

First Year

Semester 1

9 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
MITECH 300 Introduction to Manufacturing and Industrial Technology	3		
MAKR 110 3D Design for Additive Manufacturing	3		
ENGR 312 Engineering Graphics	3		

Semester 2

9 Units

COURSE	UNITS	PRE-REQS^	SEMESTERS OFFERED*
MITECH 302 Production Planning and System Design	3		
MITECH 310 Quality Systems	3		
MITECH 301 Materials and Processes	3		

Notes:

The Certificates of Achievement in Manufacturing and Industrial Technology prepares the student with engineering principles and technical skills for the manufacture of products and related industrial processes. Rooted in standards defined by the Society of Manufacturing Engineers (SME) the program is intended to provide Career Technical Education related to engineering principles, technical skills, and industrial processes for the manufacture of products. Subjects of study include shaping, forming operations, materials handling, instrumentation, and controls. The program covers concepts related to quality control, Computer Aided Manufacturing (CAM), and the use of industrial robotics. Optimization theory, industrial and manufacturing planning, and related management skills are also included in this program.

Zero Textbook Costs (ZTC):

The Zero Textbook Costs designation and logo are added to any course that provides free access to all required instructional materials. These are typically shared with students through Canvas. Courses that are designated as ZTC may still require students to purchase supplemental materials such as lab coats, a calculator, art supplies, etc. See full definitions and searching tips on the [Zero Textbook Costs](#) page of the college website.