# INDUSTRIAL DESIGN ENGINEERING - LEVEL II (CERTIFICATE N0620)

## Technology and Health Division Certificate N0620

This program is designed to prepare the student for a career in a wide range of industries including product and industrial design firms and fabrication and manufacturing companies. Students are introduced to product development from design through prototyping and fabrication for manufacturing. Portfolio or prototype development is required on each of the semester levels.

#### **Required Courses**

Course Prefix	Course Name	Units	
Completion of the Industrial Design Engineering - Level I coursework			
PLUS			
Completion of the Industrial Design Engineering - Level II coursework			
Total Units		27	
Course Prefix	Course Name	Units	
Industrial Design Engineering - Level I Coursework			
IDE 110	Design Foundation-Visual Literacy	3	
IDE 120	Introduction to CAD	3	
IDE 130	Introduction to Shop Processes	3	
IDE 150	Design Foundation II	3	
IDE 160	Intermediate CAD	3	
IDE 170	Introduction to Prototyping	3	
Total Units		18	
Course Prefix	Course Name	Units	
Industrial Design Engineering - Level II Coursework			
IDE 210	Advanced Media	3	
IDE 220	Advanced CAD	3	
IDE 230	Introduction to Mechanical Principles	3	
Total Units			

### **Recommended Electives**

Course Prefix	Course Name	Units
ELEC 50A	Electronic Circuits - Direct Current (DC)	4
ELEC 81	Laboratory Studies in Electronics Technology	1-2
MATH 51	Elementary Algebra	4
PHYS 1	Physics	4
WELD 30	Metal Sculpture	2
WELD 40	Introduction to Welding	2

#### **Program Learning Outcomes**

Review Student Learning Outcomes (SLOs) (http://www.mtsac.edu/instruction/outcomes/sloinfo.html) for this program.