



## CURRICULUM GUIDE 2017-2018

### ENGINEERING/MANUFACTURING TECHNICIAN

Certificate of Accomplishment in Engineering/Manufacturing Technician

#### Requirements for Certificate of Accomplishment:

- a) Complete satisfactorily the courses listed for the particular certificate.
- b) Complete at least 50% of the required units at Ohlone College.
- c) Maintain a 2.0 grade point average.

### ENGINEERING/MANUFACTURING TECHNICIAN

This certificate prepares students for a career as a technician in a variety of manufacturing and technical capacities, including electronics assembly, QA/QC, construction, medical devices, energy/environmental industry (i.e., solar energy), semi conductor, computer manufacturing, computer networking manufacturing, biotechnology automation, engineering consulting, telecommunications, etc.

#### Student Learning Outcomes

1. Describe the role of an engineer; discuss the application of GMP and GLP in bio-manufacturing and other technical fields.
2. Demonstrate proper cleanroom protocols.
3. Demonstrate the use of basic tools; recommend appropriate procedures to address equipment failure; interpret blueprints; apply principles of electricity and electronics appropriately.
4. Compare and contrast properties of materials such as metals, polymers, and ceramics' bio-materials; compare and contrast the mechanical, electrical, thermal, magnetic, and optical properties of metals, polymers, and ceramics.

BIOT-113	GMP/GLP and Writing SOPs	1.5
BIOT-119	Clean Room Operations	.5
CNET-105	IT Essentials (CompTIA A+)	4
ENGI-101	Introduction to Engineering	3
ENGI-115	Engineering Graphics and Design	4
ETEC-106	Electronics for Technology	3
ETEC-107	Properties of Materials	<u>1.5</u>
		17.5