

MS Business and Technology

Lou Tornatzky, Area Chair
Industrial Technology
Business Bldg. (03), Room 405
805-756-2680

Chris Carr, Associate Dean of Graduate Programs
and Faculty Development
Business Bldg. (03), Room 409
805 756-2637
mba@calpoly.edu
www.cob.calpoly.edu/gradProgram

General Characteristics

The Master of Science in Business and Technology (MS BT) program is designed to prepare students for critical "hands-on" positions in companies as operations-based facilitators.

Two tracks are offered. One provides applied development and learning opportunities for students with an interest in focused, faculty driven research projects. The second is focused upon the development of business-based decision tools with emphasis on technically-focused industrial processes and methods.

Prerequisites

Students are required to possess a bachelor's degree, from an accredited program in industrial technology, engineering or similar technical degree or background.

Admission Requirements

Admission to the MS BT program is based upon:

- Successful completion of an accredited undergraduate program of study;
- Prior academic performance, with particular emphasis placed on performance in the last 90 quarter units (60 semester units);
- Achievement on the General Test of the Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT); and
- Applicants to the *Applied Research & Development Track* must demonstrate an interest in a research project that is faculty driven (an interview and selection based upon ability to contribute to said projects is likely). Applicants to the *Working Professional Track* must possess related work experience.

Tuition and Fees

The MS Business and Technology *Working Professional Track* is offered through Continuing Education and University Outreach. As such, the program carries a separate tuition and fee schedule available in the Office of the Associate Dean of Graduate Programs, Orfalea College of Business.

Program of Study

The program requires 45 quarter-units. These courses collectively provide students with background information and training to:

- Understand global and national issues affecting industrial technology, in terms of the state of knowledge in the subfields of value chain management; packaging science and technology; technology entrepreneurship and innovation; and industrial processes and systems.
- Be able to generate timely and creative solutions that jointly improve business, technological and human outcomes, in the key sub-fields of industrial technology.
- Understand and apply decision tools and methods to a range of business and technological problems pertaining to the IT-relevant subfields of value chain management; packaging science and technology; technology entrepreneurship and innovation; and industrial processes and systems.
- Understand and apply knowledge of important societal issues that pervade the business and technological environment, particularly environmental sustainability; business ethics; and workforce growth and development.
- Demonstrate organizational leadership skills via written technical communication; oral communication and presentation; and effective team behavior.

Culminating Experience

In order to satisfy the culminating experience requirement, students following either the *Applied Research and Development Track* or the *Working Professional Track* must satisfactorily complete a comprehensive examination at the end of their program. Other courses and/or options may be available, but must be approved in advance by the Associate Dean of Graduate Programs.

| | <i>Units</i> |
|--|--------------|
| Required courses | 24 |
| IT 531 Lean Six Sigma Value Chain Management (4) | |
| IT 532 Technology Entrepreneurship (4) | |
| IT 533 Industrial Processes and Materials (4) | |
| IT 534 Adv. Packaging Dynamics for Distribution (4) | |
| IT 545 Product Conceptualization and Execution Using Rapid Prototyping (4) | |
| GSB 583 Management of Human Resources (4) | |
| Select one of the following tracks | 21 |
| <i>Applied Research and Development Track</i> | |
| IT 594, 595, 596 Business and Technology Project I, II, III (3,3,3) | |
| GSB 529 Effective Communication Skills for Managers (4) | |
| GSB 563 International Business Study Tour (4) | |
| STAT 513 Applied Experimental Design and Regression Models (4) | |
| <i>Working Professional Track</i> | |
| IT 527 Trends and Issues in Technology (4) | |
| IT 591, 592 Applied Industry Project I, II (2,3) | |
| GSB 511 Accounting for Managers (4) | |
| GSB 514 Legal/Regulatory Environment of Business (4) | |
| GSB 531 Managerial Finance (4) | |