

ADVANCED MANUFACTURING

Pathway Guide

Is a career in Advanced Manufacturing right for you?

- Today's advanced manufacturing bears little resemblance to the production lines of the past. Manufacturing has moved from manual equipment to highly computerized equipment and innovative processes like 3-D printing.
- Employers are looking for people who have math skills and a grasp of how their complicated equipment works. They are looking for technicians at ease in the mechanical world, able to apply scientific and technical principles to structures and manufacturing processes.
- Many of California's Community Colleges prepare students for high paying jobs in advanced manufacturing.

most important

Basic Skills

required for work in the
Advanced Manufacturing
Pathway

critical thinking **leadership**
problem solving collaborative ability
ability to adapt & continue to learn
technical ability listening

3 Three Main Points

1

The fast pace of innovation in manufacturing is creating a lot of opportunities in new areas like space exploration, 3D printing and biotechnologies to name a few. In fact, U.S. manufacturers lead the world in innovation and new technologies.

2

Advances in manufacturing are making the world a better place to live and creating good paying jobs. These jobs have great opportunities for advancement and many are waiting to be filled.

3

What's more, manufacturing underpins a broad range of jobs that are quite different from the usual image of manufacturing. These are higher-skill jobs in basic research and technology development, product and process engineering and design, operations and maintenance, transportation, testing, and lab work.



Printable



[Manufacturing Career
Paths and Career Ladders](#)



Video



[AMERICA REVEALED: The Future of Manufacturing](#)

On Yul's journey he has been surprised to find that America is still making things and is still the leader in many of its fields of expertise. Americans are continuously innovating, Google, Intel, Facebook, some of the largest companies in the world all started in America. The fact is, we manufacture more now than we ever have in our history.



[Moving Into the Middle Class by Making Things](#)

There's no arguing the facts: Manufacturing, in California, is a huge element of the state's economy. According to the state's Employment Development Department, there are more than 1.2 million people working in the industry.



Resources



[Centers for Applied Competitive Technologies](#)

The California Community College System provides many advancing manufacturing career pathways for students, some of which are only available in California. Here are some examples of established career pathways. The CACT web site has great articles about manufacturing, from “The Importance of Manufacturing” to a list of Career Pathways and much more.



[Manufacturing Videos](#)

iSeek has a dozen videos on specific manufacturing careers that might be of interest to students. The site also has helpful links to Manufacturing education planning and career pathways.