

Manufacturing Technology BS

(106-127 credits)

Why study Manufacturing Technology, Process Option?

The Process option focuses on select areas of the manufacturing field, CNC machining, CAD, quality assurance, and methods of metallic and non-metallic materials processing in the design and fabrication of consumable items. This option prepares the student to enter and progress in industry in a variety of areas including, quality assurance, inventory control, production line supervision or process management.

Other Degree Options

Minors in Applied Technology, Construction Management, Manufacturing, Geotechnical Engineering, and Mechanical Engineering

Career Opportunities

Students graduating from this program can successfully enter careers in a range of fields such as manufacturing technicians, applications technicians, quality technicians, as well as research technicians and technical sales and service.



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This is an example of a four year class schedule. Academic Advisors are there to help create individualized plans.

First Year

Fall 1

BACR (5 cr.)
MATH 142 or MATH 107 (5 cr.)
ENGL 101 (5 cr.)

Q2

General Elective (5 cr.)
ENGL 201 (5 cr.)
METC 110 (5 cr.)

Q3

BACR (5 cr.)
General Elective (3 cr.)
General Elective (5 cr.)
MENG 217 or TECH 217 (4 cr.)

Second Year

Q5

General Elective (5 cr.)
PHYS 100 or PHYS 110 or PH
MNTC 301 (5 cr.)

Q6

BACR (5 cr.)
CHEM 121 (GE CR) or 171 & 1
Diversity (5 cr.)
General Elective (2 cr.)

Q7

BACR (5 cr.)
General Elective (5 cr.)
General Elective (5 cr.)

Third Year

Q9

MNTC 208 (4 cr.)
TECH 330 (4 cr.)
TECH 403 (4 cr.)

Q10

MNTC 402 (5 cr.)
MNTC 406 (4 cr.)
TECH 331 (4 cr.)
TECH 454 (4 cr.)

Q11

MENG 353 (5 cr.)
MNTC 404 (5 cr.)
TECH 458 (4 cr.)

Fourth Year

Q13

MNTC 320 (5 cr.)
MNTC 430 (5 cr.)
TECH 452 (4 cr.)

Q14

MNTC 495 (4 cr.)
TECH 393 (4 cr.)
TECH 462 (4 cr.)

Q15

General Elective (5 cr.)
MNTC 491 (4 cr.)
TECH 456 (4 cr.)
TECH 490 (4 cr.)

Listed is a Sample Four Year Plan. Individual plans will vary based on placement test scores and course availability.

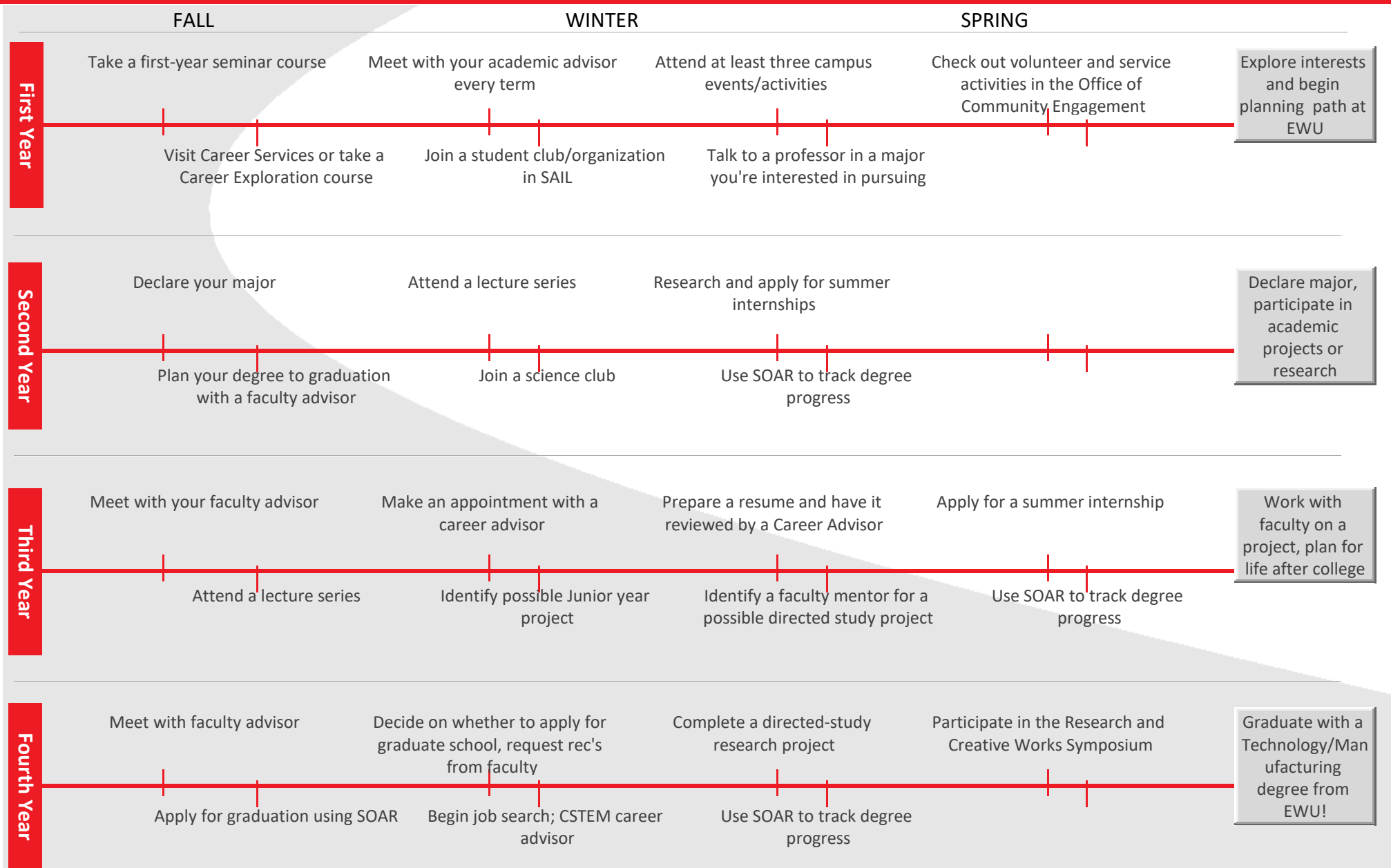


Flight Plan to Success

The following milestones will help you succeed and improve your experience at EWU.

Manufacturing Technology, BS

College of Science, Technology, Engineering, and Mathematics
Engineering & Design



All recommended activities can occur at any time during a student's time at EWU



Student's name: _____ EWU ID: _____

College of Science, Technology, Engineering, and Mathematics
 SOAR Department: Engr & Des | SOAR Major: TECH MANU
 Major Declaration Form: Manufacturing Technology
 Math proficiency needed: MATH 107 or 142

Bachelor of Science in Manufacturing Technology
 Process Option
 2019-2020 Catalog Year

First year courses and prerequisites	Notes	Previously offered **
Q1 BACR (5 cr.)		
Q1 MATH 142 or MATH 107 (5 cr.)		
Q1 ENGL 101 COLL COMP: EXPOSITN & ARGUMNT (5 cr.) Prerequisite: Writing Placement Test or General Advising. □		F18, W19, S19
Q2 General Elective (5 cr.)		
Q2 ENGL 201 COLL COMP: ANALYSIS/RES/DOCMNT (5 cr.) Prerequisite: ENGL 101, Writing Placement Test or general advising.		F18, W19, S19
Q2 METC 110 ENGINEERING GRAPHICS (5 cr.) Prerequisite: METC 102 or permission of instructor. □	Note: two years of high school drafting is highly recommended. □ □	F18, W19, S19
Q3 BACR (5 cr.)		
Q3 General Elective (3 cr.)		
Q3 General Elective (5 cr.)		
Q3 MENG 217 or TECH 217 (4 cr.)		

I have discussed this academic plan with the student listed above. Advisor name: _____ Advisor signature: _____

* See the catalog for prerequisites and other details.

** Future course offerings may differ from the past. Check the course schedule for future courses.

To follow this MAP, you should place into MATH 107 or 142. If you place lower, your custom MAP may change.

This list of courses is for information purposes only. All students are required to follow the catalog requirements for the year they declared a major.

Second year courses and prerequisites

Notes

Previously offered **

Q5	General Elective (5 cr.)	
Q5	PHYS 100 or PHYS 110 or PHYS 121 (5 cr.)	
Q5	MNTC 301 METALLIC PROCESSES (5 cr.) Prerequisite: MATH 107, MATH 141 or MATH 161; and METC 110; all with grades \geq C.	F18, W19, S19
Q6	BACR (5 cr.)	
Q6	CHEM 121 (GECR) or 171 & 171L (lab) (GECR) (5 cr.)	
Q6	Diversity (5 cr.)	
Q6	General Elective (2 cr.)	
Q7	BACR (5 cr.)	
Q7	General Elective (5 cr.)	
Q7	General Elective (5 cr.)	

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 ** Future course offerings may differ from the past. Check the course schedule for future courses.
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Third year courses and prerequisites	Notes	Previously offered **
Q9 MNTC 208 SURVEY OF ELECTRICITY (4 cr.) Prerequisite: MATH 141, PHYS 100 or PHYS 131; all with grades ?C.		F18, W19
Q9 TECH 330 TECH PROB ANALYSIS & DESIGN I (4 cr.) Prerequisites: ENGL 201 ?C.		F18, W19
Q9 TECH 403 COMP-AIDED DESIGN & PROJ MGMT (4 cr.) Prerequisites: MATH 107, MATH 141, MATH 142 or MATH 161; ? C.		F18, S19
Q10 MNTC 402 MACHINE TOOL I (5 cr.) Prerequisites: MENG 217 and MNTC 301; both with grades ?C.		W19
Q10 MNTC 406 WELDING TECHNOLOGY (4 cr.) Prerequisite: MNTC 301 with a grade ?C, or permission of instructor.		W19
Q10 TECH 331 TECH PROB ANALYSIS & DESIGN II (4 cr.) Prerequisite: TECH 330 ?C.		W19, S19
Q10 TECH 454 ENVIRONMENTAL ENGINEERING (4 cr.) Prerequisite: PHYS 100, PHYS 110 or PHYS 121; ENGL 201; MATH 107 or MATH 141; all ?C.		F18, W19
Q11 MENG 353 INDUSTRIAL MATERIALS (5 cr.) Prerequisite: CHEM 121 or CHEM 151, or CHEM 171 and CHEM 171L; ENGL 201; MATH 141, MATH 142 or MATH 161; all ?C.		F18, W19, S19
Q11 MNTC 404 COMPUTER NUMERICAL CONTR (5 cr.) Prerequisites: MNTC 301, MNTC 402, MENG 217; all with grades ?C.		S19
Q11 TECH 458 QUALITY ASSURANCE (4 cr.) Prerequisite: MATH 107 or MATH 141; ?C.	Note: this course cannot be substituted for METC 468 in degrees that require that class.□□	W19, S19

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Fourth year courses and prerequisites	Notes	Previously offered **
Q13 MNTC 320 NON-METALLIC PROCESSES (5 cr.) <i>Prerequisites: MATH 141 and METC 110; all with grades ?C.</i>		F18, W19
Q13 MNTC 430 MACHINE TOOL II (5 cr.) <i>Prerequisites: MNTC 301, MNTC 402; all with grades ?C.</i>		F18
Q13 TECH 452 ENGINEERING ECONOMICS (4 cr.) <i>Prerequisite: MATH 107 or MATH 141; ?C.</i>	Note: this course cannot be substituted for MENG 452 in degrees that require that class.□□	F18, S19
Q14 MNTC 495 INTERNSHIP (4 cr.) <i>Prerequisite: junior or senior status and permission of the instructor, department chair and dean.</i>	Note: Graded Pass/Fail. This course may be repeated.□□	F18, W19
Q14 TECH 393 TECHNOLOGY WORLD CIVILIZATION (4 cr.) <i>Prerequisite: ENGL 201 ?C.</i>		F18, W19, S19
Q14 TECH 462 INDUSTRIAL SAFETY ENGINEERING (4 cr.) <i>Prerequisites: junior standing and ENGL 201 ?C.</i>		F18, W19
Q15 General Elective (5 cr.)		
Q15 MNTC 491 SENIOR PROJECT (4 cr.) <i>Prerequisite: senior standing.</i>		W19, S19
Q15 TECH 456 ENGR, ETHIC CONTRACT, PATENT (4 cr.) <i>Prerequisite: ENGL 201 ?C.</i>		F18, S19
Q15 TECH 490 SR. CAPSTONE: PRODUCTION LAB (4 cr.) <i>Prerequisite: senior standing.</i>	Note: the course will simulate a real world design team concept by utilizing a design group that contains members of different program majors.□□	

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