# **BACHELOR OF MANAGEMENT FOR ENGINEERS**

# **Major Requirements**

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.

All BME majors must fulfill all University degree requirements, including the College of Arts & Sciences College Core Curriculum, and must take the following six required MGMT courses:

MGMT 101	Introduction to Organization and Management	1
MGMT 104	Foundations of Accounting I	1
MGMT 201	Marketing	1
MGMT 203	Managerial Finance	1
or ACFM 203	Corporate Finance	
MGMT 302	The Stakeholder Organization	1
MGMT 304	The Strategic Organization	1

In addition, **all BME majors** must take TWO Freeman College of Management electives courses, chosen from MGMT, ACFM, GLBM, MIDE, 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:3,0ther: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 102. Quantitative Reasoning for Managers. 1 Credit.

#### Offered Both Fall and Spring; Lecture hours:3,0ther:1

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.

#### MGMT 104. Foundations of Accounting I. 1 Credit.

#### Offered Both Fall and Spring; Lecture hours:3,0ther:1

Introduction to accounting and financial management including financial statement preparation and analysis, financial forecasting, cost relationships, time value of money and capital budgeting. Not open to students who have taken MGMT 200.

#### 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 201. Marketing. 1 Credit.

#### Offered Both Fall and Spring; Lecture hours:3

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.

#### MGMT 202. Operations. 1 Credit.

#### Offered Either Fall or Spring; Lecture hours:3

This course introduces students to the ways in which to model, analyze, and improve processes for producing services and goods. Prerequisite: MGMT 102. MATH 216 accepted with permission of the instructor.

#### MGMT 203. Managerial Finance. 1 Credit.

#### Offered Both Fall and Spring; Lecture hours:3

Financial analysis, forecasting, and valuation of projects and companies incorporating risk-return tradeoffs and capital structure and dividend decisions. Employs 10-K research and presentations. Prerequisite: MGMT 104 or MGMT 200. Intended ACFM majors must take ACFM 203 or ACFM 370 instead of MGMT 203.

#### MGMT 215. Topics in Management. 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 270. South Africa: Social Entrepreneurship. 1 Credit.

#### Offered Occasionally; Lecture hours:15

The course examines the legacy of apartheid and the role of social entrepreneurship in transforming communities. Students will be placed in community organizations in nearby townships. Prerequisite: permission of the instructor. Crosslisted as ECON 270 and PSYC 270 and UNIV 284 and WMST 275.

#### 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. The Technological Organization. 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. .25-2 Credits.

# Offered Either Fall or Spring; Lecture hours: Varies; Repeatable

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

#### MGMT 314. Topics in Management. .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 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 333. Leadership Theory & Personal Development. 1 Credit.

### Offered Spring Semester Only; 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.

#### MGMT 334. Team Leadership. 1 Credit.

#### Offered Fall Semester Only; 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 335. So You Want to Become a Leader - Developing Your Personal Leadership Approach. .5 Credits.

# Offered Either Fall or Spring; Lecture hours:3; Repeatable

Highly interactive course over Spring Break. Led by Ken Freeman '72. Practical learning through visits with distinguished leaders having diverse approaches to leadership. Each student will develop a personal leadership approach, representing a framework for personal development and growth for years to come. Admission into course by online 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: 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.

#### Non-traditional Study in management.

# 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.