

Career Profile for Manufacturing Technology

General Program Description: The **Associate of Applied Science (AAS) degree program in Manufacturing Technology** prepares students for employment as technicians and managers in the manufacturing industry. The program provides skills in computer programming and operation for current and future needs of the manufacturing industry. Students also gain knowledge, skills, and experience in traditional machining and manufacturing processes. The program is comprised of specialized curriculum in manufacturing technology, emphasizing mathematical and scientific theory, and a general education component. The **Associate of Applied Science (AAS) in Manufacturing Engineering Technology** prepares technologists with both conceptual and practical applications of processes, materials, and products related to manufacturing industries. The curriculum combines coursework in technology with a General Education component. The optional **Certificates of Completion (CCL) in Electromechanical Manufacturing Technology, CAD/CAM/CNC I and II, Machining I and II and Manufacturing Management** provide stepped paths leading to the AAS degree.

Advancement Options: Experienced machinists who receive on-the-job training or take classes may become CNC programmers. Some machinists are promoted to supervisor or manager jobs in their firms. A few machinists open their own shops.

Projected Job Growth: This occupation has a projected **12% growth over 10 years** (between 2003 and 2013) for the Greater Phoenix region. There is an average projected **112 job openings each year**, comprised of 38 new jobs and 74 positions vacated by individuals leaving the field (due to retirement, death, career changes, or other reasons).

| Location | Pay Period | Bureau of Labor Statistics - 2005 Salaries* | | |
|-----------------|------------|---|-----------------|-----------------|
| | | Entry-level | Median | Experienced |
| United States | Hourly | \$10.29 | \$19.00 | \$32.41 |
| | Yearly | \$21,400 | \$39,550 | \$67,400 |
| Greater Phoenix | Hourly | \$10.63 | \$18.69 | \$28.36 |
| | Yearly | \$22,100 | \$38,850 | \$59,000 |
| Arizona | Hourly | \$10.59 | \$18.77 | \$27.98 |
| | Yearly | \$22,000 | \$39,000 | \$58,200 |

For more career information for Manufacturing Technology, visit:

www.bls.gov/oco, www.maricopa.edu/workforce,
<http://www.acinet.org/>, or
www.mc.maricopa.edu/students/career/

For MCC program information, contact
Todd Verch, 480-461-7767,
Machine Technology Program Director, or visit
<http://www.mc.maricopa.edu/dept2/manufacturing/>

*Labor market information provided by AZ Dept of Economic Security in cooperation with the U.S. Dept of Labor, Bureau of Labor Statistics. Wages will vary depending on the employer, location, hours worked, experience, responsibility and other factors. Career and Re-Entry Services will collaborate with academic and occupational program departments to develop internship and career experience opportunities.

Sample Job Titles: Airplane Assemblers, Millwrights, Numerical Control Machine Operators, Quality Control Inspectors, Boilermakers, Machinists, Metal and Plastic Processing Workers, Sheet Metal Workers, Welding and Soldering Machine Operators

Types of Employers: Machine Shops, Metalworking Machinery Manufacturers, Motor Vehicle Parts Manufacturers, Aerospace Product and Parts Manufacturers, Metal Forging and Stamping Manufacturers, Plastic Product Manufacturing

Local Employers who posted related jobs on local job boards: Modern Industries, Dynamic Machine and Fabrication, Southwest Technical Solutions, Inc., Allied Tool & Die Company, Medicine Lodge

Professional Associations:
National Tooling and Machining Assoc.
www.ntma.org/eweb/StartPage.aspx
For current job openings, go to
Maricopa Career Network
<http://mcmaricopa.jobing.com/>

**International Association of Machinists
and Aerospace Workers**
www.iamaw.ca/

Manufacturing Technology / Machinists Overview At-A-Glance:

- Work with lathes, drill presses, and milling machines
- Make precision metal parts
- Many machinists do computer numerically controlled (CNC) programming
- Often wear safety glasses and earplugs
- Are highly skilled production workers
- Use many types of tools and measuring instruments
- Many use computer-aided design (CAD)
www.azcis.intocareers.org

For additional information on Manufacturing Technology careers or to watch occupational videos, visit:

Arizona Career Information Systems (AzCIS)
www.azcis.intocareers.org
User name: mesacc; Password: 4azcis02

Career Voyages
www.careervoyages.gov

Internships are supervised practical training in a short-term or temporary position with an emphasis placed on instruction, training, mentoring, networking and gaining applied work experience. These positions may be paid or unpaid. Contact Career and Re-Entry Services for internship information: 480-461-7430.

Internship Completed: _____ Dates: _____ Location: _____

Service-Learning is a teaching and learning method that connects meaningful community service with academic learning through guided reflection. Contact the Center for Service- Learning for more information: 480-461-7393.

Service-Learning Completed: _____ Dates: _____ Location: _____

Transfer Options: Contact Transfer Services for more transfer information: 480-461-7452.

Career Assessments Completed:

| Career Assessment / Results | Date Completed | Reviewed by |
|-----------------------------|----------------|-------------|
| | | |
| | | |
| | | |
| | | |
| | | |

Career Readiness Workshops / Activities Completed:

| Workshop Name / Activity | Date Completed | Follow Up Contact (s) |
|--|----------------|-----------------------|
| Resume Writing Workshop | | |
| Resume completed and reviewed by: | | |
| Participate in Mock Interview | | |
| How To Prepare for a Career Fair | | |
| Attend Career Fair / Job Expo Location: | | |
| Joined Professional Association: | | |
| | | |

MCC Career and Re-Entry Services
Providing Guidance for Career and Workplace Success

For more Career Profiles, visit

<http://www.mc.maricopa.edu/students/career/careerprofiles.html>

Meet with a Career Advisor in Bldg #36, Room SS5N - adjacent to the Kirk Student Center, 480-461-7430

