

# BACHELOR OF MANAGEMENT FOR ENGINEERS

The Bachelor of Management for Engineers (BME) degree is open to students admitted to the five-year joint degree program in engineering and management. The program leads to a joint degree comprising the Bachelor of Management for Engineers degree and the Bachelor of Science degree in one of the specific engineering disciplines.

## Major Requirements

All BME majors must fulfill all University degree requirements, including the Freeman College of Management General Education Curriculum (<http://coursecatalog.bucknell.edu/collegeofmanagementcurricula/curriculaoverview/gened/>), and must take the following combination of six required and two elective courses:

### BME Core Requirements

|                         |   |   |
|-------------------------|---|---|
| MGMT 101                | Introduction to Organization and Management | 1 |
| ACFM 104                | Foundations of Accounting I                 | 1 |
| MIDE 201                | Marketing                                   | 1 |
| ACFM 210<br>or ACFM 203 | Managerial Finance<br>Corporate Finance     | 1 |
| MGMT 302                | The Stakeholder Organization                | 1 |
| MGMT 304                | The Strategic Organization                  | 1 |

### BME Electives

Beyond the BME core requirements, all BME majors must take **two** (2) Freeman College of Management elective courses chosen from MGMT, ACFM, ANOP, GLBM, MIDE, MORS, and/or MSUS course offerings – one at the 200 or 300 level and the other at the 300 level.

Students in this program may satisfy one of their eight Freeman College of Management courses through transfer of credit from a non-Bucknell program with prior approval of the College of Management. Suggested course sequences for the program and detailed information on the degree requirements are available from the Freeman College of Management or the Office of the Dean of Engineering.

## Courses

**MGMT 100. Exploring Management. .5 Credits.**

**Offered Fall Semester Only; Lecture hours:1.5**

Explores areas of inquiry and disciplines that are pervasive in understanding the management of people and organizations. Prerequisite: first year students only or permission of the instructor.

**MGMT 101. Introduction to Organization and Management. 1 Credit.**

**Offered Both Fall and Spring; Lecture hours:3,Other:3**

Each section learns management theories, concepts, and models, putting them into practice by designing and managing their own multi-divisional hybrid organizations that conduct major service projects funded by selling business products they created. Storytelling and writing are key pedagogies. Not open to first semester first-year students.

**MGMT 190. Freeman Summer Management Institute: Management in the 21st Century. .5 Credits.**

**Offered Summer Session Only; Lecture hours:9**

This summer course provides an introduction to the areas of inquiry and disciplines that are pervasive in understanding the management of people and organizations in the 21st century. Prerequisite: permission of the instructor.

**MGMT 191. Freeman Summer Management Institute: Organizational Behavior. .5 Credits.**

**Offered Summer Session Only; Lecture hours:9**

You will learn about explaining, predicting, and influencing the behavior of organization members. Through self-assessment and application of the theories, you will explore how you can make an effective contribution to organizations, manage others, and contribute to high quality work life for yourself and others. Prerequisite: permission of the instructor.

**MGMT 192. Freeman Summer Management Institute: Business Analytics and Data Analysis. .5 Credits.**

**Offered Summer Session Only; Lecture hours:9**

This course serves as a student's introduction to quantitative modeling and basic statistical analysis in a spreadsheet-based environment, especially as they apply to managerial decision making. Prerequisite: permission of the instructor.

**MGMT 193. Freeman Summer Management Institute: Marketing Fundamentals and Digital Media. .5 Credits.**

**Offered Summer Session Only; Lecture hours:9**

Introduction to principles of marketing. Examines how organizations facilitate exchange relationships by customers' needs and wants. Explores the intricacies of identifying and establishing market positions and understanding consumer behavior. Prerequisite: permission of the instructor.

**MGMT 194. Freeman Summer Management Institute: Accounting and Financial Analysis. .5 Credits.****Offered Summer Session Only; Lecture hours:9**

Introduction to accounting and financial management including financial statement preparation and analysis, financial forecasting, cost relationships, time value of money and capital budgeting. Prerequisite: permission of the instructor.

**MGMT 195. Freeman Summer Management Institute: The Language of Leadership. .5 Credits.****Offered Summer Session Only; Lecture hours:9**

An introduction to the literature of leadership. Prerequisite: permission of the instructor.

**MGMT 196. Freeman Summer Management Institute: Management Strategy. .5 Credits.****Offered Summer Session Only; Lecture hours:9**

Students learn strategic concepts and explore the challenges of formulating and implementing organizational strategies. Prerequisite: permission of the instructor.

**MGMT 197. Freeman Summer Management Institute: Management Consulting. .5 Credits.****Offered Summer Session Only; Lecture hours:9**

Action research course exposing students to principles of organization development and change. In teams, students develop, organize, and manage significant projects that involve multiple stakeholder groups. Prerequisite: permission of the instructor.

**MGMT 1NT. Management Non-Traditional Study Internship Credit. .25 Credits.****Offered Fall, Spring, Summer; Lecture hours:Varies,Other:3; Repeatable**

Quarter credit for unpaid internship experiences. Requires submission of proposal to the Assistant Dean and approval of proposal prior to enrollment. May repeat only once for a total of .5 credit. Prerequisite: permission of the Assistant Dean.

**MGMT 215. Topics in Management. .5 Credits.****Offered Either Fall or Spring; Lecture hours:3; Repeatable**

Topic is specific to the semester offered. Course description will be available prior to registration.

**MGMT 216. Virtual Internship. .5 Credits.****Offered Occasionally; Lecture hours:20**

This .5 credit course will provide professional development for students who have obtained virtual internships. Students will engage with Bucknell alumni, parents and professionals who are eager to help shape student paths. Students will do several assignments, reflection journal entries, supervisor and self evaluations, and a final poster.

**MGMT 285. Leadership in Management and Technology. 0 Credits.****Offered Summer Session Only; Lecture hours:1.5**

Interdisciplinary experiential program that encourages students to become enlightened leaders. Interactive sessions with faculty and organizational leaders help students learn about leadership, management of technology, critical thinking, teamwork, and decision making, which they also have the opportunity to practice through projects that entail solving real problems for organizations. Crosslisted as ENGR 285.

**MGMT 2NT. Management Non-traditional Study. 1 Credit.****Offered Fall, Spring, Summer; Lecture hours:Varies,Other:3; Repeatable**

A non-traditional study project arranged with an instructor and approved by the department or program chair and academic dean. Prerequisite: permission of the instructor.

**MGMT 302. The Stakeholder Organization. 1 Credit.****Offered Both Fall and Spring; Lecture hours:3**

Students explore the moral and ethical challenges associated with complex organizational decisions in a variety of contexts. Prerequisite: MGMT 101. Juniors and seniors only.

**MGMT 303. Technological Dystopia. 1 Credit.****Offered Both Fall and Spring; Lecture hours:3**

Organizations solve a variety of problems by deploying information systems. This course explores a range of technological impacts on organizations from their behavior to survival.

**MGMT 304. The Strategic Organization. 1 Credit.****Offered Both Fall and Spring; Lecture hours:3**

Students learn strategic concepts and explore the challenges of formulating and implementing organizational strategies. Prerequisites: MGMT 101. Senior BSBA and MGEG sub-seniors, others by permission.

**MGMT 310. Independent Study in Management (.5 course credit). .5 Credits.****Offered Either Fall or Spring; Lecture hours:Varies; Repeatable**

Individual study or projects, supervised by instructor. Prerequisite: permission of the instructor.

**MGMT 311. Undergraduate Research in Management. .5-2 Credits.****Offered Occasionally; Lecture hours:Varies,Other:1; Repeatable**

Prior to registering for this course, the student should identify a particular research project they are interested in pursuing and a particular professor to supervise that project. The supervising professor must give permission for the student to register for this course.

**MGMT 314. Advanced Topics in Management (.5 course credit). .5 Credits.****Offered Either Fall or Spring; Lecture hours:2; Repeatable**

Topic is specific to the semester offered. Course description will be provided prior to registration. Prerequisites, if any, will be established by instructor each semester.

**MGMT 315. Advanced Topics in Management (1.0 course credit). 1 Credit.****Offered Either Fall or Spring; Lecture hours:3; Repeatable**

Topic is specific to the semester offered. Course description will be available prior to registration.

**MGMT 363. Leadership Theory & Personal Development. 1 Credit.****Offered Either Fall or Spring; Lecture hours:3**

This course will examine historical and contemporary leadership theories and their application in multifaceted industries. Students will use the foundation of these theories to explore their own personal leadership identity and create a personal leadership development plan. Not open to students who have taken MGMT 333 or UNIV 401.

**MGMT 364. Team Leadership. 1 Credit.****Offered Either Fall or Spring; Lecture hours:3**

Students will learn essential theories and concepts for analyzing, understanding, and leading high performing teams. Through case studies, articles, textbooks, and real life scenarios, the course will focus on strategies to build, organize, and structure teams to create successful team dynamics and cohesion.

**MGMT 366. So You Want to Become a Leader - Developing your Personal Leadership Approach. .5 Credits.****Offered Either Fall or Spring; Lecture hours:40**

Highly interactive course that will run a week prior to the start of the spring semester. Led by Ken Freeman '72. Practical learning through on and off-campus visits with distinguished leaders having diverse approaches to leadership. Each student will develop a personal leadership approach. Admission by application only.

**MGMT 382. Predictive Analytics. 1 Credit.****Offered Alternate Fall or Spring; Lecture hours:3**

Study and application of analytical methods for large scale datasets. Topics include clustering and classification methods and association rules. Prerequisite: ANOP 102 or MGMT 102 or MATH 216 or equivalent.

**MGMT 385. Internship in Management and Technology. .5 Credits.****Offered Summer Session Only; Lecture hours:1.5**

Internship in complex management challenges, the integral role of technology in organizations, and interdisciplinary decision making. Open only to students admitted to the Institute for Leadership in Technology and Management. Prerequisites: MGMT 285 and permission of the instructor. Crosslisted as ENGR 385.

**MGMT 390. Honors Course in Management. 1 Credit.****Offered Either Fall or Spring; Lecture hours:Varies; Repeatable**

Special and independent studies for BSBA students selected under guidelines of the school and the University Honors Council. Honors thesis required. Prerequisites: nomination by the school and permission of the instructor.

**MGMT 3NT. Management Non-traditional Study. 1-4 Credits.****Offered Fall Semester Only; Lecture hours:Varies,Other:Varies; Repeatable**

Non-traditional Study in management.

**MGMT 400. Management Consulting. 1 Credit.****Offered Both Fall and Spring; Lecture hours:Varies,Other:3**

This action research course exposes students to principles of organization development and change. Students integrate knowledge, skills, and experiences gained from core, major, and relevant CCC courses. In teams, students develop, organize, and manage significant projects for real organizational clients that further key goals and involve multiple stakeholders.

**MGMT 404. Honors Strategy Seminar. 1 Credit.****Offered Occasionally; Lecture hours:3**

An intensive honors seminar in the subject of strategy from its historical origins to its modern day application in business and government. Prerequisites: MGMT 101 and permission of the instructor. Only open to BSBA or MGEG seniors.