Manufacturing Engineering Technology - Graduation MAP
Production Operations and Controls Emphasis

This is a suggested plan. Meet with an academic advisor to create a specific plan that best fits your academic needs. Remember, taking an average of 15 credit hours per semester facilitates timely graduation.

WEBER STATE UNIVERSITY

Catalog Year: 2018-2019 **NAME:**_____

☑	Course	Credit Hour	Semester Offered	Prerequisites	Notes
	Freshman (Semester 1)				
	MFET 1000 Manufacturing Engr Tech Fundamentals	3	Fa, Sp		• Declare major with AAS and BS Degrees in MFET: Production Operations and Controls • C or better in all major and support courses • Will accept MATH 1080 for MATH 1060 (C or better)
	MFET 1210 Machining Principles	3	Fa, Sp		
	DET 1010 Intro to Engineering & Technical Design	3	Fa, Sp	MATH 0970 or 0990 or higher	
	EET 1850 Industrial Electronics	4	Fa, Sp	MATH 1010 or higher	
	MATH 1060* Trigonometry **OR** MATH 1080 QL Pre-Calculus	3 5	Fa, Sp, Su	MATH 1010 or placement	
	Total Semester Credits	**16-18**			
	Freshman (Semester 2)				
	DET 1160 Geo Dimen & Tolerancing Using 3D CAD	3	Fa, Sp	DET 1010	• Please note that a C or better in MATH 1060 or a B or better in MATH 1080 is required to get into PHYS 2010 without being required to take a placement exam • Will accept MATH 1210 for MATH 1110
	COMM 1020 HU Principles of Public Speaking **OR** COMM 2110 HU Interpersonal & Small Group Com	3	Fa, Sp, Su		
	PHYS 2010 PS College Physics I **OR** PHYS 2210 PS Physics for Scientists & Engineers I	5	Fa, Sp, Su Fa, Sp	MATH 1060 MATH 1210	
	ENGL 2010 EN Intermediate College Writing	3	Fa, Sp, Su	ENGL 1010 or placement	
	MATH 1110 Calculus Concepts & Applications **OR** MATH 1210 Calculus I	3 4	Fa, Sp Fa, Sp, Su	MATH 1050 or MATH 1080 MATH 1050 & 1060 or 1080	
	Total Semester Credits	**17-18**			
	Freshman (Optional)				
	Total Semester Credits				
	Sophomore (Semester 3)				
	MFET 2150 & 2150L Metal Frming, Casting & Wld/ Lab	3	Fa		• MFET will accept MFET 2300 for MFET 2310 & 2320 (C or better)
	DET 2460 Product Design Fundamentals Using 3D CAD	3	Fa, Sp	DET 1160	
	MFET 2310 Statics for Engineering Technology	3	Fa, Sp	MATH 1110 or MATH 1210, PHYS 2010 or PHYS 2210	
	MFET 2500 & 2510 Process Automation I/ Lab	3	Fa, Sp	EET 1850	
	CHEM 1110 PS Elementary Chemistry	5	Fa, Sp, Su		
	Total Semester Credits	**17**			
	Sophomore (Semester 4)				
	MFET 2320 Mechanics of Materials	3	Fa, Sp	MFET 2310	• MFET will accept MFET 2300 for MFET 2310 & 2320 (C or better) • Apply for graduation with an AAS degree in MFET: Production Operations and Controls
	MFET 2410 Quality Concepts & Statistical Applications	3	Fa, Sp	MATH 1010 or higher	
	MFET 2440 & 2440L CNC in Manufacturing/ Lab	3	Sp	MFET 1210, MATH 1080 or MATH 1050 and MATH 1060	
	SS Gen Ed (Suggestion: ECON 1010 or ECON 2010)	3	Fa, Sp, Su		
	Creative Arts (CA)/ Diversity (DV)**	3	Fa, Sp, Su		
	LIBS 1704 IL Information Navigator***	1	Fa, Sp, Su		
	Total Semester Credits	**16**			
	Sophomore (Optional)				
	Total AAS Credits	**66-69**			

☑	Course	Credit Hours	Semester Offered	Prerequisites	Notes
	Junior (Semester 5)				
	MFET 3340 & 3340L Applied Fluid Power/ Lab	3	Fa, Sp	MFET 2300 or MFET 2320 PHYS 2010 or PHYS 2210	
	MFET 3350 & 3350L Plastic & Composite Mfg/ Lab	4	Fa	CHEM 1110 or CHEM 1210	
	MSE 3850 Statistical Process Control & Reliability	3	Fa, Sp	MFET 2410 or MATH 1040 or MATH 3410	
	DET 3100 Tool Design	3	Fa	MFET 1210, DET 2460, MATH 1080 or MATH 1050 & 1060	
	MET 3400 Machine Design	3	Fa, Sp	MFET 2300 or MFET 2310	
	Total Semester Credits	**16**			
	Junior (Semester 6)				
	MFET 3550 Manufacturing Supervision	3	Fa, Sp	MFET 2410 or MATH 1040	• Apply for Senior Project • AAS, AS, or AA prerequisite for Senior Project • MFET 3620 must be taken the semester prior to beginning Senior Project (MFET 4610 and MFET 4610L)
	MFET 3710 & 3710L Comp Aided Manufacturing & Rapid Prototyping/ Lab	3	Sp	MFET 2440/L, DET 1010, DET 1160 or MFET 3460	
	MSE 3910 Six Sigma Methods & Tools in Manfcturing	4	Fa, Sp	MSE 3850 or MFET 3810	
	MET 3150 Engineering Technology Materials	3	Fa, Sp	CHEM 1110 and MFET 2300 or MFET 2320	
	MFET 3620 Senior Capstone Project Planning	0.5	Fa, Sp	Department Approval	
	Creative Arts (CA)/ Humanities (HU)/ Diversity (DV)**	3	Fa, Sp, Su		
	Total Semester Credits	**16.5**			
	Junior (Optional)				
	Total Semester Credits				
	Senior (Semester 7)				
	MFET 4580 & 4585 Process Auto II & Robotics/ Lab	3	Fa, Sp	MFET 2500 and MFET 2510	• C or better in all major and support courses. Seniors may petition to have one C- allowed in major and support courses. Approval from the Program Coordinator and Department Chair is required.
	MSE 4590 Lean Manufacturing Systems	3	Fa	MFET 2300 or MFET 2320	
	MFET 4610 Senior Project Planning & Estimating	3	Fa, Sp	Coreq: MFET 4610L	
	MFET 4610L Senior Project Lab I	2	Fa, Sp	Coreq: MFET 4610	
	MSE 3700 Manufacturing Systems I	3	Fa	MFET 2300 or MFET 2320	
	Total Semester Credits	**14**			
	Senior (Semester 8)				
	MFET 4620L Senior Project Lab II	2	Fa, Sp		• Apply for graduation with BS degree in MFET: Production Operations and Controls • Take the CMfgT Exam
	MFET 4995 CMfgT Exam Review	1	Fa, Sp		
	American Institutions (AI)	3	Fa, Sp, Su		
	Social Science (SS)/ Diversity (DV)**	3	Fa, Sp, Su		
	Life Science (LS)/ Diversity (DV)**	3	Fa, Sp, Su		
	Approved Technical Elective	3	Fa, Sp, Su		
	Total Semester Credits	**15**			
	Senior (Optional)				
	Total Semester Credits				
	Total Bachelor Credits	**127.5-130.5**			

Gen Ed Breadth Requirements (do not duplicate departments)

□ HU	□ CA	□ HU or CA
□ SS	□ SS	
□ PS	□ LS	□ PS or LS
□ DV (Double dip with breadth course)		

Avoid Misadvisement! Consult your academic advisor (weber.edu/advisors), the WSU Catalog (weber.edu/catalog), and your CatTracks degree evaluation (log into your eWeber Student Portal).

*Students are assumed to have completed MATH 1050 prior to taking MATH 1060. MATH 1050 is a prerequisite to MATH 1110.

**Only 3 credits total are needed for Diversity (DV) requirement. Do not duplicate departments when choosing CA or HU gen eds. COMM class counts as HU.

***LIBS 1504 Information Literacy Competency Exam can be taken in lieu of LIBS 1704.

This is a suggested course sequence, not an academic contract. Curriculum and program requirements are subject to change without notification.

Program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

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