



ADVANCED MANUFACTURING

INDUSTRY OVERVIEW

This sector uses technology and advanced processes to create goods for consumers and businesses. With high-tech jobs in computers and robotics, Advanced Manufacturing includes diverse industries such as electronics, aerospace, fabrication metals, biotechnology, maritime and more.

Fields:

- Engineering
- Computer or Software
- Drafting and Technician
- Production
- Composites

FAST FACTS



8,862
Businesses



217,420
People employed



12,421
5-year job growth



5.7%
5-year job growth rate



\$92,929
Average annual salary

Source: EMSI. February 2016. Non-QCEW, QCEW, self-employed and extended proprietor employment data.

Top Five Occupations by Educational Attainment and Median Hourly Wages

HIGH SCHOOL DIPLOMA

- Maintenance & Repair Workers **\$19.65**
- Welders & Solderers **\$22.27**
- Machinists **\$22.59**
- Computer User Support Specialists **\$27.54**
- Supervisors of Mechanics **\$31.56**

ASSOCIATE DEGREE

- Chemical Technicians **\$24.27**
- Web Developers **\$27.93**
- Mechanical Drafters **\$29.76**
- Engineering Technicians **\$32.07**
- Computer Network Support Specialists **\$35.55**

BACHELOR'S DEGREE OR ABOVE

- Computer Programmers **\$37.74**
- Mechanical Engineers **\$42.37**
- Software Developers **\$51.31**
- Computer Hardware Engineers **\$54.88**
- Electrical Engineers **\$55.78**

KNOWLEDGE



- Mechanical
- Building and Construction
- Computers and Electronics
- Engineering and Technology
- Telecommunications
- Production and Processing

SKILLS



- Equipment Maintenance
- Troubleshooting
- Programming
- Systems Analysis
- Critical Thinking
- Quality Control Analysis

ABILITIES



- Problem-Solving
- Information Ordering
- Deductive Reasoning
- Inductive Reasoning
- Written Comprehension
- Manual Dexterity

Learn more about Knowledge, Skills and Abilities at [ONETonline.org/search](https://www.onetonline.org/search)



Sample of Local Employers

COMPANY NAME	DESCRIPTION	NUMBER OF EMPLOYEES
Quality Controlled Manufacturing, Inc. Est. 1978	Specializes in precision machining of all metals excluding exotic alloys	51 - 200
WD-40 Est. 1953	Produces lubricants, hand cleaners, and household cleaners, including WD-40	201 - 500
D&K Engineering Est. 2000	Specializes in end-to-end research and development, product development, and manufacturing services	201 - 500
Taylor Guitars Est. 1974	Manufactures acoustic and electric guitars	501 - 1,000
General Dynamics NASSCO Est. 1959	Designs, builds and repairs ships for government and commercial clients	1,001 - 5,000

Source: LinkedIn May 2017.



How do I start my career in Advanced Manufacturing?

- **Earn an associate degree** — San Diego City College (sdcity.edu/ManufacturingEngineeringTechnology)
- **Bring your ideas to life** — Fab Lab San Diego (fablabsd.org)
- **Get training** — MiraCosta College Technology Career Institute (tci.miracosta.edu/courses-manufacturing.html)
- **Find out about paid apprenticeship programs** — California Division of Apprenticeship Standards (dir.ca.gov/databases/das/aigstart.asp)
- **Find an apprenticeship work-study program** — Advanced Manufacturing & Transportation Apprenticeships of California (amtac-apprentice.org)

Learn more at workforce.org/mycareer