

a great
place
to start for

ADVANCED MANUFACTURING



The Advanced Manufacturing Program consists of classroom and shop learning experiences which will permit the student successfully completing the program to be qualified as an entry-level machinist. Major contact areas covered in the program are machine shop safety; measuring instruments; blueprint reading; operation of general machine tools such as lathe, mills, saws, lathes, solidworks, 3D printing, laser engraving, design/ manufacturing and certification. In addition, students will gain valuable experience in the Job Shop course through the design and production of customer projects. (Hours to be arranged by Instructor). A focal point of the Advanced Manufacturing Program is instruction in the programming set-up, and operation of the computer numerical control (CNC) equipment, as well as learning the basics of 3D Printing and Laser Engraving. Apprenticeships may be available with local machine shops and manufacturing businesses.

The following certificates may be earned:

Advanced Manufacturing

Class Hours

7:50-10:40 am, M, T, W, Th, F

OR

12:05-2:55 pm, M, T, W, Th, F

OR

5:30-10:00 pm, M, T, W, Th

Estimated Cost

Tuition**/Credit Hour Fee:

Semester 1: \$1,690.00(Tuition) \$180.00(Credit Hour Fee) <hr/> \$1,870.00	Semester 3: \$1,560.00(Tuition) \$170.00(Credit Hour Fee) <hr/> \$1,730.00
Semester 2: \$1,560.00(Tuition) \$170.00(Credit Hour Fee) <hr/> \$1,730.00	Semester 4: \$1,560.00(Tuition) \$170.00(Credit Hour Fee) <hr/> \$1,730.00

Program charges: \$500.00/semester*

Student ID: \$10.00/yearly

CTSO Charge \$20.00/yearly

Safety Glasses: \$5.00 (plus tax)

Books: \$129.00 (plus tax)

Mandatory Purchase off Campus:

Shop Shirt: \$17.00-30.00 (plus tax)

Estimated Totals:

Advanced Manufacturing Certificate: \$9,254.00 (plus tax)

Optional Costs:

Books: \$350.00 (plus tax)

Skills USA Workforce Ready Assessment: \$20.00

Students will be charged a program fee each semester they attend*

Based on Colorado Resident In-state tuition*

Additional costs may apply. All books, kits & supply costs are estimated. Cost, information, and classes are subject to change at any time.

This certificate is eligible for Financial Aid. You may begin the Financial Aid process by completing your Free Application for Federal Aid (FAFSA) at www.FAFSA.ed.gov. If you have further questions, please call (303)344-4910, ext 27797.



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Cost and information revised April 2021

ADVANCED MANUFACTURING CERTIFICATE

This certificate is a combination of the Advanced Manufacturing Level I

Certificate and the following courses:

Certificate Length: 4 Semesters

Courses required for this certificate:

MAC 101 Introduction to Machine Shop

MAC 102 Print Reading for Machinists

MAC 110 Introduction to Engine Lathe

MAC 111 Intermediate Engine Lathe

MAC 120 Introduction to Milling Machine

MAC 121 Intermediate Milling Machine

MAC 145 Production Manufacturing

MAC 275 Special Topics

MAC 201 Introduction to CNC Turning Operations

MAC 202 CNC Turning Operations II

MAC 205 Introduction to CNC Milling Operations

MAC 221 Surface Grinder Setups and Operations

MAC 240 CAD/CAM 2D

MAC 241 CAD/CAM 2D Lab

MAC 252 Practical Metallurgy

MAC 278 Machining Workshop

Advanced Manufacturing Certificate Total:

Clock Hours: 1620 Credit Hours: 49

Please visit www.pickenstech.org to view our catalog online for course descriptions

