Industrial Technology

Bachelor of Science degree
with a major in Industrial Technology
options in construction management, industrial design, manufacturing & operations management, and technology management

Minor in Industrial Technology

Department Chair
Saeed Mortazavi, Ph.D.
School of Business

Program Leader
James Russell, Ph.D.

Department of Applied Technology
Siemens Hall 111
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The Program

The program is designed for students interested in business and industry. Students have full use of modern and well equipped laboratories at Humboldt.

Graduates pursue careers in: industrial training, material scheduling, production supervision, technical writing, product development, industrial design, technical field representation, contracting, production planning, operations analysis, project control, construction management, inspection and testing, development engineering, manufacturing engineering, and industrial sales.

REQUIREMENTS FOR THE MAJOR

Core Requirements

Regardless of the option chosen, all students must complete these core requirements:

IT 104	Beginning Wood*
IT 140	Technical Drawing & Computer-Aided Design
IT 151	Electricity & Electronics
IT 230	Basic Machine Tool
IT 232/JMC 232	Technical Writing
IT 250	Industrial Health & Safety
IT 308	Socio-Technological Thinking Processes*
IT 311	Industrial Materials & Processes
IT 371	Power & Energy
IT 389	Industry Practicum
IT 475	Project Mgmt Fundamentals
IT 490	Senior Thesis **or**
IT 492	Senior Project
IT 493	Statistical Process Control & Quality Systems

Required Support Courses

CIS 100	Critical Thinking with Computers*
MATH 115	Algebra & Elementary Functions or equivalent
PHYX 106	College Physics: Mechanics & Heat*
STAT 108	Elementary Statistics*
CHEM 107	Fundamentals of Chemistry*

Electives

Each student will take 9 - 16 units of electives, depending on the option selected.

Construction Management Option

IT 225	Construction Systems
IT 265	Construction Mgmt Methods
IT 335	Construction Law
IT 340	Architectural Design
IT 420	Adv Construction Materials
IT 425	Estimating & Scheduling

Industrial Design Option

ART 105C	Color & Design*
ART 108	Beginning Graphic Arts*
IT 345	Advanced Computer-Aided Design
IT 349	Principles of Industrial Design
IT 391	Design Ergonomics
IT 431	Design Prototyping & CAD/CAM

Manufacturing & Operations Management Option

IT 251	Industrial Control Electronics
IT 290	Mechatronics & Robotics
▪ IT 374	Operations Management
IT 430	Computer Numerical Control
IT 494	Production Operations Management

Appropriate Technology Minor

ENGR 114	Whole Earth Engineering
ENGR 305	Appropriate Technology
ENGR 308	Technology & the Environment
PSCI 373	Politics of Sustainable Society
PSCI 464	Technology & Development
SOC 320	Social Ecology

Completing all courses constitutes eligibility for a minor in Appropriate Technology.

Business Administration Minor

BA 210	Legal Environment of Business
BA 345	Marketing Essentials
BA 355	Essentials of Financial & Management Accounting
BA 365	Finance Essentials
BA 375	Management Essentials **or**
BA 378	Small Business Management
ECON 104	Contemporary Topics in Economics* **or**
ECON 210	Principles of Economics (for MBA prerequisite)

Completing all courses constitutes eligibility for a minor in Business Administration. Refer to the Business Administration section for more details about receiving a minor in Business.

REQUIREMENTS FOR THE INDUSTRIAL TECHNOLOGY MINOR

A minimum of 18 IT units, at least nine of which must be upper division. A maximum of two units of independent study may apply to the minor.

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* Course also meets general education requirements.