



# AZ HIGH TECH FUTURES

## PRECISION MACHINING

Programs available at: Mesa, Maricopa Skill Center



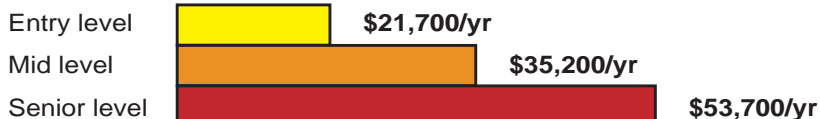
### What can I do in Precision Machining?

Precision Machining is the production of precision metal parts, from mass production to unique custom made parts. Machinists use the most basic hand tools to the latest computer-operated equipment to make aerospace hardware, medical devices, and everyday gadgets. Computer technology, math skills and creativity are essential in this career.

### Day in the Life

In the clean, air-conditioned shop machinists make custom designed products according to client specifications. After meeting to understand their client's ideas, they use a CAD drawing to program a CNC machining center to bring ideas to life. You could be creating a one-of-a-kind handlebar in one corner of the shop, and a hundred copies of an aircraft throttle in the other.

### Show Me the Money



Students in our courses will learn skills that are aligned with industry standards. Students will learn how to:

- Set up and operate machine tools such as manual lathes, mills, presses and grinders
- Load programs, position materials, program and operate Computer Numerically Controlled (CNC) machines
- Troubleshoot and correct problems in the production process
- Use reverse engineering to design a new product with computer technology
- Interpret blueprints to manufacture and inspect products

### BRENT KIRKLAND – PROGRAM ENGINEER – EXCALIBUR PRECISION

Brent was hired as a Lathe Operator at Excalibur Precision during his second year of studying machining at a Maricopa Community College, and within a year and a half was promoted to Program Engineer.

"I love precision machining! I've made all kinds of stuff like gyroscopic stabilizers for missiles and pedals for F-18 fighter jets. I even made new valves for my brother's 4-wheeler engine. There's nothing you can't do."

Brent plans to earn a Mechanical Engineering degree, with the encouragement of his teachers.

"They're really cool; they don't just teach you something, they want you to understand it."



**PURSUE YOUR HIGH TECH FUTURE THROUGH MARICOPA COMMUNITY COLLEGES!**

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# AZ HIGH TECH FUTURES



## PURSUE YOUR PRECISION MACHINING FUTURE THROUGH MARICOPA COMMUNITY COLLEGES!

### Mesa Community College

#### Associate of Applied Science (AAS) in:

- Machining and Product Development (66-69 credits)
- Manufacturing Engineering Technology (66 credits)
- Manufacturing Technology (61-69 credits)

#### Certificate of Completion (CCL) in:

- CAD/CAM – CNC I (15 credits)
- CAD/CAM – CNC II (30 credits)
- Manufacturing Machining I (15 credits)
- Manufacturing Machining II (15 credits)
- Manufacturing Management (29-30 credits)

### Maricopa Skill Center

#### Certificate of Completion (CCL) in:

- CNC Machinist (762 hrs)
- Manual Machinist (432 hrs)

## PURSUE YOUR HIGH TECH FUTURE THROUGH MARICOPA COMMUNITY COLLEGES!

Whether you're just out of high school, going back to college, or seeking to upgrade your job skills, the Maricopa Community Colleges offer a wide range of opportunities. Our 10 colleges and 2 skill centers are dedicated to excellence, meeting your educational needs with affordable, convenient classes.

Learn more at [www.azhightech.com](http://www.azhightech.com)

- Chandler-Gilbert
- Estrella Mountain
- GateWay
- Glendale
- Maricopa Skill Center
- Mesa
- Paradise Valley
- Phoenix
- Rio Salado
- Scottsdale
- South Mountain
- Southwest Skill Center



HTWI is an initiative of the Division of Academic and Student Affairs at the Maricopa Community Colleges.



**HTWI**  
HIGH TECH WORKFORCE INITIATIVE



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