



METROPOLITAN STATE UNIVERSITYSM
OF DENVER

College of Professional Studies

Advanced Manufacturing Sciences, B.S. - Computer Science Concentration

Minor (Not Required)

2019 - 2020 Catalog Year

First Year		
Fall: 13 Credits	ENG 1010 (3) Composing Arguments	
	Oral Communication (3)	
	MTH 1110 (4) College Algebra	
	PHI 1030 (3) Introduction to Ethics (Recommended)	
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Spring: 16 Credits	ENG 1020 (3) Research and Argument Writing	
	AMS 1010 (3) Survey of Adv Manuf & Workplace Prep	
	MET 1010 (3) Manufacturing Processes (Recommended) OR	
	IND 2830 (3) Manufacturing Materials and Processes	
	CS 1050 (4) Computer Science I	
CIS 1010 (3) Introduction to Computers*		

Third Year		
Fall: 16 Credits	ECO 2020 (3) Principles of Microeconomics (Recommended)	
	AMS 3010 (3) Additive Manufacturing Stratasys Cert Prep	
	MET 3000 (4) Manufacturing Analysis	
	MTH 2140 (2) Computational Matrix Algebra	
	CS 3250 (4) Software Development Methods & Tools*	
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Spring: 16 Credits	Historical (3) MC or GD recommended	
	CET 3120 (3) Engineering Economy	
	CSS 1751 (3) Computing and Security for Manufacturing	
	MET 2010 (3) CNC Machining and Inspection	
	CS 3750 (4) Computer and Network Security	

Second Year		
Fall: 17 Credits	EET 1001 (3) Electronics: An Introduction	
	MET 1200 (3) Technical Drawing I (Recommended) OR	
	IND 1450 (3) Technical Drawing and CAD OR	
	CET 1215 (3) Engineering Graphics	
	MTH 1120 (3) College Trigonometry	
	CS 1400 (4) Computer Organization I	
CS 2050 (4) Computer Science II		
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Spring: 16 Credits	PHY 2010 (4) College Physics I	
	PHY 2030 (1) College Physics Laboratory	
	MET 1310 (3) Principles of Quality Assurance	
	CS 2400 (4) Computer Organization II	
	MTH 1410 (4) Calculus I	

Fourth Year		
Fall: 14 Credits	Art and Humanities (3) MC or GD recommended	
	JMP 2610 (3) Introduction to Technical Writing	
	CS 3510 (4) Computer Graphics	
	CS 3600 (4) Operating Systems	
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Spring: 14 Credits	AMS 4950 (3) Professional Internship	
	CS 3140 (4) Human-Computer Interaction or Any 3000-4000 CS	
	CS 3410 (4) Embedded Systems or Any 3000-4000 CS	
	Advisor Approved Elective (Must be 3000-4000)*	

*Students need to complete 7 credits of AMS advisor approved electives. A minimum of 7 credits of electives must be Upper Division (3000 or 4000 level). All students are required to complete 40 credits of Upper Division to graduate. *NOTE: If not a transfer student, may need to complete an additional 1-credit of GS Natural & Physical Sciences*