

Areas students choose to focus on:

- Electronics Manufacturing
- Manufacturing Process
 Design
- Automation & Robotics
- Manufacturing Systems
- Sustainability
- Rapid Prototyping & 3-D Printing
- CAD/CAM

For more information, contact: Dr. Daniel Waldorf, Department Chair Industrial and Manufacturing Engineering Department Bldg. 192, Room 223 San Luis Obispo, CA 93407 (805) 756-2341 or visit www.ime.calpoly.edu

Students are encouraged to review admissions and curriculum requirements in the Cal Poly Catalog or at the following websites:

Curriculum Requirements <u>http://catalog.calpoly.edu</u>

Cal Poly Admissions http://admissions.calpoly.edu

CENG Advising Center http://eadvise.calpoly.edu/

California Polytechnic State University

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Manufacturing Engineering

Manufacturing Engineering

Is the profession that applies engineering analysis and methods to the production of all manufactured goods and services. The manufacturing engineer plans, develops, and optimizes the processes of production and designs products to be manufactured.

Graduates in manufacturing engineering are career-ready engineers prepared for:

- Immediate entry into their field, based on hands-on experience.
- Success as engineering professionals based on a solid grounding in the fundamentals
- Long-term career success based on a well-rounded education
- A life-long pursuit of learning

Career Opportunities

The B.S. Manufacturing Engineering degree opens the door to many attractive career options in numerous industries (e.g., aerospace, biomedical, electronics, energy, food processing, and manufacturing). Sample positions accepted include design engineer, manufacturing engineer/manager, process engineer/manager, and more.

Graduates are also well prepared for successful graduate study. Currently the IME Department offers masters degrees in Industrial Engineering (IE), Integrated Technology Management (ITM), and (jointly with the College of Business) the Engineering Management Program (EMP). The focus of each of these programs can be tailored to best fit the individual needs of a manufacturing engineer.

B.S. MfgE Curriculum

The curriculum emphasis is based upon the application of the basic knowledge of math, physics and materials involved in the wide variety of manufacturing processes. Knowledge of basic processes, tool design, and computer-aided manufacturing are applied directly to the problems of development and sustained operation of manufacturing operations

Computing Environment

Department and university laboratories and equipment, including computers and software, as well as industry projects are integrated into coursework throughout the curriculum to investigate, test, and apply theoretical principles learned in the classroom.

Project Experience

Due to their unique experiences in their classes and laboratories, manufacturing engineers serve as valuable team members for projects across the college and university such as: Carbon Fiber Skate Board

Community Service Design Project Electric Bike Project QL+ Ergo Knife Lead-Free Solder Joint Reliability LED Project PolyHouse Printed Circuit Board Design RFID Project Design SAE Supermileage and Baja Comp

Student Organizations

The department has active student chapters of the Society of Manufacturing Engineers (SME), Institute of Industrial Engineers (IIE), Society of Women Engineers (SWE), International Microelectronics and Packaging Society (IMAPS), Association of Facility Engineers (AFE), Society of Automotive Engineers (SAE), American Society of Mechanical Engineers (ASME), and Sales Engineering Club (SEC). Student teams compete in national competitions and student organizations sponsor industry/student events.

Manufacturing Engineering program accredited by the Engineering Accreditation Commission of ABET http://www.abet.org