



# ADVANCED MANUFACTURING SCIENCES MAJOR, B.S.

## Operations Management Concentration | 2020-2021

Courses	Credits	Notes
General Studies/AMS Required Prerequisites	34	<a href="#">General Studies Catalog</a>
AMS Core Courses	34	<a href="#">AMS Academic Catalog</a>
Professional Internship	3	<a href="#">Classroom to Career Hub</a>
Concentration Courses	21	<a href="#">AMS Academic Catalog</a>
Advisor Approved Electives	28	<a href="#">AMS Academic Catalog</a>
<b>General Studies/AMS Required Prerequisites</b>		
Historical ( Multicultural or Global Diversity)	3	
Art and Humanities (Multicultural or Global Diversity)	3	
Oral Communication	3	
ENG 1010 - Composing Arguments	3	
MTH 1109 - College Algebra Stretch, Part II OR MTH 1110 - College Algebra for Calculus	4	
PHI 1030 - Introduction to Ethics (Recommended)	3	
ENG 1020 - Research and Argument Writing	3	
PHY 1020 - Physics of Advanced Materials (Recommended)	1	
PHY 2010 - College Physics I	4	
PHY 2030 - College Physics Laboratory	1	
ECO 2020 - Principles of Microeconomics (Recommended)	3	
CET 3120 - Engineering Economy	3	
<b>AMS Core Courses</b>		
AMS 1010 - Survey of Advanced Manufacturing & Workplace Prep	3	
AMS 3010 - Additive Manufacturing Stratasys Cert Prep	3	<b>Prerequisite(s):</b> IND 1450 or CET 1215 or MET 1200 with a grade of "C" or better, or permission of instructor
MET 1010 - Manufacturing Processes (Recommended) OR IND 2830 - Manufacturing Materials and Processes	3	
MTH 1120 - College Trigonometry	3	
EET 1001 - Electronics: An Introduction	3	<b>Prerequisite(s):</b> High school algebra
MET 1200 - Technical Drawing I (Recommended) OR IND 1450 - Technical Drawing and CAD OR CET 1215 - Engineering Graphics	3	
JMP 2610 - Introduction to Technical Writing	3	
MET 1310 - Principles of Quality Assurance	3	<b>Prerequisite(s):</b> Intermediate algebra or equivalent with a grade of "C" or better
MET 2010 - CNC Machining and Inspection	3	
MET 3000 - Manufacturing Analysis	4	
CSS 1751 - Computing and Security for Manufacturing	3	
AMS 4950 - Professional Internship	3	
<b>Operations Management Concentration Courses</b>		
BUS 1850 - Introduction to Business	3	
MGT 3000 - Organizational Management	3	
MGT 3530 - Human Resources Management	3	
MGT 3550 - Operations Management	3	<b>Prerequisite(s):</b> MTH1110 or MTH 1210
MGT 4050 - Purchasing and Supply Chain Management	3	
MGT 4350 - Enterprise Planning	3	
MGT 4550 - Project Management	3	<b>Prerequisite(s):</b> MTH1110 or MTH 1210
<b>AMS Advisor Approved Electives</b>		
28 credits with a minimum of 9 upper-division credits; Elective courses may not include those with the following prefixes: ACC, CIS, ECO, FIN, MKT, MGT; see AMS Elective Courses at <a href="#">AMS Academic Catalog</a>		
<b>TOTAL PROGRAM HOURS</b>	<b>120</b>	