

Degree Requirements

In the curriculum listings appear several courses titled “MET elective.” MET electives allow the student to select and pursue specific career objectives within the mechanical engineering technology field. MET electives are upper-division MET courses, not specifically required for graduation.

Students from other institutions should refer to the sections of this catalog titled “Transfer Students” and “Admission to Baccalaureate Programs.” The Bachelor of Science in Mechanical Engineering Technology requires 190 credit hours as prescribed in the following curriculum outline.

Bachelor of Science in Mechanical Engineering Technology

Curriculum

Required courses and recommended terms during which they should be taken:

Freshman Year	Fall	
CHE 101/201	Chemistry	3
CHE 104/204	Chemistry Laboratory	1
MATH 111	College Algebra	4
MET 111	Orientation I	2
WRI 121	English Composition	3
	Psychology elective*	3
Total		16

Freshman Year	Winter	
MATH 112	Trigonometry	4
MET 112	Orientation II	2
MFG 103	Introductory Welding Processes	3
WRI 122	English Composition	3
	Social Science elective	3
Total		15

Freshman Year	Spring	
MATH 251	Differential Calculus	4
MFG 120	Manufacturing Processes I	4
SPE 111	Fundamentals of Speech	3
	Economics elective	3
	Humanities elective	3
Total		17

Sophomore Year	Fall	
MATH 252	Integral Calculus	4
MET 160	Materials I	3
MET 241	CAD for Mechanical Design I	2
PHY 201/221	General Physics	4
WRI 227	Technical Report Writing	3
Total		16

Sophomore Year	Winter	
ENGR 211	Statics**	4
MATH 254N	Vector Calculus I	4
MET 242	CAD for Mechanical Design II	2
MFG 112	Introduction to Manufacturing Processes	3
PHY 202/222	General Physics	4
Total		17

Sophomore Year	Spring	
ENGR 213	Strength of Materials**	4
MATH 361	Statistical Methods I	4
MET 218	Fluid Mechanics	4
PHY 203/223	General Physics	4
Total		16

Junior Year	Fall	
ENGR 236	Fundamentals of Electric Circuits	3
ENGR 266	Computer Programming for Engineers	3
MET 315	Machine Design I	3
MET 360	Materials II	3
MET 363	Instrumentation	3
Total		15

Junior Year	Winter	
ENGR 212	Dynamics	3
ENGR 355	Thermodynamics***	3
MET 316	Machine Design II	3
MET 375	Solid Modeling	3
	Social Science elective	3
Total		15

Junior Year	Spring	
MET 313	Applied Thermodynamics	3
MET 415	Design Project	3
MET 351	Finite Element Analysis	3
MFG 314	Geometric Dimensioning and Tolerancing	3
	Humanities elective	3
Total		15

Senior Year	Fall	
MGT 345	Engineering Economy	3
MET 323	Heat Transfer I	3
MET 326	Electric Power Systems	3
MET 490	Senior Projects I	3
WRI 321	Advanced Technical Communication I	3
	MET elective	3
Total		16

Senior Year	Winter	
MET 426	Fluid Power Systems	3
MET 437	Heat Transfer II	2
MET 491	Senior Projects II	3
SPE 321	Small Group and Team Communication	3
WRI 322	Advanced Technical Communication I	1
	MET elective	3
Total		15

Senior Year	Spring	
MET 492	Senior Projects III	3
MFG 331	Industrial Controls	3
WRI 323	Advanced Technical Communication I	1
	Engineering Exam****	1
	Humanities elective	3
	MET electives	6
Total		17

* PSY 201 Recommended

** ENGT 230, ENGT 231, ENGT 232 sequence may be substituted for the ENG 211, ENGR 213 sequence

*** MET 232 Thermodynamics may be substituted for ENGR 355 Thermodynamics

**** Engineering Exam to be selected from:
 • ENGR 485 Fundamentals of Engineering Exam
 • MFG 428 Manufacturing Engineering Certification