INDUSTRIAL TECHNOLOGY MAJOR

Overview of Industrial Technology
The Industrial Technology program incorporates a broad range of technical/business management skills and knowledge to cultivate best-in-class industrial leaders. The collaborative, project-based classes create well-rounded problem solving graduates that would be successful and quickly functional in any industry. Students develop a strong foundation in the science and liberal arts, business and management disciplines, as well as extensive hands-on coursework in industrial operations and packaging. The program meets the needs of industry for people who know technology, who know and work well with people and who can manage the processes of change.

Sample Job Functions and Descriptions for Industrial Technology Professionals

Quality Engineer - Provide technical support to entire organizations to assure products are designed and manufactured with high quality and reliability, within all regulatory requirements and meet or exceed customer expectations.

Lean Operations Manager – Work with cross functional teams to design and continuously improve the flow of material and information in the factory/business including factory layouts, visual management, one flow manufacturing, 5S, value stream mapping, and other lean practices. Assist in proliferation of Lean Six Sigma activities and indicators. Assist in conducting training as and when the need arises and engaging all employees in the site to drive Kaizen.

Supply Chain Manager - Responsible for purchasing, contracting, expediting, traffic and logistic services, and warehousing. Serve as liaison with vendors and suppliers.

Production Supervisor - Work directly with sales force, purchasing, shipping, stockroom and training to ensure customer satisfaction. Monitor and improve department’s quality, productivity, and efficiency. Plan and coordinate manufacturing and production resources to meet customer needs and production plans. Handle responsibility of the manufacturing function of customer focused teams, schedule production timelines, supervise and motivate the activities of the assembly workers, lead improvement activities within the department, and provide development plans for individuals in the department.

Project Manager - Coordinate incoming work and projects, provide sales support and design and implement solutions for new and existing clients. Manage multiple activities, set priorities, work in teams and communicate effectively.

Technical Sales - Sell products to client base. Work involves establishing relationships with customers, development of sales region, market studies and forecasting, scheduling, and
administration. Position requires travel, strong interpersonal, verbal and written communication skills.

**Packaging Engineer** - Design product packaging to ensure product integrity and appeal under varying shipping and display conditions. Test, analyze, and select materials for packaging based on durability and cost effectiveness. Assist quality control to resolve packaging issues in the manufacturing plant.

**Typical Job Titles (Cal Poly recent graduates)**

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<td>Supply Chain Manager</td>
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<td>Quality Engineer</td>
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**Salary Information**

*Career Services’ Graduate Survey for Cal Poly recent grads:*
- 2013-2014 - Median Salary - $68,000
- 2013-2013 - Median Salary - $65,000

**Access Career Services’ Graduate Status Reports:**
[https://www.careers.calpoly.edu/search.php](https://www.careers.calpoly.edu/search.php)

**Industrial Technology at Cal Poly**

**Skills and Abilities**

Entrepreneurship is a constant theme among IT classes. Students who are drawn to IT enjoy technology and business as well as practical, hands-on projects. Ability to communicate effectively, manage others, and organize schedules to meet project deadlines. IT courses often involve group work, so the ability to work in teams is an important skill.

**What classes are involved?**

Below is a link provided for you by the Office of the Registrar. This link will take you to a webpage to determine Flow Charts and Curriculum Sheets for your declared major and concentration.

**Access to Industrial Technology Flowchart and Curriculum:**

1. Input your Catalog Year
2. Input your Major
3. Input your Emphasis (i.e. Operations Technology or Packaging Technology)

More academic resources about the Industrial Technology Major can be found at http://www.cob.calpoly.edu/undergraduate/major-curriculum/industrial-technology-major/
   a. For more academic assistance, please visit the advising center in Bldg 3 Room 100, or call at 805-756-2601

Senior Project Options
Senior projects are primarily operations or packaging based, and are meant to solve real world problems in the following areas:
   • Exploring the solutions for improving operational management of a company
   • Developing, designing/building a prototype for a new product and exploring its commercialization aspect
   • Exploring the opportunities for using technology for welfare of society, e.g., use of sustainable energy, environmental-friendly products/operations, etc.
   • Analysis and testing of a new technology/material

Visit the Industrial Technology Senior Project web site for information:
   http://www.cob.calpoly.edu/academic/industrial-technology/industrial-technology-senior-projects/

Preparation
   • Find information about the Industrial Technology major at:
     http://www.cob.calpoly.edu/academic/industrial-technology/
   • Industrial Technology Society (ITS) - http://itsociety.calpoly.edu/ - Meet people in your major, network with employers, and get involved to build your resume!

Career Research Resources
   • http://www.cob.calpoly.edu/academic/industrial-technology/student-success/ - Industrial Technology Student Success – Find historical information on previous Industrial Technology Graduates such as: Salary Ranges, Job Placement Success, Exit Exam Results, Graduation & Retention Results
   • www.careerservices.calpoly.edu – Cal Poly Career Services - career planning links, job listing links, career information and help
   • MustangJOBS – On your portal account, find local part-time job, internship, and career postings for Cal Poly students, in addition to information on employers who recruit Industrial Technology students
   • http://www.bls.gov/oco/ocos001.htm - Department of Labor & Statistics information about careers