



ADVANCED MANUFACTURING SCIENCES MAJOR, B.S.

Aerospace Concentration | 2021-2022

SAMPLE ACADEMIC PLAN OF STUDY

The following academic plan is a *sample* pathway to completing degree requirements for this major/concentration.

Semester 1 - Fall	
ENG 1010 Composing Arguments	3
Oral Communication	3
Art and Humanities (Multicultural or Global Diversity)	3
MTH 1110 College Algebra for Calculus	4
AMS 1010 Survey of Advanced Manufacturing & Workplace Prep	3
TOTAL CREDIT HOURS	16

Semester 2 - Spring	
ENG 1020 Research and Argument Writing	3
Historical (Multicultural or Global Diversity)	3
Art and Humanities (Multicultural or Global Diversity)	3
MET 1010 Manufacturing Processes (Recommended) OR IND 2830 Manufacturing Materials and Processes	3
MTH 1120 College Trigonometry	3
TOTAL CREDIT HOURS	15

Semester 3 - Fall	
Introduction to Engineering (CET 1040, EET 1040, MET 1040)	3
PHY 2010 College Physics I	4
PHY 2030 College Physics Lab	1
EET 1001 Electronics: An Introduction	3
MET 1200 Technical Drawing (Recommended) OR IND 1450 Technical Drawing and CAD OR CET 1215 Engineering Graphics	3
Advisor Approved Elective	3
TOTAL CREDIT HOURS	17

Semester 4 - Spring	
ECO 2020 Principles of Microeconomics (Recommended)	3
JMP 2610 Introduction to Technical Writing	3
MET 1310 Principles of Quality Assurance	3
AES 1050 Introduction to Space	3
AES 2607 Introduction to Aerospace Systems Simulation	3
TOTAL CREDIT HOURS	15

Semester 5 - Fall	
CET 3120 Engineering Economy	3
AMS 3010 Additive Manufacturing Stratasys Cert Prep	3
MET 3000 Manufacturing Analysis	4
AES 3600 Space Flight Operations I	3
Advisor Approved Elective	3
TOTAL CREDIT HOURS	16

Semester 6 - Spring	
CSS 1751 Computing and Security for Manufacturing	3
MET 2010 CNC Machining and Inspection	3
AES 3530 Aerodynamics	3
AES 4601 Space Flight Operations II	3
Advisor Approved Elective	3
TOTAL CREDIT HOURS	15

Semester 7 - Fall	
AES 4603 Aerospace Operations System Analysis and Design	3
AES 3610 Elements of Spacecraft Design I	3
Advisor Approved Elective	3
Advisor Approved Elective	3
Advisor Approved Elective	3
TOTAL CREDIT HOURS	15

Semester 8 - Spring	
AMS 4950 Professional Internship	3
AES 4620 Elements of Space Craft Design II	3
Advisor Approved Elective	3
Advisor Approved Elective	3
Advisor Approved Elective	3
TOTAL CREDIT HOURS	15

Advisor Approved Electives: (25) credit hours with a minimum of (9) upper-division courses.

Metropolitan State University of Denver reserves the right to withdraw courses; revise the academic calendar; or change curriculum, graduation procedures, requirements and policies that apply to students at any time.