METROPOLITAN STATE UNIVERSITY OF DENVER MECHANICAL ENGINEERING TECHNOLOGY **BACHELOR OF SCIENCE** 

## Interested in engineering? Transfer 38 pre-engineering credits, as well as machining and CAD credits, toward this degree!

The Mechanical Engineering Technology (MET) curriculum emphasizes both theoretical and practical applications, providing MSU Denver students with a solid foundation in mechanical engineering fundamentals, as well as hands-on laboratory work. This applied engineering emphasis allows students to experience the integration of engineering theory and practice. The MET program offers concentrations in mechanical and manufacturing engineering technology courses that keep students current with industry standards. Mechanical Engineering Technologists are employed in various industries ranging from large aerospace companies to small manufacturing and custom-design businesses applying engineering analysis to solve problems and design to enhance existing conditions. The MET program at MSU Denver is aimed to educate students in the theoretical and applied skillsets necessary to work in a wide range of technology industry positions.

## Learn more: msudenver.edu/met/programcurriculum







The Colorado Helps Advanced Manufacturing Program (CHAMP) is a U.S. Department of Labor TAACCCT-funded grant project serving to increase the attainment of degrees and certifications in manufacturing in high demand fields in Colorado. CHAMP Grant funds were used to purchase new equipment for the Mechanical Engineering Technology B.S. Degree program offered by MSU Denver, including a compression molding machine, an electric discharge machine, and a 3D metal printer. Engineering students now have new training opportunities with additive manufacturing machinery. This fact sheet was created with CHAMP Grant funds to notify RRCC students of their transfer options to MSU Denver for this CHAMP-supported engineering degree and their transfer credits toward its completion.

This fact sheet was funded by a grant awarded by the U.S. Department of Labor s Employment and Training Administration. The fact sheet was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites, and including, but not limited to accuracy of the information or its completeness, timeliness, usefulness, adequacy, continued availability or ownership. Red Rocks Community College is committed to diversity in its people and programs. The College is an equal opportunity educational institution and does not discriminate on the basis of disability, race, creed, color, gender, sexual orientation, gender expression, religion, age, national origin, or ancestry or any other category protected by applicable law. The College has designated the Human Resources Director as its Equal Opportunity Employment Officer and Title IX Administrator with the responsibility to coordinate its civil rights compliance activities and grievance procedures. Report all concerns or complaints relating to discrimination or harassment to the Title IX/EO Coordinator(s): Arnie Oudenhoven, Executive Director of HR, Title IX Coordinator, Title VII/Equal Opportunity Coordinator, ADA/Sec 504 Coordinator, 13300 West Sixth Avenue, Lakewood, Co 80228. 303.914.6298, arnie.oudenhoven@rrcc.edu.

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## PRE-ENGINEERING TRANSFER CREDITS: Complete the courses outlined below before transferring to MSU Denver. (38 CREDITS)

NOTE: It is imperative that you contact an engineering advisor at MSU Denver by the end of the first semester to clarify course work appropriate for your intended engineering major and to identify the community college courses and GPA necessary to meet the competitive admission requirements. Contact an advisor at msudenver.edu/eaet/advising or 303-556-2503.

GENERAL EDUCATION KNOWLEDGE AREA	CREDITS	RRCC COURSE NO.	<b>COURSE TITLE &amp; gtPATHWAYS CATEGORY</b> "C" grade or better
Written Communication	3 3	ENG 121 ENG 122	English Comp. I (GT-CO1) English Comp. II (GT-CO2)
Oral Communication	3	COM 115	Public Speaking
Art & Humanities	3	Contact an RRCC advisor to obtain information regarding course transfer.	Any 200-Level GT-AH1, GT-AH2, GT-AH3
Social & Behavioral Science	3	ECO 201	Macroeconomics (GT-SS1)
History	3	Contact an RRCC advisor to obtain information regarding course transfer.	Any 200-Level GT-HI1
Natural & Physical Sciences	5	*PHY 211	Physics: Calculus-based (GT-SC1) (Note: MAT 201 is a prerequisite for PHY 211)
	5	CHE 111	General College Chemistry I with Lab (GT-SC1)
Mathematics	5 5	MAT 201 MAT 202	Calculus I (GT-MA1) Calculus II (GT-MA1)

\*Students are strongly encouraged to complete course sequences such as, PHY 211 and PHY 212, at the same institution before transferring.

## MACHINING AND CAD TRANSFER CREDITS

MSU COURSE	CREDITS	RRCC COURSE NO. & TITLE (approved for articulation)
MET 1010 Manufacturing Processes	3	Any one of the following: MAC 110 Intro. to Engine Lathe MAC 120 Intro. to Milling Machine
TWET TO TO Manufacturing Frocesses		(Additional courses approved for transfer with a "C" grade or better: MAC 101 Intro. to Machine Shop, MTE 101 Intro. to Manufacturing, and MTE 120 Manufacturing Processes)
MET 1200 Technical Drawing I	3	Any one of the following: CAD 102 Computer Aided Drafting II (CAD 101 is a prerequisite for CAD 102) MAC 245 CAD/CAM 3D (cannot count towards both MET 1200 and MET 1210)
		(Additional courses approved for transfer with a "C" grade or better: CAD 100 Print Reading for CAD, EGT 101 Technical Drafting I, EGT 102 Technical Drafting II, MAC 102 Print Reading for Machinists, and MAC 240 CAD/CAM 2D)
	3	MAC 245 CAD/CAM 3D (cannot count towards both MET 1200 and MET 1210)
MET 1210 3D Modeling		(Additional courses approved for transfer with a "C" grade or better: CAD 153 Intro. to Pro Engineer/Basics, CAD 240 Inventor I/Autodesk, CAD 244 Advanced Inventor, and CAD 255 SolidWorks/Mechanical)
MET 1310 Principles of Quality Assurance	3	Any one of the following: MAC 250 Advanced Inspection Techniques MAC 266 Advanced Inspection Techniques II MAC 267 Metrology Maintenance
MET 3260 Direct Digital Mfg.	3	CAD 262 3D Printing* (CAD 202 is a perquisite for CAD 262)
MET 3410 Geometric Dimensioning and Tolerance	3	EGT 205 Geometric Dimension/Tolerance*

\*This course will meet the requirements for this upper division MET course but will not be counted toward the 40 hours of required upper division credit required for the Mechanical Engineering Technology B.S. Degree.