



Washkewicz College
of Engineering

MECHANICAL ENGINEERING TECHNOLOGY DEGREE CHARTS

(Prerequisites Included)

Select your Mathematics entry course:

1. [4-Year Plan](#)
2. [5-Year Plan](#)

Note: ONLY the Calculus Entry 4-Year Plan is linked to the Undergraduate Catalog 23-24.

Bachelor of MECHANICAL ENGINEERING TECHNOLOGY (MET)

Updated August 2023

4-Year Recommended Course Sequence

Click on the Course Name to access the course description in the Undergraduate Catalog 23-24

Fall Semester 1	Spring Semester 2	Fall Semester 3	Spring Semester 4	Fall Semester 5	Spring Semester 6	Fall Semester 7	Spring Semester 8
MCE 180 [2] Computer Aided Eng. Lab I	MCE 181 [2] Computer Aided Engineering Lab II (MCE 180)	MET 201 [3] Statics for ET (MTH 149, PHY 221, and ESC 120)	MET 202 [3] Dynamics for ET (MET 201)	MET 345 [3] Thermodynamics (PHY 221 and *MTT 300)	MET 330 [3] Adv. Dynamics & Vibrations (MTH 149 and MET 202)	MET 470 [1] Senior Design A (Senior Standing)	MET 480 [3] Senior Design B (MET 470)
EET 205 [3] DC Circuits	PHY 221 [5] College Physics I (MTH 165 or MTH 167)	CHM 251 [3] College Chemistry 1 (MTH 149)	GET 315 [3] Advanced Program Methods	MET 320 [3] Adv. Mechanics of Materials (MTH 149 and MET 201)	MET 350 [3] Fluid Mechanics (MET 345, MTT 300 and PHY 221)	MET 410 [3] Design of Machine Elements (MET 320 and MTT 301)	GET 430 [3] Elect Power, Controls, Instruments (MTT 301 and EET 205)
MTH 165 [3] Intensive Precalc I or MTH 167 [3] Precalculus I	MTH 149 [4] Math for Business Majors II (MTH 165 or MTH 167)	CHM 256 [1] College Chemistry 1 Lab (MTH 149)	** ESC 130 [1] Engineering Co-op Orientation	MTT 300 [3] Applied Math (MTH 149)	MET 351 [2] Thermal Fluids Lab (MET 345 and *MET 350)	MET 411 [1] Design of Machine Elements Lab (MET 320 and MTT 301)	GET 431 [1] Elect Power, Controls, Instrument Lab (*GET 430) (WAC)
ENG 100 [3] Intensive Writing or ENG 101 [3] College Writing I	ESC 102 [3] Technical Writing (Preferred) (ENG 100 or ENG 101)	GET 285 [3] Science of Alternative Energy	General Ed. Elective [3]	General Ed. Elective [3]	MTT 301 [3] Advanced Applied Math (MTT 300)	MET 445 [3] Solid Modeling Applications (MCE 181, MET 320 and MET 350)	MET 450 [3] Mechanical System Design (MET 330, MET 410, and MET 445)
GET 255 [3] Intro Robotics & Automated System	ESC 120 [2] Intro to Engr Design	Communications Elective [3] (WAC)	General Ed. Elective [3]	Business Elective [3]	MET 494 [3] Advanced Topics in MET	MET 420 [3] Heat Transfer (MET 345, MET 350 and MTT 301)	MET 494 [3] Advanced Topics in MET
★ ESC 100 [1] New Student Orientation		General Ed. Elective [3]	PHL 215 [3] A&H Engineering Ethics (ENG 102 or ESC 102) (WAC)			MET 494 [3] Advanced Topics in MET	General Ed. Elective [3]
15 Total Credit Hours	16 Total Credit Hours	16 Total Credit Hours	16 Total Credit Hours	15 Total Credit Hours	14 Total Credit Hours	14 Total Credit Hours	16 Total Credit Hours

Total Credits for MET Degree: **121** or **122** including ESC 130 Engineering Co-op Orientation

(Prerequisites) • (*Pre/co-requisite) • [# of Course Credits] • MET XXX = Only Offered That Fall/Spring Semester

- Required MET Courses **Highly recommended, yet optional.
- Required Science Courses
- Required English Courses (ESC 102 is preferred. However, can be substituted with ENG 102.)
- Required Writing Across the Curriculum (WAC)

- Required MET Electives
- Required Math Courses
- General Ed. Electives (2 A&Hs, 2 Ss, 1 ALAAME, & 2 DIVs)**

EASILY EARN AN IST MINOR AS A MET MAJOR! [CLICK HERE TO LEARN HOW](#)

EASILY EARN AN OSM MINOR AS AN MET MAJOR! [CLICK HERE TO LEARN HOW](#)

★ Must take ESC 100 (Exception of ASC 101 upon WCE Advisor Approval or special ASC 101 section)

↓ [Scroll Down to View the MET 5-Year Plan Degree Chart](#) ↓

Bachelor of MECHANICAL ENGINEERING TECHNOLOGY (MET)

Updated August 2023

5-Year Recommended Course Sequence

[CLICK HERE](#) for Course Catalog Description

Fall Semester 1	Spring Semester 2	Fall Semester 3	Spring Semester 4	Fall Semester 5	Spring Semester 6	Fall Semester 7	Spring Semester 8	Fall Semester 9	Spring Semester 10
MCE 180 [2] Computer Aided Engineering Lab I	MCE 181 [2] Computer Aided Engineering Lab II (MCE 180)	GET 285 [3] Science of Alternative Energy	GET 315 [3] Advanced Program Methods	MET 201 [3] Statics for ET (MTH 149, PHY 221 and ESC 120)	MET 202 [3] Dynamics for ET (MET 201)	MET 345 [3] Thermodynamics (PHY 221 and *MTT 300)	MET 330 [3] Adv. Dynamics & Vibrations (MTH 149 and MET 202)	MET 470 [1] Senior Design A (Senior Standing)	MET 480 [3] Senior Design B (MET 470)
ESC 120 [2] Intro to Engineering Design	MTH 149 [4] Math for Business Majors II (MTH 165 or MTH 167)	PHY 221 [5] College Physics I (MTH 165 or MTH 167)	CHM 251 [3] College Chemistry 1 (MTH 149)	MTT 300 [3] Applied Math (MTH 149)	MTT 301 [3] Advanced Applied Math (MTT 300)	MET 320 [3] Adv. Mechanics of Materials (MTH 149 and MET 201)	MET 350 [3] Fluid Mechanics (MET 345, MTT 300 and PHY 221)	MET 410 [3] Design of Machine Elements (MET 320 and MTT 301)	GET 430 [3] Elect Power, Cont, Instru (MTT 301 and EET 205)
MTH 165 [3] Intensive Precalc I OR MTH 167 [3] Precalculus I	ESC 102 [3] Technical Writing (Preferred)	General Ed. Elective [3]	CHM 256 [1] College Chemistry 1 Lab (MTH 149)	General Ed. Elective [3]	PHL 215 [3] A&H Engineering Ethics (ENG 102 or ESC 102) (WAC)	Business Elective [3]	MET 351 [2] Thermal Fluids Lab (MET 345 and *MET 350)	MET 411 [1] Design of Machine Elements Lab (MET 320 and MTT 301)	GET 431 [1] Elect Power, Controls, Instrument Lab (*GET 430) (WAC)
ENG 100 [3] Intensive Writing or ENG 101 [3] College Writing I	General Ed. Elective [3]	Communications Elective [3] (WAC)	**ESC 130 [1] Engineering Co-op Orientation	Any course [3] of your choosing OR Repeat a course for higher grade	Any course [3] of your choosing OR Repeat a course for higher grade	IST 203 [3] Software Tools	General Ed. Elective [3]	MET 420 [3] Heat Transfer (MET 345, MET 350 and MTT 301)	MET 494 [3] Advanced Topics in MET
GET 255 [3] Intro Robotics & Auto System	★ ESC 100 [1] New Student Orientation		Any course [3] of your choosing OR Repeat a course for higher grade				MET 494 [3] Advanced Topics in MET	MET 445 [3] Solid Modeling Applications (MCE 181, MET 320 and MET 350)	MET 494 [3] Advanced Topics in MET
			General Ed. Elective [3]					General Ed. Elective [3]	
13 Total Credit Hours	13 Total Credit Hours	14 Total Credit Hours	14 Total Credit Hours	12 Total Credit Hours	12 Total Credit Hours	12 Total Credit Hours	14 Total Credit Hours	14 Total Credit Hours	13 Total Credit Hours

Total Credits for MET Degree: 121 or 122 including ESC 130 Engineering Co-op Orientation

(Prerequisites) • (*Pre/co-requisite) • [# of Course Credits] • **MET XXX = Only Offered That Fall/Spring Semester**

- Required MET Courses **Highly recommended, yet optional.
- Required Science Courses
- Required English Courses (ESC 102 is preferred. However, can be substituted with ENG 102.)
- Required Writing Across the Curriculum (WAC)

★ Must take **ESC 100** (Exception of ASC 101 upon WCE Advisor Approval or special **ASC 101** section)

- Required MET Electives
- Required Math Courses
- General Ed. Electives (2 A&Hs, 2 Ss, 1 ALAAME, & 2 DIVs)

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↓ **Be Sure to Select a Course Listed Below that Qualifies for Two (2) General Ed. Electives** ↓

Updated Fall 2023

To eliminate one (1) of your General Education Requirements,
consider taking a course that qualifies as two (2) General Ed. Electives

Recommended Courses that Qualify as Two (2) General Ed. Electives

Course	Social Sciences (SS)	Arts & Humanities (AH)	Non-Western Social Sciences (ALAAME & NW-SS)
ANT 153 – Intro to African Cultures	X		X
ANT 275 – Ancient Mysteries	X		X
COM 201 – Com & Relationships / East Asian	X		X
COM 233 – Bollywood & Beyond	X		X
HIS 103 – Ancient World His to 1300 C.E.	X		X
HIS 104 – Modern World History	X		X
SOC 210 – Dev. Societies in Changing World	X		X
UST 206 – Megacities of Asia	X		X
UST 222 – World Population and Society	X		X
ANT 103 – Rise/Fall of Civilizations		X	X
ANT 171 – Native Civilization of Americas		X	X
ARB 274 – Introduction to Middle East		X	X
ART 281 – Asian Art		X	X
ART 286 – African Art		X	X
ENG 204 – World Literature		X	X
HIS 165 – Intro to Latin American History		X	X
HIS 175 – Intro to African History		X	X
HIS 185 – Survey of Middle Eastern History		X	X
HIS 195 – Intro to East Asian History		X	X
MUS 263 – Black Music of Two Worlds		X	X
PHL 255 – Non-Western Philosophy		X	X
PHL 262 – Medieval Philosophy		X	X
REL 101 – Understanding Religion		X	X
REL 268 – Religion & Culture in Africa		X	X
WLC 265 – Francophone Lit in Translation		X	X

Popular Introductory General Ed.
Courses for Engineering Students

SOCIAL SCIENCES (SS)

[PSY 220 – Child Development](#) (SS)

[UST 200 – Intro to Urban Studies](#) (SS)

[COM 233 – Bollywood & Beyond](#) (SS & ALAAME)

ARTS & HUMANITIES (AH)

[MUS 161 – Roots of Rock & Soul](#) (AH)

[UST 201 – Building Cleveland](#) (AH)

[REL 101 – Understanding Religion](#) (AH & ALAAME)

[MUS 263 – Black Music of Two Worlds](#) (AH & ALAAME)

[ANT 171 – Native Civilization of America](#) (AH & ALAAME)

US DIVERSITY (US DIV)

[ANT 100 – Human Diversity](#) (US DIV)

[SOC 201 – Race/Class/Gender](#) (US DIV)

AFRICAN-AMERICAN (AFRICAN-AMER.)

[SWK 150 – The Black Experience](#) (African- Amer.)

[UST 202 – Cleveland: The Afr-Amer. Exp.](#) (African-Amer.)