210	4
GENERAL EDUCATION/OHIO TRANSFER 36 TOTAL:			18-20
<p>Advising Notes:</p> <p>Where it indicates "Any Ohio Transfer 36 approved," students should work closely with their advisors.</p> <p><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.</p> <p><sup>2</sup> MATH 1580 or 1610/161H can be taken in place of MATH 1530/153H and 1540/154H.</p>			

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
ADDITIONAL/APPLIED GENERAL EDUCATION TOTAL:			7



## Transfer Credit Ohio

Ohio Guaranteed Transfer Pathways

CUYAHOGA COMMUNITY COLLEGE

# Mechanical Engineering Technology

Associate of Applied Science

EFFECTIVE BEGINNING ACADEMIC YEAR 2024-25

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
PRE-MAJOR/BEGINNING MAJOR TOTAL:			18

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
OTHER RECOMMENDATIONS TOTAL:		18

APPLIED ASSOCIATE DEGREE	Total Credit Hours
APPLIED ASSOCIATE DEGREE TOTAL:	61-63

### 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

[transfercenter@tri-c.edu](mailto:transfercenter@tri-c.edu)

216-987-3841

<https://www.tri-c.edu/transfer/transfer-resources/ohio-guaranteed-transfer-pathways.html>



## Transfer Credit Ohio

Ohio Guaranteed Transfer Pathways

CUYAHOGA COMMUNITY COLLEGE

# Mechanical Engineering Technology

Associate of Applied Science

EFFECTIVE BEGINNING ACADEMIC YEAR 2024-25

LAST REVISED: April 4, 2025

## SAMPLE DEGREE MAP

### FIRST YEAR

SEMESTER 1		SEMESTER 2	
COURSE NAME & NUMBER	CREDIT HOURS	COURSE NAME & NUMBER	CREDIT HOURS
ENG 1010/101H English Composition I/ Honors	3	ENG 1020/102H English Composition II/ Honors or ENG-2151 Technical Writing	3
MATH 1530 College Algebra	4	MATH 1540 Trigonometry	3
MET 1100 Technology Orientation	2	MET 1240 Machine Tools and Manufacturing Processes	3
MET 1120 Computer Applications and Programming	2	MET 1601 Technical Statics 2	3
MET 1230 Drawing and AutoCAD	3	PHYS 1210 College Physics I	4
Ohio Transfer 36 Arts and Humanities Elective	3		
Total SEMESTER 1 Credit Hours	17	Total SEMESTER 2 Credit Hours	16

### SECOND YEAR

SEMESTER 3		SEMESTER 4	
COURSE NAME & NUMBER	CREDIT HOURS	COURSE NAME & NUMBER	CREDIT HOURS
MET 1300 Engineering Materials and Metallurgy	3	PHY 1220 College Physics II	4
MET 1621 Technical Dynamics	3	Ohio Transfer 36 Social & Behavioral Sciences Elective	3
MET 2041 CAD II & GD&T	3	HLTH 1230 Standard First Aid and Personal Safety	1
MET 2200 Strength of Materials	3	MET 2601 3D Solid Modeling	3
MET 2240 Mechanical Engineering Lab	1	MET 2700 Machine Design	3
MET 2300 Fluid Power	3		
Total SEMESTER 3 Credit Hours	16	Total SEMESTER 4 Credit Hours	14



## Transfer Credit Ohio

Ohio Guaranteed Transfer Pathways

CUYAHOGA COMMUNITY COLLEGE

# Mechanical Engineering Technology

Associate of Applied Science

EFFECTIVE BEGINNING ACADEMIC YEAR 2024-25

LAST REVISED: April 4, 2025

## OHIO TRANSFER 36 ELECTIVES

Please work closely with your advisor when selecting courses.

ARTS AND HUMANITIES	Course Number	Credit Hours
Art Appreciation	ART 1010	3
Survey of Non-Western Art	ART 1040	3
Art History Survey: Prehistoric to Renaissance	ART 2020/202H	3
Art History Survey: Late Renaissance to Present	ART 2030/203H	3
Dance Appreciation	DANC 1100	3
Women Writers on the Experiences of Women	ENG 2020	3
American Literature I	ENG 2310	3
American Literature II	ENG 2320	3
British Literature I	ENG 2350	3
British Literature II	ENG 2360	3
Introduction to Literature: Poetry	ENG 2410	3
Introduction to Literature: Fiction	ENG 2420	3
Introduction to Literature: Drama	ENG 2430	3
Introduction to Literature: Science Fiction	ENG 2450	3
African-American Literature I	ENG 2510	3
African-American Literature II	ENG 2520	3
Literature for Children & Adolescents	ENG 2601	3
World Literature	ENG 2700	3
Shakespeare	ENG 2710	3
Exploration of World Mythology	ENG 2730	3
Rhetorics of Gaming: Introduction to Video Game Analysis	ENG 2770	3
Islam to the Modern Middle East	HIST 2031	3
African American History to 1877	HIST 2150	3
African American History 1877-Present	HIST 2160	3
Hitler and the Holocaust	HIST 2520	3
Women in American History	HIST 2660	3

ARTS AND HUMANITIES, CONTINUED	Course Number	Credit Hours
Introduction to Humanities	HUM 1010	3
The Individual Society	HUM 1020/102H	3
Community Engagement Through the Humanities	HUM 2020	3
Culture and Belief	HUM 2030	3
Film Appreciation	MJS 1310	3
Survey of European Classical Music	MUS 1010	3
Survey of Jazz	MUS 1020	3
Survey of Rock and Roll	MUS 1030	3
Survey of African-American Music	MUS 1040	3
Survey of World Music	MUS 1050	3
Jazz History	MUS 2541	3
Critical Thinking	PHIL 1000	3
Introduction to Philosophy	PHIL 1010/101H	3
Ethics	PHIL 2020/202H	3
Bioethics	PHIL 2050/205H	3
Business Ethics	PHIL 2060	3
Honors Social Justice	PHIL 208H	3
Introduction to Religious Studies	REL 1010	3
Comparative World Religions	REL 2000	3
Religious Traditions of Western Christianity	REL 2010	3
African-American Religious Experience	REL 2060	3
Theatre Appreciation	THEA 1010	3
History of Theatre and Drama I	THEA 2210	3
History of Theatre and Drama II	THEA 2220	3



## Transfer Credit Ohio

Ohio Guaranteed Transfer Pathways

CUYAHOGA COMMUNITY COLLEGE

# Mechanical Engineering Technology

Associate of Applied Science

EFFECTIVE BEGINNING ACADEMIC YEAR 2024-25

LAST REVISED: April 4, 2025

## OHIO TRANSFER 36 ELECTIVES

Please work closely with your advisor when selecting courses.

SOCIAL AND BEHAVIORAL SCIENCES	Course Number	Credit Hours
Cultural Anthropology	ANTH 1010	3
Peoples and Cultures of the World	ANTH 2010	3
Archaeology	ANTH 2110	3
Survey of Economics	ECON 1210	3
Principles of Microeconomics	ECON 2000	3
Principles of Macroeconomics	ECON 2010	3
Introduction to Geography	GEOG 1000	3
World Regional Geography	GEOG 1010	3
Africans in the Americas	GEOG 1050	3
Regional Geography of the US & Canada	GEOG 1510	3
Environmental Geography	GEOG 2030	3
History of Civilization I	HIST 1010/101H	3
History of Civilization II	HIST 1020/102H	3
United States History to 1877	HIST 1510/151H	3
United States History Since 1877	HIST 1520/152H	3
History of Africa	HIST 1700	3
History of Modern Africa	HIST 2700	3
American National Government	POL 1010/101H	3
State and Local Government	POL 1020	3
Introduction to Conflict and Peace Studies	POL 2020	3
Comparative Politics	POL 2030	3
Political Systems of Africa	POL 2060	3
International Relations	POL 2070	3
Constitutional Law	POL 2100	3
Women and Politics	POL 2120	3
General Psychology	PSY 1010/101H	3
Intro to Industrial/Organizational Psych	PSY 1050	3
Child Growth and Development	PSY 2010	3

SOCIAL AND BEHAVIORAL SCIENCES, CONTINUED	Course Number	Credit Hours
Life Span Development	PSY 2020/202H	3
Social Psychology	PSY 2040	3
Psychology of Personality	PSY 2050	3
Adolescent Psychology	PSY 2060	3
Psychopathology	PSY 2081	3
Introduction to Aging	PSY 2100	3
Educational Psychology	PSY 2110	3
Introductory Sociology	SOC 1010/101H	3
Social Institutions	SOC 1020	3
Social Problems	SOC 2010/201H	3
Sociology of the Family	SOC 2020	3
Aging and Society	SOC 2100	3
Death and Dying	SOC 2110	3
Introduction to Criminology	SOC 2160	3
Sociology of Gender	SOC 2410	3
Race and Ethnic Relations	SOC 2550	3
Introduction to Urban Studies	UST 1010	3
Introduction to Women's Studies	WGS 1510/151H	3
Women in the World	WGS 2010/201H	3
Women and Politics	WGS/POL 2120	3