

Department of Management, Information Systems and Quantitative Methods

Interim Chair: Barbara Wech, Ph.D.

The [Department of Management, Information Systems and Quantitative Methods](#) supports the mission of the Collat School of Business through the department's majors and course offerings. The department offers an educational foundation that prepares students for professional careers and enables them to pursue graduate studies.

The department is responsible for courses, concentrations, majors and minors in management, information systems, entrepreneurship and quantitative methods. Below is an overview of each major. Detailed degree requirements are located on the Majors Tab above.

Management Major

The management major is designed to prepare graduates to be effective decision makers in an organizational setting. The objective of the major is to enable students to acquire the knowledge and skills necessary for success and sustained growth in a management career. Internships, elective courses, and concentrations allow students to customize their curriculum. Management majors have the option of choosing a concentration in **Business Administration** or **Operations Management**. A student not choosing a concentration will have a **Management** degree with no concentration, but more elective options.

Human Resource Management Major

The human resource management major prepares graduates to enter their career path armed with the skills necessary to build and grow a successful team in any industry. The curriculum has been designed to meet the very high standards established by the Society for Human Resource Management and to prepare graduates to earn professional certification. Students participate in internships, research projects, and professional organizations while earning the degree. The knowledge and skills acquired in this program enable graduates to confidently enter this growing field.

Entrepreneurship Major

The entrepreneurship major in the UAB J. Frank Barefield, Jr. Entrepreneurship Program instills learners with powerful and transformational conceptualizations of how new ventures, businesses, movements, and many other kinds of organizations grow, adapt, and thrive in entrepreneurial ways. Entrepreneurs turn problems and inefficiencies into opportunities in markets, communities, and institutional settings. In addition to the curricular offerings, students in the entrepreneurship major have special access to a range of practice-oriented extracurricular programs and professional opportunities in the regional ecosystem. Barefield Entrepreneurship Program students and alumni have begun their careers with existing entrepreneurial ventures,

with entrepreneurial teams and departments in established companies, and have launched their own entrepreneurial ventures.

Information Systems Major

The information systems major is designed to prepare graduates with the foundational knowledge and managerial skills to enter careers in information systems, systems analysis and design, IT project management, cyber security, data analytics, and/or the implementation of a complex information systems solution to business challenges. Information Systems majors have the option of choosing a concentration in **Cyber Security Management** or **Data Analytics**. Students can also build an **Information Systems** degree with a combination of required and elective courses in information systems according to their specific career plans.

Major in Management

Requirements	Hours
Grade and GPA Requirement	
Students must earn at least a grade of C in all stated prerequisite courses for the management major. An overall 2.0 GPA in all courses used in the major is also required. At least 15 hours of the major courses must be taken at UAB. The universities course forgiveness policy may be applied to this major.	
Blazer Core Curriculum	41
Analytics and Technology	
BUS 214 Introduction to Business Statistics	3
BUS 204 Business Analytics Applications	3
or BUS 215 Foundations in Business Analytics	
BUS 201 Introduction to Artificial Intelligence	3
or BUS 203 Working with Data and Disruptive Technologies	
Business Acumen	
BUS 202 Know Your Accounting Numbers	3
BUS 302 Business Foundations: Finance	3
BUS 303 Introduction to Organizational Management and Marketing	3
BUS 304 Operations and Supply Chain Management	3
or BUS 246 Legal Environment of Business	
Communication	
BUS 350 Professional Business Communications	3
or BUS 351 Innovative Communication Strategies	
BUS 361 Storytelling with Data	3
Professionalism	
BUS 306 Professional Development and Personal Branding	3
BUS 325 Self Leadership and Team Dynamics: Building Professional Excellence	3
The Capstone Experience	
BUS 450 Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹	3
or BUS 495 Business Honors Seminar, I	
Experiential Learning ²	
Management Major Courses	
MG 302 Management Processes and Behavior	3
MG 401 Organizational Behavior	3
MG 409 Human Resource Management	3
MG 417 Project Management	3
Management Electives	12
Choose 4 (12 hours) MG 300/400 courses or other upper level courses with approval of major advisor	

Business Electives ³	12
General Electives	7
Total Hours	120

- ¹ Business Honors students take BUS 495.
- ² All business majors are required to participate in experiential education. Experiential education can carry 0 - 3 credit hours. This requirement may be met by satisfactory completion of [AC 364](#), [AC 464](#), [AC 474](#), [BUS 496](#), [DB 495](#), [EC 460](#), [ENT 445](#), [ENT 426](#), [FN 460](#), [FN 358](#), [FN 359](#), [IB 495](#), [IS 464](#), [MG 445](#), [MK 425](#), or [MK 445](#) . Other courses may be approved by your Program. You may access details about options for satisfying this degree requirement here: <https://www.uab.edu/business/home/undergraduate/experiential-learning>. Please see your academic advisor for specific requirements for your major.
- ³ Take 12 hours not required in the major course requirements.

Major in Management with Business Administration Concentration

The business administration concentration is designed for students who seek more flexibility within the management major by allowing them to select courses from other disciplines to round out the major. Besides providing greater flexibility, the student can select advanced studies in other areas of business such as accounting, economics, entrepreneurship, finance, information systems, international business, management, marketing, and quantitative methods.

Requirements	Hours
Blazer Core Curriculum	41
Analytics and Technology	
BUS 214 Introduction to Business Statistics	3
BUS 204 Business Analytics Applications or BUS 215 Foundations in Business Analytics	3
BUS 201 Introduction to Artificial Intelligence or BUS 203 Working with Data and Disruptive Technologies	3
Business Acumen	
BUS 202 Know Your Accounting Numbers	3
BUS 302 Business Foundations: Finance	3
BUS 303 Introduction to Organizational Management and Marketing	3
BUS 304 Operations and Supply Chain Management or BUS 246 Legal Environment of Business	3
Communication	
BUS 350 Professional Business Communications or BUS 351 Innovative Communication Strategies	3
BUS 361 Storytelling with Data	3
Professionalism	
BUS 306 Professional Development and Personal Branding	3
BUS 325 Self Leadership and Team Dynamics: Building Professional Excellence	3
The Capstone Experience	
BUS 450 Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹ or BUS 495 Business Honors Seminar, I	3
Experiential Learning ²	
Management Major Courses	
MG 302 Management Processes and Behavior	3
MG 409 Human Resource Management	3

MG 417 Project Management	3
Business Administration Concentration Courses	
Choose any 5 300/400 level business courses from AC, BUS, DB, EC, ENT, FN, IB, IS, MG, MK, and QM	15
Business Electives ³	12
General Electives	7
Total Hours	120

- ¹ Business Honors students take BUS 495.
- ² All business majors are required to participate in experiential education. This requirement may carry 0-3 credit hours. This requirement may be met by satisfactory completion of one of the following courses or other course/project approved by your Program: AC 464, BUS 496, DB 495, EC 460, ENT 426, ENT 445, FN 460, IB 495, IS 464, MG 445, MK 425, MK 445. A description of options to satisfy this degree requirement may be accessed here: <https://www.uab.edu/business/home/undergraduate/experiential-learning-requirement>. Please see your advisor for specific requirements for your major.
- ³ Take 12 hours in business courses not required in the major or concentration courses.

Major in Management with Operations Management Concentration

The operations management concentration is designed for students who seek to pursue a career in operations management. The curriculum provide students with the background to be able to execute operations in organizations as well as to manage projects within and across entities within the organization.

Requirements	Hours
Grade and GPA Requirement	
Students must earn a grade of C or better in all stated prerequisites for all major courses, have an overall 2.0 GPA and have an overall 2.0 GPA in all major courses.	
Blazer Core Curriculum	41
Analytics and Technology	
BUS 214 Introduction to Business Statistics	3
BUS 204 Business Analytics Applications or BUS 215 Foundations in Business Analytics	3
BUS 201 Introduction to Artificial Intelligence or BUS 203 Working with Data and Disruptive Technologies	3
Business Acumen	
BUS 202 Know Your Accounting Numbers	3
BUS 302 Business Foundations: Finance	3
BUS 303 Introduction to Organizational Management and Marketing	3
BUS 246 Legal Environment of Business or BUS 304 Operations and Supply Chain Management	3
Communication	
BUS 350 Professional Business Communications or BUS 351 Innovative Communication Strategies	3
BUS 361 Storytelling with Data	3
Professionalism	
BUS 306 Professional Development and Personal Branding	3
BUS 325 Self Leadership and Team Dynamics: Building Professional Excellence	3
The Capstone Experience	

BUS 450	Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹	3
or BUS 495	Business Honors Seminar, I	
Experiential Education ²		
Management Major Courses		
MG 302	Management Processes and Behavior	3
MG 401	Organizational Behavior	3
MG 409	Human Resource Management	3
MG 417	Project Management	3
Production & Operations Management Concentration		
MG 416	Supply Chain Management	
DB 320	Distribution Management	
MG Elective courses numbered 300:499		6
Business Electives ³		
General Electives		
Total Hours		120

¹ All business majors are required to participate in experiential education. This requirement may carry 0-3 credit hours. This requirement may be met by satisfactory completion of one of the following courses or other course/project approved by your Program: AC 464, BUS 496, DB 495 EC 460, ENT 426 ENT 445, FN 460, IB 495, IS 464, MG 445, MK 425, MK 445 A description of options to satisfy this degree requirement may be accessed here: <http://www.uab.edu/business/home/degrees-certificates/undergraduate/experiential-learning-requirement>. Please see your advisor for specific requirements for your major.

² Business Honors students take BUS 495.

³ Students must take 12 hours in Business Course electives.

Major in Human Resource Management

The human resource management major is designed to provide students with the skills necessary to enter a career in human resource management. The knowledge and skills acquired in this program enable students to enter a broad range of human resource management jobs, preparing them for their careers as well as professional certification.

Requirements	Hours	
Grade and GPA requirement		
Students must earn at least a grade of C in all stated prerequisite courses for the human resource management major. An overall 2.0 GPA in all courses used in the major is also required. At least 15 hours of the major courses must be taken at UAB. The universities course forgiveness policy may be applied to this major.		
Blazer Core Curriculum		
41		
Analytics and Technology		
BUS 214	Introduction to Business Statistics	3
BUS 204	Business Analytics Applications	3
or BUS 215	Foundations in Business Analytics	
BUS 201	Introduction to Artificial Intelligence	3
or BUS 203	Working with Data and Disruptive Technologies	
Business Acumen		
BUS 202	Know Your Accounting Numbers	3
BUS 302	Business Foundations: Finance	3
BUS 303	Introduction to Organizational Management and Marketing	3
BUS 246	Legal Environment of Business	3
or BUS 304	Operations and Supply Chain Management	

Communication		
BUS 350	Professional Business Communications	3
or BUS 351	Innovative Communication Strategies	
BUS 361	Storytelling with Data	3
Professionalism		
BUS 306	Professional Development and Personal Branding	3
BUS 325	Self Leadership and Team Dynamics: Building Professional Excellence	3
The Capstone Experience		
BUS 450	Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹	3
or BUS 495	Business Honors Seminar, I	
Experiential Learning ²		
Human Resource Management Major Courses		
MG 302	Management Processes and Behavior	3
MG 409	Human Resource Management	3
MG 411	Compensation Administration	3
MG 412	Organizational Staffing	3
MG 413	Employment Law	3
MG 414	Talent Development	3
Select 2 MG elective courses with Advisor approval		
6		
Business Electives ³		
12		
General Electives		
7		
Total Hours		120

¹ Business Honors students take BUS 495.

² All business majors are required to participate in experiential education. This requirement may carry 0-3 credit hours. This requirement may be met by satisfactory completion of one of the following courses or other course/project approved by your Program: AC 464, BUS 496, DB 495, EC 460, ENT 426, ENT 445, FN 460, IB 495, IS 464, MG 445, MK 425, MK 445. A description of options to satisfy this degree requirement may be accessed here: <https://www.uab.edu/business/home/undergraduate/experiential-learning-requirement>. Please see your advisor for specific requirements for your major.

³ Students must take 12 hours in Business Course electives.

Major in Information Systems

The information systems major is designed to provide students with the foundational knowledge and managerial skills to pursue a career in information systems, systems analysis and design, IT project management, cyber security, data analytics, and/or the implementation of a complex information system.

Students must have a minimum grade of C in all information systems courses, numbered 200 and above, that are applied to the major. The grade of C is a prerequisite for all information systems courses numbered 300 or above. In addition, students must have a grade of C or better and an overall C average in all major courses. At least 15 hours of the major must be taken at UAB. The university's course forgiveness policy may be applied to this major.

Requirements	Hours	
Blazer Core Curriculum		
41		
Analytics and Technology		
BUS 214	Introduction to Business Statistics	3
BUS 204	Business Analytics Applications	3
or BUS 215	Foundations in Business Analytics	

BUS 201	Introduction to Artificial Intelligence	3
or BUS 203	Working with Data and Disruptive Technologies	
Business Acumen		
BUS 202	Know Your Accounting Numbers	3
BUS 302	Business Foundations: Finance	3
BUS 303	Introduction to Organizational Management and Marketing	3
BUS 246	Legal Environment of Business	3
or BUS 304	Operations and Supply Chain Management	
Communication		
BUS 350	Professional Business Communications	3
or BUS 351	Innovative Communication Strategies	
BUS 361	Storytelling with Data	3
Professionalism		
BUS 306	Professional Development and Personal Branding	3
BUS 325	Self Leadership and Team Dynamics: Building Professional Excellence	3
The Capstone Experience		
BUS 450	Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹	3
or BUS 495	Business Honors Seminar, I	
Experiential Learning ²		
Information Systems Major Courses		
IS 204	Introduction to Business Programming	3
IS 301	Introduction to Database Management Systems	3
IS 302	Business Data Communications	3
IS 321	Systems Analysis	3
IS 413	Introduction to Information Security	3
MG 417	Project Management	3
Information Systems Electives		
Business Electives		
General Electives		
Total Hours		120

¹ Business Honors students take BUS 495.
² All business majors are required to participate in experiential education. This requirement may carry 0-3 credit hours. This requirement may be met by satisfactory completion of one of the following courses or other course/project approved by your Program: AC 464, BUS 496, DB 495, EC 460, ENT 426, ENT 445, FN 460, IB 495, IS 464, MG 445, MK 425, MK 445. A description of options to satisfy this degree requirement may be accessed here: <https://www.uab.edu/business/home/undergraduate/experiential-learning-requirement>. Please see your advisor for specific requirements for your major.

Major in Information Systems with Concentration in Cybersecurity Management

Requirements	Hours
Blazer Core Curriculum	41
Analytics and Technology	
BUS 214	Introduction to Business Statistics
BUS 204	Business Analytics Applications
or BUS 215	Foundations in Business Analytics
BUS 201	Introduction to Artificial Intelligence
or BUS 203	Working with Data and Disruptive Technologies
Business Acumen	

BUS 202	Know Your Accounting Numbers	3
BUS 302	Business Foundations: Finance	3
BUS 303	Introduction to Organizational Management and Marketing	3
BUS 246	Legal Environment of Business	3
or BUS 304	Operations and Supply Chain Management	
Communication		
BUS 350	Professional Business Communications	3
or BUS 351	Innovative Communication Strategies	
BUS 361	Storytelling with Data	3
Professionalism		
BUS 306	Professional Development and Personal Branding	3
BUS 325	Self Leadership and Team Dynamics: Building Professional Excellence	3
The Capstone Experience		
BUS 450	Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹	3
or BUS 495	Business Honors Seminar, I	
Experiential Learning ²		
Information Systems Major Courses		
IS 204	Introduction to Business Programming	3
IS 301	Introduction to Database Management Systems	3
IS 321	Systems Analysis	3
IS 413	Introduction to Information Security	3
MG 417	Project Management	3
Cybersecurity Management Concentration		
IS 302	Business Data Communications	3
IS 414	Information Security Planning and Management	3
Information Systems Electives		
Business Electives ³		
General Electives		
Total Hours		120

¹ Business Honors students take BUS 495.
² All business majors are required to participate in experiential education. This requirement may carry 0-3 credit hours. This requirement may be met by satisfactory completion of one of the following courses or other course/project approved by your Program: AC 464, BUS 496, DB 495, EC 460, ENT 426, ENT 445, FN 460, IB 495, IS 464, MG 445, MK 425, MK 445. A description of options to satisfy this degree requirement may be accessed here: <https://www.uab.edu/business/home/undergraduate/experiential-learning-requirement>. Please see your advisor for specific requirements for your major.
³ Students take 9 hours in business courses not required in the major or concentration courses.

Major in Information Systems with Concentration in Data Analytics

Requirements	Hours
Blazer Core Curriculum	41
Analytics and Technology	
BUS 214	Introduction to Business Statistics
BUS 204	Business Analytics Applications
or BUS 215	Foundations in Business Analytics
BUS 201	Introduction to Artificial Intelligence
or BUS 203	Working with Data and Disruptive Technologies

Business Acumen		
BUS 202	Know Your Accounting Numbers	3
BUS 302	Business Foundations: Finance	3
BUS 303	Introduction to Organizational Management and Marketing	3
BUS 246 or BUS 304	Legal Environment of Business Operations and Supply Chain Management	3
Communication		
BUS 350 or BUS 351	Professional Business Communications Innovative Communication Strategies	3
BUS 361	Storytelling with Data	3
Professionalism		
BUS 306	Professional Development and Personal Branding	3
BUS 325	Self Leadership and Team Dynamics: Building Professional Excellence	3
The Capstone Experience		
BUS 450 or BUS 495	Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹ Business Honors Seminar, I	3
Experiential Learning ²		
Information Systems Major Courses		
IS 204	Introduction to Business Programming	3
IS 302	Business Data Communications	3
IS 321	Systems Analysis	3
IS 413	Introduction to Information Security	3
MG 417	Project Management	3
Data Analytics Concentration		
IS 301	Introduction to Database Management Systems ⁴	3
IS 417	Introduction to Business Intelligence	3
IS 418	Applied Data Science for Information Systems	3
Information Systems Elective		
Business Electives ³		9
General Electives		7
Total Hours		120

¹ Business Honors students take BUS 495.

² All business majors are required to participate in experiential education. This requirement may carry 0-3 credit hours. This requirement may be met by satisfactory completion of one of the following courses or other course/project approved by your Program: AC 464, BUS 496, DB 495, EC 460, ENT 426, ENT 445, FN 460, IB 495, IS 418. A description of options to satisfy this degree requirement may be accessed here: <https://www.uab.edu/business/home/undergraduate/experiential-learning-requirement>. Please see your advisor for specific requirements for your major.

³ Students take 9 hours in business courses not required in the major or concentration courses.

Major in Entrepreneurship

The entrepreneurship major in UAB's J. Frank Barefield, Jr. Entrepreneurship Program instills learners with powerful concepts and practical knowledge regarding all kinds of entrepreneurial phenomena. The vast majority of new jobs come from the entrepreneurial sector.

Alumni launch careers in those jobs, working at successful startups as well as in entrepreneurial teams and departments in established companies. Alumni also launch their own entrepreneurial ventures. Our students learn to become entrepreneurs by turning problems into valuable opportunities in markets and communities. Entrepreneurship

majors have exclusive access to co-working space at Innovation Depot, as well as other valuable resources, all made possible by the program's extremely generous donors.

Students must earn at least a grade of C in all stated prerequisite courses for the Entrepreneurship major. An overall 2.0 GPA in all courses used in the major is also required. At least 15 hours of the major courses must be taken at UAB. The university's course forgiveness policy may be applied to this major.

Requirements		Hours	
Blazer Core Curriculum		41	
Analysis and Technology			
BUS 214	Introduction to Business Statistics	3	
BUS 204 or BUS 215	Business Analytics Applications Foundations in Business Analytics	3	
BUS 201 or BUS 203	Introduction to Artificial Intelligence Working with Data and Disruptive Technologies	3	
Business Acumen			
BUS 202	Know Your Accounting Numbers	3	
BUS 302	Business Foundations: Finance	3	
BUS 303	Introduction to Organizational Management and Marketing	3	
BUS 246 or BUS 304	Legal Environment of Business Operations and Supply Chain Management	3	
Communication			
BUS 350 or BUS 351	Professional Business Communications Innovative Communication Strategies	3	
BUS 361	Storytelling with Data	3	
Professionalism			
BUS 306	Professional Development and Personal Branding	3	
BUS 325	Self Leadership and Team Dynamics: Building Professional Excellence	3	
The Capstone Experience			
BUS 450	Strategic Management Capstone: Achieving Sustained Competitive Advantage ¹	3	
Experiential Education ²			
Entrepreneurship Major Requirements			
ENT 270	The Entrepreneurial Mindset	3	
ENT 320	Entrepreneurial Accounting and Finance	3	
ENT 421	Entrepreneurial Marketing and Sales	3	
ENT 422	Entrepreneurial Strategy and Operations	3	
ENT 350	Social and Community Enterprise	3	
ENT 425	Entrepreneurial Engagement Seminar	3	
Major Electives			
ENT 424 Entrepreneurial New Product and Service Development		6	
ENT 426 Practicum in Commercialization			
ENT 445 Entrepreneurial Internship			
ENT 450 I-Corps Lean Startup			
ENT 499 Directed Study in Entrepreneurship			
IB 495 Business Study Abroad			
HC 314 Honors Seminar in Business			
MK 330 Professional Selling			
Business Electives ³			
			12
General Electives			
		7	
Total Hours		120	

¹ Business Honors students take BUS 495.

² All business majors are required to participate in experiential education. This requirement may carry 0-3 credit hours. This requirement may be met by satisfactory completion of one of the following courses or other course/project approved by your Program: AC 464, BUS 496, DB 495, EC 460, ENT 426, ENT 445, FN 460, IB 495, IS 464, MG 445, MK 425, MK 445, A description of options to satisfy this degree requirement may be accessed here: <https://www.uab.edu/business/home/undergraduate/experiential-learning-requirement>. Please see your advisor for specific requirements for your major.

³ Students take 12 hours in business courses not required in the major or concentration courses.

Proposed Program of Study for a Major in Management with a Business Administration Concentration

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 EC 211	3
Blazer Core: Quantitative Literacy ¹		3 Elective	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Reasoning	3
Blazer Core: History and Meaning		3 Blazer Core: Scientific Inquiry	4
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
EC 210		3 BUS 246 or 304	3
BUS 214		3 BUS 215	3
BUS 203		3 Blazer Core: City as Classroom	3
Blazer Core: Creative Arts		3 MG 302	3
Blazer Core: Scientific Inquiry		4 BUS 303	3
		16	15
Junior			
First Term	Hours	Second Term	Hours
BUS 350		3 MG 417	3
BUS 202		3 BUS 302	3
MG 409		3 BUS 306	3
BADM Elective #1		3 BADM Elective #2	3
Business Elective #1		3 BUS 361 or 360	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
MG 445 (or BADM elective #3) ²		3 BUS 450 or 495 ³	3
BUS 325		3 MG elective #4	3
BADM Elective #4		3 Business Elective #3	3
Business Elective #2		3 Business Elective #4	3
		3 Elective	1
		15	13
Total credit hours: 120			

Elective	3 Elective	1
	15	13

Total credit hours: 120

Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² MG 445 satisfies Experiential Learning requirement.

³ Business Honors students take BUS 495.

Proposed Program of Study for a Major in Management

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 EC 211	3
Blazer Core: Quantitative Literacy ¹		3 General Elective	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Reasoning	3
Blazer Core: History and Meaning		3 Blazer Core: Scientific Inquiry	4
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
EC 210		3 BUS 246 or 304	3
BUS 214		3 BUS 215	3
BUS 203		3 Blazer Core: City as Classroom	3
Blazer Core: Creative Arts		3 MG 302	3
Blazer Core: Scientific Inquiry		4 BUS 303	3
		16	15
Junior			
First Term	Hours	Second Term	Hours
BUS 350		3 BUS 302	3
BUS 202		3 BUS 306	3
MG 409		3 MG 417	3
MG 401		3 MG Elective #1	3
Business Elective #1		3 BUS 361 or 360	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
MG 445 (or MG elective #2) ²		3 BUS 450 or 495 ³	3
BUS 325		3 MG elective #4	3
MG elective #3		3 Business Elective #3	3
Business Elective #2		3 Business Elective #4	3
Elective		3 Elective	1
		15	13
Total credit hours: 120			

¹ Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² MG 445 satisfies Experiential Learning requirement.

³ Business Honors students take BUS 495.

Proposed Program of Study for a Major in Human Resource Management

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 EC 211	3
Blazer Core: Quantitative Literacy ¹		3 Elective ⁴	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Reasoning	3
Blazer Core: History & Meaning		3 Blazer Core: Scientific Inquiry	4
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
EC 210		3 BUS 246 or 304	3
BUS 214		3 BUS 215	3
BUS 203		3 Blazer Core: City as Classroom	3
Blazer Core: Creative Arts		3 MG 302	3
Blazer Core: Scientific Inquiry		4 BUS 303	3
		16	15
Junior			
First Term	Hours	Second Term	Hours
BUS 350		3 MG 414	3
MG 409		3 BUS 302	3
MG 413		3 BUS 306	3
BUS 202		3 Elective ⁴	3
Elective ⁴		3 BUS 361 or 360	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
MG 411		3 BUS 450 or 495 ²	3
BUS 325		3 MG 412	3
MG 445 ³		3 MG elective	3
Elective ⁴		3 Elective ⁴	3
Elective ⁴		3 Elective ⁴	1
		15	13
Total credit hours: 120			

¹ Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² Business Honors students take BUS 495.

³ Satisfies Experiential Learning requirement.

⁴ Students must take 12 hours in Business Course electives.

Proposed Program of Study for a Major in Information Systems

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 EC 211	3
Blazer Core: Quantitative Literacy ¹		3 Elective	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Reasoning	3
Blazer Core: History & Meaning		3 Blazer Core: Scientific Reasoning	4
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
BUS 214		3 BUS 246 or 304	3
BUS 203		3 BUS 215	3
Blazer Core: Creative Arts		3 Blazer Core: City as Classroom	3
Blazer Core: Scientific Inquiry		4 BUS 303	3
EC 210		3 Elective ⁴	3
		16	15
Junior			
First Term	Hours	Second Term	Hours
IS 321		3 IS 301	3
BUS 350		3 IS 302	3
BUS 202		3 BUS 302	3
IS 204		3 BUS 306	3
Elective ⁴		3 BUS 361 or 360	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
MG 417		3 BUS 450 or 495 ²	3
IS 413		3 Information Systems Elective	3
BUS 325		3 IS 464 ³	3
Elective ⁴		3 Elective ⁴	3
Elective ⁴		3 Elective ⁴	1
		15	13
Total credit hours: 120			

¹ Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² Business Honors students take BUS 495.

³ Satisfies Experiential Learning requirement.

⁴ Students must take 9 hours in Business Course electives.

Proposed Program of Study for a Major in Information Systems with a Concentration in Data Analytics

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 EC 211	3
Blazer Core: Quantitative Literacy ¹		3 Blazer Core: Reasoning	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Scientific Inquiry	4
Blazer Core: History and Meaning		3 Elective ⁴	3
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
EC 210		3 BUS 246 or 304	3
BUS 203		3 BUS 215	3
BUS 214		3 BUS 303	3
Blazer Core: Creative Arts		3 Blazer Core: City as Classroom	3
Blazer Core: Scientific Inquiry		4 Elective ⁴	3
		16	15
Junior			
First Term	Hours	Second Term	Hours
BUS 350		3 IS 301	3
BUS 202		3 IS 302	3
IS 204		3 BUS 302	3
IS 321		3 BUS 306	3
Elective ⁴		3 BUS 361 or 360	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
MG 417		3 BUS 450 or 495 ²	3
IS 417		3 IS 418	3
BUS 325		3 IS 464 ³	3
Elective ⁴		3 Elective ⁴	3
Elective ⁴		3 Elective ⁴	1
		15	13
Total credit hours: 120			

¹ Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² Business Honors students take BUS 495

³ Satisfies Experiential Learning requirement.

⁴ Students must take 9 hours in Business Course electives.

Proposed Program of Study for a Major in Information Systems with a Concentration in Cybersecurity Management

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 EC 211	3
Blazer Core: Quantitative Literacy ¹		3 Blazer Core: Reasoning	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Scientific Inquiry	4
Blazer Core: History and Meaning		3 Elective ⁴	3
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
EC 210		3 BUS 246 or 304	3
BUS 214		3 BUS 215	3
BUS 203		3 BUS 303	3
Blazer Core: Creative Arts		3 Blazer Core: City as Classroom	3
Blazer Core: Scientific Inquiry		4 Elective ⁴	3
		16	15
Junior			
First Term	Hours	Second Term	Hours
BUS 350		3 IS 301	3
IS 321		3 IS 302	3
IS 204		3 BUS 302	3
BUS 202		3 BUS 306	3
Elective ⁴		3 BUS 361 or 360	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
MG 417		3 BUS 450 or 495 ²	3
IS 413		3 IS 414	3
BUS 325		3 IS 464 ³	3
Elective ⁴		3 Elective ⁴	3
Elective ⁴		3 Elective ⁴	1
		15	13
Total credit hours: 120			

¹ Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² Business Honors students take BUS 495

³ Satisfies Experiential Learning requirement.

⁴ Students must take 9 hours in Business Course electives.

Proposed Program of Study for a Major in Management with a Concentration in Operations Management

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 EC 211	3
Blazer Core: Quantitative Literacy ¹		3 Elective	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Reasoning	3
Blazer Core: History and Meaning		3 Blazer Core: Scientific Inquiry	4
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
EC 210		3 BUS 304	3
BUS 214		3 BUS 215	3
BUS 203		3 Blazer Core: City as Classroom	3
Blazer Core: Creative Arts		3 MG 302	3
Blazer Core: Scientific Inquiry		4 BUS 303	3
		16	15
Junior			
First Term	Hours	Second Term	Hours
BUS 350		3 BUS 302	3
BUS 202		3 BUS 306	3
MG 409		3 MG 417	3
MG 401		3 BUS 361 or 360	3
Business Elective #1		3 MG 416	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
MG 445 (or OP Elective #1) ²		3 BUS 450 or 495 ³	3
BUS 325		3 OP Elective #2	3
DB 320		3 Business elective #3	3
Business elective #2		3 Business Elective #4	3
Elective		3 Elective	1
		15	13
Total credit hours: 120			

¹ Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² MG 445 satisfies Experiential Learning requirement.

³ Business Honors students take BUS 495.

Proposed Program of Study for a Major in Entrepreneurship

Freshman			
First Term	Hours	Second Term	Hours
EH 101		3 EH 102	3
BUS 101		3 Blazer Core: Reasoning	3
Blazer Core: Communicating in the Modern World		3 Blazer Core: Scientific Inquiry	4
Blazer Core: Quantitative Literacy ¹		3 EC 211	3
Blazer Core: History & Meaning		3 Elective ²	3
		15	16
Sophomore			
First Term	Hours	Second Term	Hours
ENT 270		3 Blazer Core: Scientific Inquiry	4
EC 210		3 BUS 215	3
BUS 214		3 Blazer Core: City as Classroom	3
BUS 203		3 ENT 350	3
Blazer Core: Creative Arts		3 BUS 303	3
		15	16
Junior			
First Term	Hours	Second Term	Hours
ENT 421		3 ENT 422	3
BUS 350		3 BUS 306	3
BUS 202		3 BUS 302	3
BUS 246 or 304		3 BUS 361 or 360	3
Elective ²		3 Elective ²	3
		15	15
Senior			
First Term	Hours	Second Term	Hours
BUS 325		3 ENT 425	3
ENT 445		3 BUS 450 or 495 ³	3
ENT 499		3 ENT 320	3
Elective ²		3 Elective ²	3
Elective ²		3 Elective ²	1
		15	13
Total credit hours: 120			

¹ Students select from: MA 105, MA 106, MA 107, MA 110, MA 125 or MA 126.

² Students must take 12 hours in business course electives.

³ Business Honors students take BUS 495

ENT- Entrepreneurship Courses

ENT 270. The Entrepreneurial Mindset. 3 Hours.

The course instills an entrepreneurial mindset by teaching students high-impact entrepreneurship concepts, transformational entrepreneurial paradigms, and bold professional practices. Risky and uncertain environments, personal authenticity and confidence, project failure and success, creativity, stimulating and leading growth, building a team, and making money and impact are among the topics.

ENT 320. Entrepreneurial Accounting and Finance. 3 Hours.

Students will learn how key principles of accounting and finance relate to entrepreneurial career paths and how these functions relate to each other in the context of entrepreneurial ventures. The course covers a diverse range of topics within this realm, including financial statements, assembling a team of advisors, entrepreneurial investing, building a business case, company valuation, pro forma statements, and entrepreneurial fundraising.

Prerequisites: ENT 270 [Min Grade: C]

ENT 350. Social and Community Enterprise. 3 Hours.

Entrepreneurial ventures often perform outside non-profit or for-profit realms and can make impact in economic, social, and natural environments simultaneously. These social enterprises feature novel business models and unique environments such as technology-based communities, institutional and legal contexts, public good scenarios, monopoly situations, and market failure cases where traditional for-profit ventures fail but social enterprises thrive.

Prerequisites: ENT 270 [Min Grade: C]

ENT 421. Entrepreneurial Marketing and Sales. 3 Hours.

This course helps students identify, validate, and engage entrepreneurial opportunities in market settings. Based on individual-level sales and firm-level marketing concepts, students learn to formulate business ideas, build business models, and transact business. Students also learn to analyze markets and conduct research in industrial settings, entrepreneurial sectors, and other environments.

Prerequisites: ENT 270 [Min Grade: C]

ENT 422. Entrepreneurial Strategy and Operations. 3 Hours.

This course explores strategic decisions that early-stage entrepreneurs face when building and growing their businesses. From a very practical and experiential perspective, students learn how to formulate new venture business models, research competitive environments, examine venture assumptions, develop strategic plans. They also learn how to structure new ventures, conceptualize supply and value chains, and measure venture performance.

Prerequisites: ENT 270 [Min Grade: C]

ENT 424. Entrepreneurial New Product and Service Development. 3 Hours.

Students will learn how entrepreneurs develop various types of innovations (e.g., technological, mechanical, algorithmic, process, etc.) into new products or services ready to enter markets or community environments in the context of entrepreneurial ventures. This course begins by focusing on the output of innovation activity - innovations themselves - and clarifies the process of developing them into market-ready product or service applications.

Prerequisites: ENT 270 [Min Grade: C]

ENT 425. Entrepreneurial Engagement Seminar. 3 Hours.

This course revisits selected entrepreneurship concepts from ENT 270, adds a model of strategic entrepreneurship, and undertakes team-based outreach consulting projects, with entrepreneurial ventures in the Birmingham region. The entrepreneur clients appraise the effects of the team deliverables on their ventures, which assists with grading. The course yields unmatched networking experiences and real-world practical application of entrepreneurship concepts.

Prerequisites: ENT 270 [Min Grade: C]

ENT 426. Practicum in Commercialization. 3 Hours.

This course offers qualified students the chance to gain first hand experience in product commercialization while receiving academic credit. Students work in cross-disciplinary teams with senior engineering students to develop a commercialization plan corresponding to an original product design.

ENT 445. Entrepreneurial Internship. 3 Hours.

Standard internship with entrepreneurial business or organization. Junior standing and 2.0 minimum overall GPA. Must be currently enrolled in the Collat School of Business as a degree-seeking student or declared minor in business.

ENT 450. I-Corps Lean Startup. 3 Hours.

Student teams will execute the Lean Startup approach to develop a business model following the highly successful I-Corps methodology. This is a team-based course where students will spend the semester exploring the viability of a new business venture. Students will be organized into startup teams and be expected to fully execute all areas of the business model canvas by testing their business assumptions through customer/stakeholder interviews. Students must apply for enrollment with the instructor. This course has a major group project component.

ENT 499. Directed Study in Entrepreneurship. 3 Hours.

Supervised project in a specific area of entrepreneurship. This is an experiential course for completion of a minor in entrepreneurship. Course may be online or face-to-face.

IS-Information Systems Courses

IS 103. Applied Information Technology. 3 Hours.

Use of microcomputers, business applications in office automation, analysis of business problems, and retrieval and presentation of information.

Prerequisites: MA 105 [Min Grade: C](Can be taken Concurrently) or MA 107 [Min Grade: C] or (A02 23 and HSCG 3.50) or (A02 24 and HSCG 3.00) or (A02 25 and HSCG 2.50) or (A02 26 or S02 540 and HSCG 3.50) or (S02 560 and HSCG 3.00) or (S02 580 and HSCG 2.50) or S02 600 or MAC1 17

IS 204. Introduction to Business Programming. 3 Hours.

An introductory course addressing the concepts, structures, and use of an event-driven programming language to implement business solutions. Emphasis is placed on developing general problem-solving strategies and implementing solutions through algorithm development.

Prerequisites: MA 105 [Min Grade: C]

IS 301. Introduction to Database Management Systems. 3 Hours.

An introduction to the intricacies of managing and querying structured information. This course provides a solid foundation for understanding the concepts and tools used in the field of database management. Learn data modeling using the ER approach (entity-relationship) and practice writing SQL queries for data retrieval and manipulation. Create data models that incorporate business rules and entities relevant to the organization's goals. Gain confidence in the design and construction of a relational and adaptable database and understand the use of databases in business analytics and web technologies.

Prerequisites: BUS 203 [Min Grade: C]

IS 302. Business Data Communications. 3 Hours.

Delve into the movement of information (data) from one device to another using various transmission systems such as electrical, optical, radio, or satellite. This course provides a solid foundation for understanding the network architecture, concepts, terminology, and management issues related to modern networking and data communications in organizations. Learners will explore common communication protocols, network management, network security and best practices for solving business problems.

IS 303. Information Systems. 3 Hours.

An examination of information systems technology topics such as network effects, social media, telecommunications, software, and security. Learners will understand how organizations use information technology as a change agent, and to support critical decision making. Includes planning, development and implementation of strategies that leverage information systems for competitive advantage.

IS 321. Systems Analysis. 3 Hours.

Delve into the concepts, methods, and techniques essential for systems analysts. Learn how to assess user requirements using interviewing and testing techniques to update existing or design new information systems. Estimate system development costs and create systems that meet clients' needs.

IS 413. Introduction to Information Security. 3 Hours.

Explore the fast-growing field of information security and learn how to protect valuable organizational assets. This introductory course provides students with a foundational understanding of cybersecurity principles. You will develop an understanding of how businesses safeguard sensitive data, navigate legal and ethical challenges, and prepare for emerging threats. Gain knowledge in security planning and risk management, learning how to mitigate risks using logical, physical, and administrative controls. This course is perfect for students looking to develop critical skills for a career in cybersecurity or any tech-driven field.

IS 414. Information Security Planning and Management. 3 Hours.

Understand how technology and organizational policies are developed to best safeguard an organization's critical information resources. Advanced topics include how to manage in an environment of uncertainty, analyze risk and develop policies and procedures to make information systems secure, and audit and recovery processes following a security breach.

Prerequisites: IS 413 [Min Grade: C]

IS 417. Introduction to Business Intelligence. 3 Hours.

Explore principles and techniques in business intelligence and analytics, including descriptive and predictive analytics. Learn the qualitative and graphical understanding of core concepts in business analytics from the perspective of business users. This course requires an emerging and powerful data visualization tool and the usage of data mining platform for assignments. Discover how useful information can be extracted from large volumes of structured data and represented as data mining models to improve business decision making.

IS 418. Applied Data Science for Information Systems. 3 Hours.

Discover how useful information can be extracted from large volumes of unstructured data and represented as various text mining models to improve business decision making. This course delves into principles and techniques in data science, such as natural language processing, and text mining (e.g., topic modeling), deep learning and artificial intelligence. It emphasizes the qualitative and graphical understanding of the core concepts in data science from the perspective of business users.

IS 464. IS Internship. 1-3 Hour.

Work experience enabling students to better integrate academic knowledge with practical applications by exposure to information systems and the business environment. 2.0 GPA in IS courses and permission of instructor required. Must be an Information Systems major. Sponsoring business may require additional courses.

Prerequisites: GPAO 2.00

IS 491. Current Topics in Information Systems. 3 Hours.

A study of selected current developments in information systems emphasizing development and managerial implications. Permission of instructor required.

IS 499. Directed Readings. 1-3 Hour.

Readings and independent study in selected areas.

MG-Management Courses

MG 302. Management Processes and Behavior. 3 Hours.

Unlock the secrets of effective leadership and organizational success. This course is the gateway to understanding the theories and best practices for managing in dynamic environments. Emphasis is on strategic planning, communication in traditional and virtual settings, social responsibility, and motivation to foster individual and team development.

MG 304. Managerial Spreadsheet Analytics. 3 Hours.

This course provides an introduction to concepts and methods of business analytics with a focus on the application of spreadsheet modeling and analysis to managerial decision making.

Prerequisites: QM 214 [Min Grade: C]

MG 305. Nonprofit Organization Mgmt/SL. 3 Hours.

Explore the unique challenges and opportunities of the nonprofit sector including managing a voluntary workforce and developing mission-driven strategies for organizational growth. Create outcome-focused goals and performance metrics, evaluate program effectiveness, and explore budgeting, financial reporting and resource allocation at an academic level. Learners also gain first-hand experience with a chosen NPO/NGO.

MG 306. Managing Innovation. 3 Hours.

This course addresses selected challenges and opportunities related to managing innovation. The purpose of this course is to provide an overview of the role of creativity and innovation in organizations, examine the managerial strategies and tactics for fostering innovation, and to help students enhance their own ability to innovate.

MG 309. Wizarding and Superhero Leadership Academy. 3 Hours.

Marvel movies and the Harry Potter book/movie series are full of insights about life matters. They also teach us about how to be better business managers in addressing adversity, success, leadership, and ethics. In this class, we will examine various leadership theories and popular management books and understand them in terms of the characters and situations presented in the Marvel movies and the Harry Potter book/movie series.

MG 401. Organizational Behavior. 3 Hours.

Learn how to navigate and influence the workplace culture as you gain insight into and apply the principles of individual behavior in organizations. Topics for discussion include diversity, attitudes, job satisfaction, emotions, moods, and how group dynamics influence culture. Successful students gain tools for motivating employees, building relationships, inspiring high functioning teams, and creating change.

Prerequisites: MG 302 [Min Grade: C]

MG 403. Operations Management. 3 Hours.

This course covers the strategic, tactical, and integrative roles of Operations in the management of service and manufacturing organizations in a globally competitive economy. Students will learn how to maximize efficiency and value in a business environment. Topics include productivity, design and process strategies, sustainability, ethics, quality management, supply chain strategies, scheduling, forecasting, inventory management, facilities location and layout strategies, maintenance and reliability.

Prerequisites: AC 201 [Min Grade: C] and EC 210 [Min Grade: C] and EC 211 [Min Grade: C] and LS 246 [Min Grade: C] and QM 215 [Min Grade: C] and MG 302 [Min Grade: C]

MG 405. Nonprofit Strategy and Entrepreneurship. 3 Hours.

This course takes students on the journey from a promising program idea through the steps necessary to create a viable strategic plan for your program's business model. Working as individuals and small teams, students will work with an assigned nonprofit organization (NPO) start-up, or established NPO, seeking the next steps for their program idea. These steps include analyzing and defending a suggested business model and strategic analysis where individuals or teams suggest improvements and next steps for this NPO. Along the way students will meet and interact with local nonprofits and engage in thought-provoking brainstorming sessions with some of Birmingham's most innovative and creative nonprofits.

MG 409. Human Resource Management. 3 Hours.

This course covers managerial problems associated with the acquisition, development, motivation, and compensation of human resources. Personnel problems such as employment, employee education and training, labor relations, industrial health and safety, and wage and salary administration.

Prerequisites: (MG 302 [Min Grade: C])

MG 410. Labor-Management Relations. 3 Hours.

Analysis of managerial issues and opportunities associated with the development of labor-management relations policy. The impact of public policy, significance of pressure groups, negotiations and administration of the collective bargaining agreements, along with the role of the National Labor Relations Board (NLRB) and Labor Relations(LA) as a matter of policy.

Prerequisites: (MG 302 [Min Grade: C])

MG 411. Compensation Administration. 3 Hours.

This course covers compensation administration in public and private organizations, with emphasis on determination of range, salary levels, and structures. Job evaluation, pay systems, and wage and benefits legal issues are covered.

Prerequisites: (MG 409 [Min Grade: C])

MG 412. Organizational Staffing. 3 Hours.

Students focus on the employee recruiting and selection functions within organizations. Strategic staffing, Federal laws and regulations impacting staffing activities, recruitment and selection practices, hiring decision approaches, job analysis and measurement in selection will also be covered in detail.

Prerequisites: MG 409 [Min Grade: C] and BUS 215 [Min Grade: C] or QM 215 [Min Grade: C]

MG 413. Employment Law. 3 Hours.

Management of legal risks arising from hiring, promotion, and other human resources transactions, including risks arising under anti-discrimination laws (e.g., Title VII of Civil Rights Act of 1964) and income security laws (e.g., Fair Labor Standards Act and Family Medical Leave Act).

MG 414. Talent Development. 3 Hours.

This course focuses on strategies and practices for training and developing employee capabilities that improve individual and organizational success. Specific focus is placed on building personal, professional, and organizational capabilities that fosters growth. Topics include talent development methods and assessment, learning styles, delivery methods including eLearning, and employee development.

Prerequisites: MG 409 [Min Grade: C]

MG 415. International Business Dynamics. 3 Hours.

Essential information that managers need to conduct business in an international setting. Students will consider the cultural, political, and geographic differences presented and will learn how to develop strategies to maximize opportunities considering these differences. Topics for discussion include global leadership practices, international monetary systems and financial forces, international trade, foreign direct investment, and the global supply chain.

Prerequisites: BUS 303 [Min Grade: C] or BUS 311 [Min Grade: C]

MG 416. Supply Chain Management. 3 Hours.

This course provides an operational view of the supply chain - a mechanism for matching supply and demand through the management of material and information flows - and uses this framework to understand the strategic, design, and operational issues in supply chain management. Some of the themes explored are: How is operational performance measured in a supply chain context? How do suppliers, producers and distributors interact and coordinate? Are there ways to leverage product design for competitive advantage?.

Prerequisites: MG 403 [Min Grade: C] or BUS 304 [Min Grade: C]

MG 417. Project Management. 3 Hours.

The course covers project management principles, methods, techniques, and tools from the perspective of the manager who must plan, schedule, organize and control non-routine activities to achieve schedule, budget and performance objectives. It traverses the life-cycle of a project and the knowledge areas that are applicable at each stage.

Prerequisites: MG 302 [Min Grade: C]

MG 418. Quality Management. 3 Hours.

Concepts, techniques, and organizational requirements to ensure that quality is provided to consumer. Breadth of quality efforts, statistical quality control methods, quality circle principles, and quality assurance activities in various enterprises.

Prerequisites: MG 403 [Min Grade: C]

MG 425. Managing Through Leadership. 3 Hours.

Provide students with a comprehensive understanding of leadership as a phenomenon, with an emphasis on developing the skills to lead others. Major theories of leadership will be examined and students will gain insights about their individual strengths and weaknesses. Through hands-on experiences and workshops, students will develop and acquire the skills to lead high-performance teams that can optimize their productivity and deliver high-quality results.

MG 430. Management and Leadership in Sports and Entertainment Organizations. 3 Hours.

Students will gain an understanding of leadership requirements and challenges in the sports and entertainment industries. Topics include: problem solving and decision making, culture, human resource management, teams, communication, motivation, leadership, facilities and events.

MG 440. Advanced Leadership Theory and Practice. 3 Hours.

This course builds on MG 425 by incorporating additional leadership theories and practices that are relevant for leaders, managers, and supervisors in either profit or non-profit organizations. Students also learn about strategic leadership and the importance of collaboration. Students develop their skills and abilities to create positive and meaningful change in others and their organizations, which has implications for the broader community. Students complete a variety of hands-on activities to develop their leadership capabilities to create desirable results for constituents.

Prerequisites: MG 425 [Min Grade: C]

MG 445. Management Internship. 1-3 Hour.

Offers qualified undergraduate students the chance to gain first-hand experience in a local business while receiving academic credit. Sponsoring business may require additional courses.

Prerequisites: BUS 325 [Min Grade: C] or BUS 305 [Min Grade: C] or BUS 306 [Min Grade: C]

MG 448. Workplace Wellness Program Design, Management and Assessment. 3 Hours.

The purpose of this course is to build professional capacity for creating, implementing, managing, and assessing workplace wellness programs.

MG 490. Current Topics in Management. 3 Hours.

Selected management topics designed to allow students to gain knowledge in new areas of focus not currently covered in other classes.

Prerequisites: MG 302 [Min Grade: C]

MG 492. Current Topics in Production and Operations Management. 3 Hours.

Selected topics in production and operations management.

Prerequisites: (MG 403 [Min Grade: C])

MG 493. Current Topics in Human Resource Management. 3 Hours.

Current development and issues in human resource management.

Prerequisites: (MG 409 [Min Grade: C])

MG 499. Directed Study in Management. 1-3 Hour.

Specific areas in management.

QM 214. Introduction to Business Statistics. 3 Hours.

This course provides an overview of data, probability, sampling, and its application to decision making in business. Upon successful completion of this courses, students will be able to summarize data graphically and numerically, understand sources of variation in data, and be able to conduct one-sample statistical inference.

Prerequisites: (MA 105 [Min Grade: C] or MA 106 [Min Grade: C] or MA 109 [Min Grade: C] or MA 125 [Min Grade: C]) and BUS 110 [Min Grade: C]

QM 215. Foundations in Business Analytics. 3 Hours.

This course provides a foundation for the use of data for analytical decision making in business. Topics include comparison of independent samples, linear regression, business forecasting and data mining. Emphasis is on analysis of real data with computer implementation and communication of results.

Prerequisites: QM 214 [Min Grade: C] or MA 180 [Min Grade: C]

QM 350. Quantitative Methods for Finance. 3 Hours.

Development of the mathematical foundations of undergraduate level financial modeling and analysis, including applications of calculus, probability theory, linear algebra and Monte Carlo simulation to the measurement of asset returns and the assessment of risk, to the pricing of options and other financial derivatives, and to the solution of important financial optimization problems.

Prerequisites: BUS 204 [Min Grade: C] or QM 215 [Min Grade: C] and CS 101 [Min Grade: C]

QM 420. Applied Forecasting. 3 Hours.

Practical use of various forecasting techniques on business and economic data. Topics include dynamic regression models, exponential smoothing, forecast criteria, moving averages, seasonality, and univariate Box Jenkins ARIMA modeling. Completion of all pre-business requirements required.

Prerequisites: (BUS 202 [Min Grade: C] or AC 201 [Min Grade: C]) and EC 210 [Min Grade: C] and EC 211 [Min Grade: C] and (BUS 246 [Min Grade: C] or LS 246 [Min Grade: C]) and (BUS 215 [Min Grade: C] and QM 215 [Min Grade: C]) and CS 101 [Min Grade: C]

QM 490. Advanced Topics in Statistics/Management Science. 3 Hours.

Statistics/management science application to problems in business and economics.

QM 499. Directed Readings in Quantitative Methods. 1-3 Hour.

Readings and independent study in selected areas.

Prerequisites: EC 211 [Min Grade: C] and (BUS 204 [Min Grade: C] or BUS 215 [Min Grade: C]) or QM 215 [Min Grade: C] and EC 210 [Min Grade: C]

QM-Quantitative Methods Courses

QM 101. Introduction to Analytics Tools. 3 Hours.

This course explores analytics tools for data preprocessing, exploration, and visualization, and presenting and reporting results. Topics include data manipulation and transformation for conducting basic exploratory data analytics and visual analytics. The skills learned will be applicable across a wide range of domains and industries. No prior knowledge of data analytics is required.