



# PRECISION MACHINING CERTIFICATES

The TAA-Department of Labor funded the development, redesign and adaptation of all machining courses leading to the A.A.S. degree and certificates.

### Machine Shop Fundamentals

Required Courses	Credits
MAC 110 Introduction to Engine Lathe	3
MAC 120 Introduction to Milling Machine	3
<b>Total Credits</b>	<b>6</b>

### Manual Machine Operator

Requirements	Credits
Machine Shop Fundamentals Certificate	6
Required Courses	Credits
MAC 111 Intermediate Engine Lathe	3
MAC 121 Intermediate Milling Machine	3
MAC 250 Advanced Inspection Techniques	3
EGT 205 Geometric Dimensioning and Tolerancing	3
<b>Total Credits</b>	<b>18</b>

### Wire EDM Operator

Required Courses	Credits
MAC 253 Wire EDM Operation	3
MAC 257 Wire EDM Programming	3
<b>Total Credits</b>	<b>6</b>

### CNC Lathe Operator

Required Courses	Credits
MAC 201 Introduction to CNC Turning Operations	3
MAC 202 CNC Turning Operations II	3
MAC 245 CAD/CAM 3D	3
<b>Total Credits</b>	<b>9</b>

### CNC Mill Operator

Required Courses	Credits
MAC 205 Introduction to CNC Milling Operations	3
MAC 206 CNC Milling Operations II	3
MAC 245 CAD/CAM 3D	3
<b>Total Credits</b>	<b>9</b>

## Swiss Screw Machine Operator

Required Courses	Credits
MAC 210 Intro to Swiss Turn Operations	3
MAC 211 Swiss Turn Programming I	3
<b>Total Credits</b>	<b>6</b>

## 5-Axis Milling Operator

Required Courses	Credits
MAC 261 5-Axis Mill Programming	3
MAC 260 5-Axis Mill Operation	3
<b>Total Credits</b>	<b>6</b>

## Metrology/Quality Control

Required Courses	Credits
EGT 205 Geometric Dimensioning and Tolerancing	3
MAC 250 Advanced Inspection Techniques	3
MAC 266 Advanced Inspection Techniques II	3
MAC 267 Metrology Maintenance	3
<b>Total Credits</b>	<b>12</b>



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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