



METROPOLITAN STATE UNIVERSITY OF DENVER ADDITIVE MANUFACTURING ENGINEERING CERTIFICATE

Interested in 3-D printing? Want to increase your knowledge of additive manufacturing? Transfer 6 RRCC credits towards this 18-credit certificate!

The certificate in Additive Manufacturing Engineering at MSU Denver is designed to prepare students with hands-on training and knowledge necessary to meet increasing demand in the design, scanning, and manufacture of components with additive manufacturing techniques. The program will provide students with theoretical and practical knowledge in material identification, 3D design and scanning, design for additive manufacturing, direct digital manufacturing techniques, inspection, and applications. All of the courses within this certificate can be applied toward the completion of a major in the Mechanical Engineering Technology (MET) program.

MSU Denver Catalog, Oct. 12, 2016.

Learn more: msudenver.edu/eaet



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. The Additive Manufacturing Engineering Certificate offered by MSU Denver was developed specifically under CHAMP. This certificate provides additional possibilities for students to enhance their skills to more favorably compete in the job market. This fact sheet was created with CHAMP Grant funds to notify RRCC students of the Additive Manufacturing Engineering Certificate and their transfer credits toward its completion.

Revised 03/2017

ADDITIVE MANUFACTURING ENGINEERING CERTIFICATE REQUIRED COURSES

18 CREDITS

Students must earn 60% of required courses at MSU Denver. A maximum of 6 credits (2 courses) will transfer from RRCC.

MSU COURSE	CREDITS	RRCC COURSE NO. & TITLE, "C" grade or better
MET 1010 Manufacturing Processes	3	Any one of the following: MAC 110 Intro. to Engine Lathe MAC 120 Intro. to Milling Machine (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)
MET 1210 3D Modeling	3	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 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 prerequisite 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 from MSU Denver.



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**For more information about this certificate, contact MSU Denver Advising
msudenver.edu/eaet/advising or 303-556-2503**