

# Four-Year Gateway Degree Pathway Planner

## B.S. Manufacturing Engineering Technology (MFET)

For students admitted Fall 2026 and after.

**Explanation:** Your individual plan may vary based on course availability and individual goals. You should always consult with your advisor regularly and reference the course catalog available on the MU Web site.

### FIRST YEAR

FALL SEMESTER		SPRING SEMESTER	
Recommended Course Selections	Credits	Recommended Course Selections	Credits
AENG 130 Production Materials and Processes	4	AENG 241 Drafting Communications	4
AENG 161 Electronic Systems	4	OSEH 120 Occupational Safety & Environ. Health Issues	3
ENG 110 English Composition	3	MATH 130 or prerequisite	3
FYEX 100 First-Year Experience	3	COMM 100 Oral Communication	3
(Take CHEM placement test)	-	GEN ED: Gateway Course	3
<b>Total Credits for Semester</b>	<b>14</b>	<b>Total Credits for Semester</b>	<b>16</b>

### SECOND YEAR

FALL SEMESTER		SPRING SEMESTER	
Recommended Course Selections	Credits	Recommended Course Selections	Credits
AENG 271 Processing Non-Metallic Materials	4	AENG 281 Metallic Materials & Production Methods	4
AENG 225 Industrial Robotics I	4	AENG 342 Solid Modeling & 3D Prototyping	4
AENG 325 Power Conversion & Control	4	MATH 151, 160, or 161 Calculus (pick one)	4
BUAD 251 Principles of Management	3	GEN ED: Gateway Course	3
<b>Total Credits for Semester</b>	<b>15</b>	<b>Total Credits for Semester</b>	<b>15</b>

### THIRD YEAR

FALL SEMESTER		SPRING SEMESTER	
Recommended Course Selections	Credits	Recommended Course Selections	Credits
AENG 300+ Elective/Internship *	3	AENG 337 Programmable Logic Controllers I	4
AENG 382 Automated Manufacturing	4	AENG 375 Polymer and Ceramic Technology	4
CHEM 103 or CHEM 111 (pick one)	4	PHYS 103 or PHYS 131 (pick one)	4-5
GEN ED: Gateway Course	3	Free Elective (optional minor**)	3
WRIT 312/316/319 (pick one)	3	<b>Total Credits for Semester</b>	<b>15-16</b>
<b>Total Credits for Semester</b>	<b>17</b>		

### FOURTH YEAR

FALL SEMESTER		SPRING SEMESTER	
Recommended Course Selections	Credits	Recommended Course Selections	Credits
AENG 492 Technical Entrepreneurship	4	AENG 448 Machine Tool Design	4
AENG 494 Total Quality Management	4	AENG 470 Senior Seminar	1
MGMT 452 Production and Operations Management	3	GEN ED: Keystone Course	3
Free Elective (optional minor**)	3	Free Elective (optional minor**)	3
<b>Total Credits for Semester</b>	<b>14</b>	Free Elective (optional minor**)	3
		<b>Total Credits for Semester</b>	<b>14</b>

\* AENG 300+ Co-Op Recommendation: It is recommended that students complete an AENG 300 Co-Op as their directed elective, ideally during the summer after the sophomore or junior year. This approach helps balance the semester course load, and the Co-Op itself is a highly valuable experience that strengthens professional skills and supports job placement after graduation.

\*\* Minor requirements vary—consult with your advisor.