

Bachelor of Science in Manufacturing Engineering Technology

Curriculum

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

Freshman Year	Fall	
MATH 111	College Algebra	4
MET 111	Orientation I	2
WRI 121	English Composition	3
	Humanities/Social Science elective *	3
	Humanities/Social Science elective *	3
Total		15

Freshman Year	Winter	
CHE 101	Elementary Chemistry	3
CHE 104	Elementary Chemistry Laboratory	1
MFG 120	Manufacturing Processes I	4
MATH 112	Trigonometry	4
MET 112	Orientation II	2
WRI 122	English Composition	3
Total		17

Freshman Year	Spring	
MFG 103	Introductory Welding Processes	3
MATH 251	Differential Calculus	4
MET 241	CAD for Mechanical Design I	2
SPE 111	Fundamentals of Speech	3
	Humanities/Social Science elective *	3
Total		15

Sophomore Year	Fall	
MFG 314	Geometric Dimensioning and Tolerancing	3
MATH 252	Integral Calculus	4
MET 160	Materials I	3
MET 242	CAD for Mechanical Design II	2
PHY 201/221	General Physics	4
Total		16

Sophomore Year	Winter	
ENGR 211	Statics **	4
MFG 112	Introduction to Manufacturing Processes	3
MATH 361	Statistical Methods I	4
PHY 202/222	General Physics	4
Total		15

Sophomore Year	Spring	
ENGR 213	Strength of Materials **	4
ENGR 236	Fundamentals of Electric Circuits	3
ENGR 266	Computer Programming for Engineers	3
MATH 362	Statistical Methods II	4
WRI 227	Technical Report Writing	3
Total		17

Junior Year	Fall	
MFG 313	Manufacturing Analysis and Planning	3
MFG 341	Numeric Control Programming	3
MET 315	Machine Design I	3
MET 375	Solid Modeling	3
MET 360	Materials II	3
Total		15

Junior Year	Winter	
MFG 333	Statistical Methods for Quality Improvement	3
MFG 342	Computer Aided Machining	3
MFG 343	Manufacturing Tool Design	3
MET 316	Machine Design II	3
MET 326	Electric Power Systems	3
	Humanities/Social Science elective *	3
Total		18

Junior Year	Spring	
MGT 345	Engineering Economy	3
MFG 331	Industrial Controls	3
MFG 344	Design of Manufacturing Tooling	3
SPE 321	Small Group and Team Communication	3
	BUS/MGT restricted elective *****	3
Total		15

Senior Year	Fall	
ANTH 452	Globalization	3
MFG 453	Automation and Robotics in Manufacturing	3
MFG 454	Thermal Systems for Manufacturing	3
MFG 461	Senior Project I	3
WRI 327	Advanced Technical Writing	3
	Engineering Science elective ***	3
Total		18

Senior Year	Winter	
MFG 462	Senior Project II	3
	BUS/MGT restricted elective *****	3
	Humanities/Social Science elective *	3
	Manufacturing elective ****	3
	Manufacturing elective ****	3
Total		15

Senior Year	Spring	
ENGR 485	Fundamentals of Engineering Exam	1
ENGT 415	Occupational Safety	3
MFG 447	Lean Manufacturing	3
MFG 463	Senior Project III	3
	Humanities/Social Science elective *	3
	Manufacturing elective ****	3
Total		16

* Humanities/Social Science requirements: 9 credits of Humanities electives and 9 credits of Social Science electives. ANTH 452 Globalization counts as 3 Social Science credits.

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

*** Engineering Science elective: complete one of the following courses: Dynamics (ENGR 212), Fluid Mechanics (MET 218), or Thermodynamics (ENGR 355).

**** Manufacturing electives: selected Manufacturing and /or Mechanical Engineering Technology courses. Consult with your advisor for a list of approved courses.

***** Business/Management restricted elective: complete one of the following courses: BUS 226, BUS 304, BUS 335, MGT 321, MGT 461, or MGT 462.