

# Department of Management, Information Systems and Quantitative Methods

**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 provide students with the ability 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 gaining entry into a management career and for sustaining successful performance throughout that career. Internships and elective courses in entrepreneurship are also available. 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.

## Human Resource Management Major

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.

## 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 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. Information Systems majors have the option of choosing a concentration in **Cyber Security Management** or **Data Analytics**. A student not choosing a concentration will have an **Information Systems** degree with no concentration.

## Major in Management

Management majors have the option of choosing a concentration in either **Business Administration** or **Operations Management**. A student not choosing a concentration will have a **Management** degree with no concentration.

The management major is designed for students who seek to develop a broad exposure to the management discipline rather than pursue any emphasis. This major includes courses in human resources, organizational behavior, leadership and project management.

Requirements	Hours
<b>Grade and GPA Requirement</b>	
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.	
<b>Required Courses</b>	
<b>Core Curriculum</b>	<b>41</b>
<b>Lower Level Business</b>	
AC 200	Financial Accounting Foundations 3
AC 201	Introduction to Decision-Driven Accounting 3
LS 246	Legal Environment of Business 3
QM 214	Introduction to Business Statistics 3
QM 215	Foundations in Business Analytics 3
BUS 101	Introduction to Business 3
or BUS 102	Business Foundations
BUS 110	Essentials of Financial Literacy 3
<b>Upper Level Business Requirements</b>	
BUS 305	Professional Development for Today's Workplace 1
BUS 350	Business Communications 3
FN 310	Fundamentals of Financial Management 3
MG 302	Management Processes and Behavior 3
MG 403	Operations Management 3
or DB 320	Distribution Management
IS 303	Information Systems 3
MK 303	Basic Marketing 3
BUS 450	Strategic Management Capstone Experience <sup>1</sup> 3
or BUS 495	Business Honors Seminar, I
International Business <sup>2</sup>	3
Experiential Learning <sup>3</sup>	
<b>Management Major Courses</b>	
MG 401	Organizational Behavior 3
MG 409	Human Resource Management 3
MG 417	Project Management 3
MG 425	Managing Through Leadership 3
<b>Management Electives <sup>4</sup></b>	

Choose 4 (12 hours) MG 300/400 courses or other upper level courses with approval of major advisor	12
<b>General Electives</b>	
Choose 9 hours of General Electives.	9
<b>Total Hours</b>	<b>120</b>

Please note the hours to degree may vary due to prerequisite requirements. For undergraduate programs, at minimum of 120 hours of undergraduate credit is required for degree. General electives may be taken to meet the hour requirement if necessary.

- <sup>1</sup> BUS 495 is the capstone experience for Business Honors students.
- <sup>2</sup> International Business Courses include: EC 407, FN 412, MG 415, MK 416, AC 440, IB 320, IB 439 and IB 495.
- <sup>3</sup> 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.
- <sup>4</sup> Students may NOT apply MG 415 to this requirement and the IB requirement. COURSE USED ONLY ONCE.

## 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
<b>Core Curriculum</b>	<b>41</b>
<b>Lower Level Business Requirements</b>	
AC 200 Financial Accounting Foundations	3
AC 201 Introduction to Decision-Driven Accounting	3
BUS 101 Introduction to Business or BUS 102 Business Foundations	3
BUS 110 Essentials of Financial Literacy	3
LS 246 Legal Environment of Business	3
QM 214 Introduction to Business Statistics	3
QM 215 Foundations in Business Analytics	3
<b>Upper Level Business Requirements</b>	
BUS 305 Professional Development for Today's Workplace	1
BUS 350 Business Communications	3
FN 310 Fundamentals of Financial Management	3
IS 303 Information Systems	3
MG 302 Management Processes and Behavior	3
MG 403 Operations Management	3
MK 303 Basic Marketing	3
BUS 450 Strategic Management Capstone Experience <sup>1</sup> or BUS 495 Business Honors Seminar, I International Business <sup>2</sup>	3

Experiential Learning <sup>3</sup>	
<b>Management Major Courses</b>	
MG 401 Organizational Behavior	3
MG 409 Human Resource Management	3
MG 417 Project Management	3
<b>Business Administration Concentration Courses</b>	
Choose any 5 300/400 level business courses from AC, BUS, DB, EC, ENT, FN, IB, IS, MG, MK, and QM	15
<b>General Electives</b>	<b>9</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Business Honors students take BUS 495.
- <sup>2</sup> International Business courses include: EC 407, FN 412, MG 415, MK 416, AC 440, IB 320, IB 439, and AC 440.
- <sup>3</sup> 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 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
<b>Grade and GPA Requirement</b>	
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.	
<b>Core Curriculum</b>	<b>41</b>
<b>Lower Level Business Requirements</b>	
AC 200 Principles of Accounting I	3
AC 201 Principles of Accounting II	3
BUS 101 Introduction to Business or BUS 102 Business Foundations	3
BUS 110 Essentials of Financial Literacy	3
LS 246 Legal Environment of Business	3
QM 214 Introduction to Business Statistics	3
QM 215 Foundations in Business Analytics	3
<b>Upper Level Business Requirements</b>	
BUS 305 Professional Development for Today's Workplace	1
BUS 350 Business Communications	3
FN 310 Fundamentals of Financial Management	3
IS 303 Information Systems	3
MG 302 Management Processes and Behavior	3
MG 403 Operations Management	3
MK 303 Basic Marketing	3
BUS 450 Strategic Management Capstone Experience <sup>1</sup> or BUS 495 Business Honors Seminar, I	3

International Business <sup>2</sup>	3
Experiential Learning <sup>3</sup>	
<b>Management Major Courses</b>	
MG 401 Organizational Behavior	3
MG 409 Human Resource Management	3
MG 417 Project Management	3
MG 425 Managing Through Leadership	3
<b>Production &amp; Operations Management Concentration</b>	<b>6</b>
MG 416 Supply Chain Management	
DB 320 Distribution Management	
MG Elective courses numbered 300:499	6
<b>General Electives</b>	<b>9</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Business Honors students take BUS 495.
- <sup>2</sup> International Business courses include: EC 407, FN 412, MG 415, MK 416, AC 440, IB 320, IB 439, IB 495, and AC 440.
- <sup>3</sup> 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.

## 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
<b>Grade and GPA requirement</b>	
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 university's course forgiveness policy may be applied to this major.	
<b>Required courses:</b>	
<b>Core Curriculum</b>	<b>41</b>
<b>Lower Level Business Requirements</b>	
AC 200 Principles of Accounting I	3
AC 201 Principles of Accounting II	3
BUS 101 Introduction to Business	3
or BUS 102 Business Foundations	
BUS 110 Essentials of Financial Literacy	3
LS 246 Legal Environment of Business	3
QM 214 Introduction to Business Statistics	3
QM 215 Foundations in Business Analytics	3
<b>Upper Level Business Requirements</b>	
BUS 305 Professional Development for Today's Workplace	1
BUS 350 Business Communications	3
FN 310 Fundamentals of Financial Management	3
IS 303 Information Systems	3

MG 302 Management Processes and Behavior	3
MG 403 Operations Management	3
MK 303 Basic Marketing	3
BUS 450 Strategic Management Capstone Experience <sup>1</sup>	3
or BUS 495 Business Honors Seminar, I	
International Business <sup>2</sup>	3
Experiential Learning <sup>3</sup>	
<b>Human Resource Management Major Courses</b>	
MG 401 Organizational 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
<b>Select 2 MG elective courses with Advisor approval</b>	<b>6</b>
<b>General Electives</b>	<b>9</b>
<b>Total Hours</b>	<b>120</b>

- <sup>1</sup> Business Honors students take BUS 495.
- <sup>2</sup> International Business courses include: EC 407, FN 412, MG 415, MK 416, IB 320, IB 439, IB 495, AC 440.
- <sup>3</sup> 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

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
<b>Core Curriculum</b>	<b>41</b>
<b>Lower Level Business Requirements</b>	
AC 200 Principles of Accounting I	3
AC 201 Principles of Accounting II	3
BUS 101 Introduction to Business	3
or BUS 102 Business Foundations	
BUS 110 Essentials of Financial Literacy	3
LS 246 Legal Environment of Business	3
QM 214 Introduction to Business Statistics	3
QM 215 Foundations in Business Analytics	3

Upper Level Business Requirements		
BUS 305	Professional Development for Today's Workplace	1
BUS 350	Business Communications	3
FN 310	Fundamentals of Financial Management	3
IS 303	Information Systems	3
MG 302	Management Processes and Behavior	3
MG 403	Operations Management	3
MK 303	Basic Marketing	3
BUS 450	Strategic Management Capstone Experience <sup>1</sup>	3
	or BUS 495 Business Honors Seminar, I	
	International Business <sup>2</sup>	3
	Experiential Learning <sup>3</sup>	
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
MG 417	Project Management	3
Information Systems Electives		
		9
General Electives		
		9
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Business Honors students take BUS 495.

<sup>2</sup> International Business courses include: EC 407, FN 412, MG 415, MK 416, IB 320, IB 439, IB 495, or AC 440

<sup>3</sup> 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, AC 474, 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	
<b>Core Curriculum</b>	<b>41</b>	
Lower Level Business Requirements		
AC 200	Principles of Accounting I	3
AC 201	Principles of Accounting II	3
BUS 101	Introduction to Business	3
	or BUS 102 Business Foundations	
BUS 110	Essentials of Financial Literacy	3
LS 246	Legal Environment of Business	3
QM 214	Introduction to Business Statistics	3
QM 215	Foundations in Business Analytics	3
Upper Level Business Requirements		
BUS 305	Professional Development for Today's Workplace	1
BUS 350	Business Communications	3
FN 310	Fundamentals of Financial Management	3
IS 303	Information Systems	3
MG 302	Management Processes and Behavior	3
MG 403	Operations Management	3
MK 303	Basic Marketing	3

BUS 450	Strategic Management Capstone Experience <sup>1</sup>	3
	or BUS 495 Business Honors Seminar, I	
	Experiential Learning <sup>2</sup>	
	International Business <sup>3</sup>	3
Information Systems Major Courses		
IS 204	Introduction to Business Programming	3
IS 301	Introduction to Database Management Systems	3
IS 321	Systems Analysis	3
MG 417	Project Management	3
Cybersecurity Management Concentration		
IS 302	Business Data Communications	3
IS 413	Introduction to Information Security	3
IS 414	Information Security Planning and Management	3
	Information Systems Elective	3
	General Electives	9
<b>Total Hours</b>		<b>120</b>

<sup>1</sup> Business Honors students take BUS 495.

<sup>2</sup> 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.

<sup>3</sup> Select from EC 407, FN 412, MG 415, MK 416, AC 440, IB 320, IB 439, or IB 495.

## Major in Information Systems with Concentration in Data Analytics

Requirements	Hours	
<b>Core Curriculum</b>	<b>41</b>	
Lower Level Business Requirements		
AC 200	Principles of Accounting I	3
AC 201	Principles of Accounting II	3
BUS 101	Introduction to Business	3
	or BUS 102 Business Foundations	
BUS 110	Essentials of Financial Literacy	3
LS 246	Legal Environment of Business	3
QM 214	Introduction to Business Statistics	3
QM 215	Foundations in Business Analytics	3
Upper Level Business Requirements		
BUS 305	Professional Development for Today's Workplace	1
BUS 350	Business Communications	3
FN 310	Fundamentals of Financial Management	3
IS 303	Information Systems	3
MG 302	Management Processes and Behavior	3
MG 403	Operations Management	3
MK 303	Basic Marketing	3
BUS 450	Strategic Management Capstone Experience <sup>1</sup>	3
	or BUS 495 Business Honors Seminar, I	
	Experiential Learning <sup>2</sup>	
	International Business <sup>3</sup>	3

**Information Systems Major Courses**

IS 204	Introduction to Business Programming	3
IS 302	Business Data Communications	3
IS 321	Systems Analysis	3
MG 417	Project Management	3
<b>Data Analytics Concentration</b>		
IS 301	Introduction to Database Management Systems <sup>4</sup>	3
IS 417	Introduction to Business Intelligence	3
IS 418	Applied Data Science for Information Systems	3
Information Systems Elective		3
General Electives		9
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> Business Honors students take BUS 495.
- <sup>2</sup> 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 415, MK 416, MK 425, MK 445, MK 446, MK 447, MK 448, MK 449, MK 450, MK 451, MK 452, MK 453, MK 454, MK 455, MK 456, MK 457, MK 458, MK 459, MK 460, MK 461, MK 462, MK 463, MK 464, MK 465, MK 466, MK 467, MK 468, MK 469, MK 470, MK 471, MK 472, MK 473, MK 474, MK 475, MK 476, MK 477, MK 478, MK 479, MK 480, MK 481, MK 482, MK 483, MK 484, MK 485, MK 486, MK 487, MK 488, MK 489, MK 490, MK 491, MK 492, MK 493, MK 494, MK 495, MK 496, MK 497, MK 498, MK 499, MK 500, MK 501, MK 502, MK 503, MK 504, MK 505, MK 506, MK 507, MK 508, MK 509, MK 510, MK 511, MK 512, MK 513, MK 514, MK 515, MK 516, MK 517, MK 518, MK 519, MK 520, MK 521, MK 522, MK 523, MK 524, MK 525, MK 526, MK 527, MK 528, MK 529, MK 530, MK 531, MK 532, MK 533, MK 534, MK 535, MK 536, MK 537, MK 538, MK 539, MK 540, MK 541, MK 542, MK 543, MK 544, MK 545, MK 546, MK 547, MK 548, MK 549, MK 550, MK 551, MK 552, MK 553, MK 554, MK 555, MK 556, MK 557, MK 558, MK 559, MK 560, MK 561, MK 562, MK 563, MK 564, MK 565, MK 566, MK 567, MK 568, MK 569, MK 570, MK 571, MK 572, MK 573, MK 574, MK 575, MK 576, MK 577, MK 578, MK 579, MK 580, MK 581, MK 582, MK 583, MK 584, MK 585, MK 586, MK 587, MK 588, MK 589, MK 590, MK 591, MK 592, MK 593, MK 594, MK 595, MK 596, MK 597, MK 598, MK 599, MK 600, MK 601, MK 602, MK 603, MK 604, MK 605, MK 606, MK 607, MK 608, MK 609, MK 610, MK 611, MK 612, MK 613, MK 614, MK 615, MK 616, MK 617, MK 618, MK 619, MK 620, MK 621, MK 622, MK 623, MK 624, MK 625, MK 626, MK 627, MK 628, MK 629, MK 630, MK 631, MK 632, MK 633, MK 634, MK 635, MK 636, MK 637, MK 638, MK 639, MK 640, MK 641, MK 642, MK 643, MK 644, MK 645, MK 646, MK 647, MK 648, MK 649, MK 650, MK 651, MK 652, MK 653, MK 654, MK 655, MK 656, MK 657, MK 658, MK 659, MK 660, MK 661, MK 662, MK 663, MK 664, MK 665, MK 666, MK 667, MK 668, MK 669, MK 670, MK 671, MK 672, MK 673, MK 674, MK 675, MK 676, MK 677, MK 678, MK 679, MK 680, MK 681, MK 682, MK 683, MK 684, MK 685, MK 686, MK 687, MK 688, MK 689, MK 690, MK 691, MK 692, MK 693, MK 694, MK 695, MK 696, MK 697, MK 698, MK 699, MK 700, MK 701, MK 702, MK 703, MK 704, MK 705, MK 706, MK 707, MK 708, MK 709, MK 710, MK 711, MK 712, MK 713, MK 714, MK 715, MK 716, MK 717, MK 718, MK 719, MK 720, MK 721, MK 722, MK 723, MK 724, MK 725, MK 726, MK 727, MK 728, MK 729, MK 730, MK 731, MK 732, MK 733, MK 734, MK 735, MK 736, MK 737, MK 738, MK 739, MK 740, MK 741, MK 742, MK 743, MK 744, MK 745, MK 746, MK 747, MK 748, MK 749, MK 750, MK 751, MK 752, MK 753, MK 754, MK 755, MK 756, MK 757, MK 758, MK 759, MK 760, MK 761, MK 762, MK 763, MK 764, MK 765, MK 766, MK 767, MK 768, MK 769, MK 770, MK 771, MK 772, MK 773, MK 774, MK 775, MK 776, MK 777, MK 778, MK 779, MK 780, MK 781, MK 782, MK 783, MK 784, MK 785, MK 786, MK 787, MK 788, MK 789, MK 790, MK 791, MK 792, MK 793, MK 794, MK 795, MK 796, MK 797, MK 798, MK 799, MK 800, MK 801, MK 802, MK 803, MK 804, MK 805, MK 806, MK 807, MK 808, MK 809, MK 810, MK 811, MK 812, MK 813, MK 814, MK 815, MK 816, MK 817, MK 818, MK 819, MK 820, MK 821, MK 822, MK 823, MK 824, MK 825, MK 826, MK 827, MK 828, MK 829, MK 830, MK 831, MK 832, MK 833, MK 834, MK 835, MK 836, MK 837, MK 838, MK 839, MK 840, MK 841, MK 842, MK 843, MK 844, MK 845, MK 846, MK 847, MK 848, MK 849, MK 850, MK 851, MK 852, MK 853, MK 854, MK 855, MK 856, MK 857, MK 858, MK 859, MK 860, MK 861, MK 862, MK 863, MK 864, MK 865, MK 866, MK 867, MK 868, MK 869, MK 870, MK 871, MK 872, MK 873, MK 874, MK 875, MK 876, MK 877, MK 878, MK 879, MK 880, MK 881, MK 882, MK 883, MK 884, MK 885, MK 886, MK 887, MK 888, MK 889, MK 890, MK 891, MK 892, MK 893, MK 894, MK 895, MK 896, MK 897, MK 898, MK 899, MK 900, MK 901, MK 902, MK 903, MK 904, MK 905, MK 906, MK 907, MK 908, MK 909, MK 910, MK 911, MK 912, MK 913, MK 914, MK 915, MK 916, MK 917, MK 918, MK 919, MK 920, MK 921, MK 922, MK 923, MK 924, MK 925, MK 926, MK 927, MK 928, MK 929, MK 930, MK 931, MK 932, MK 933, MK 934, MK 935, MK 936, MK 937, MK 938, MK 939, MK 940, MK 941, MK 942, MK 943, MK 944, MK 945, MK 946, MK 947, MK 948, MK 949, MK 950, MK 951, MK 952, MK 953, MK 954, MK 955, MK 956, MK 957, MK 958, MK 959, MK 960, MK 961, MK 962, MK 963, MK 964, MK 965, MK 966, MK 967, MK 968, MK 969, MK 970, MK 971, MK 972, MK 973, MK 974, MK 975, MK 976, MK 977, MK 978, MK 979, MK 980, MK 981, MK 982, MK 983, MK 984, MK 985, MK 986, MK 987, MK 988, MK 989, MK 990, MK 991, MK 992, MK 993, MK 994, MK 995, MK 996, MK 997, MK 998, MK 999, MK 1000.
- <sup>3</sup> International Business courses include: EC 407, FN 412, MG 415, MK 416, IB 320, IB 439, IB 495, or AC 440
- <sup>4</sup> IS 301 will also fulfill Data Analytics Concentration.

**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
<b>Core Curriculum Requirements</b>	<b>41</b>
<b>Lower-level Business Core</b>	
BUS 101 Introduction to Business	3
or BUS 102 Business Foundations	
BUS 110 Essentials of Financial Literacy	3
AC 200 Principles of Accounting I	3
AC 201 Principles of Accounting II	3
LS 246 Legal Environment of Business	3
QM 214 Introduction to Business Statistics	3
QM 215 Foundations in Business Analytics	3
<b>Upper-level Business Core</b>	

BUS 305	Professional Development for Today's Workplace	1
BUS 350	Business Communications	3
FN 310	Fundamentals of Financial Management	3
MG 302	Management Processes and Behavior	3
IS 303	Information Systems	3
MK 303	Basic Marketing	3
International Business <sup>1</sup>		3
MG 403	Operations Management	3
or DB 320	Distribution Management	
BUS 450	Strategic Management Capstone Experience <sup>2</sup>	3
<b>Entrepreneurship Major Requirements</b>		
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
<b>Major Electives</b>		<b>6</b>
ENT 424	Entrepreneurial New Product and Service Development	
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	
General Electives		9
<b>Total Hours</b>		<b>120</b>

- <sup>1</sup> Select from EC 407, FN 412, MG 415, MK 416, AC 440, IB 320, IB 439, or IB 495.
- <sup>2</sup> Business Honors students take BUS 495.

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

<b>Freshman</b>			
First Term	Hours	Second Term	Hours
EH 101	3	EH 102	3
MA 105	3	CMST 101	3
BUS 101	3	BUS 110	3
Core Curriculum Area II: Humanities, Fine Arts <sup>1</sup>	3	Core Curriculum Area III: Natural Science (with laboratory)	4
Core Curriculum Area IV: Social and Behavioral Science	3	Core Curriculum Area IV: History <sup>2</sup>	3
<b>15</b>		<b>16</b>	
<b>Sophomore</b>			
First Term	Hours	Second Term	Hours
QM 214	3	LS 246	3
AC 200	3	QM 215	3
EC 210	3	AC 201	3
Core Curriculum Area II: Literature	3	EC 211	3

Core Curriculum Area III: Natural Science (with laboratory)	4 Core Curriculum Area II	3	
		<b>16</b>	<b>15</b>
<b>Junior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
BUS 350	3	MG 409	3
MK 303	3	MG 417	3
MG 302 <sup>4</sup>	3	International Business Elective <sup>3</sup>	3
EC 304 or 320	3	FN 310	3
BUS 305	1		
MG 403	3		
		<b>16</b>	<b>12</b>
<b>Senior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
MG 401	3	BUS 450	3
IS 303	3	Finance Elective <sup>6</sup>	3
MG 445	3	Business Course Elective	3
Marketing Elective <sup>5</sup>	3	General Electives	6
Business Course Elective	3		
		<b>15</b>	<b>15</b>
<b>Total credit hours: 120</b>			

- <sup>1</sup> Select one from the following courses: ARH 101, MU 120 or THR 100.
- <sup>2</sup> Select one course from the following: HY 101, HY 102, HY 104, HY 105, HY 120, or HY 121.
- <sup>3</sup> Choose from AC 440, EC 407, MG 415, MK 416, FN 412, IB 320, IB 439 or IB 495.
- <sup>4</sup> Junior standing required (60 semester hours credit)
- <sup>5</sup> Select one from: Any 300/400 MK course.
- <sup>6</sup> Select one from: Any 300/400 FN course.

## Proposed Program of Study for a Major in Management

<b>Freshman</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
EH 101	3	EH 102	3
MA 105	3	CMST 101	3
BUS 101	3	BUS 110	3
Core Curriculum Area IV: Social & Behavioral Science	3	Core Curriculum Area IV: History <sup>2</sup>	3
Core Curriculum Area II: Humanities, Fine Art <sup>1</sup>	3	Core Curriculum Area III: Natural Science (with laboratory)	4
		<b>15</b>	<b>16</b>
<b>Sophomore</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
QM 214	3	LS 246	3
AC 200	3	QM 215	3
EC 210	3	AC 201	3
Core Curriculum Area II: Literature	3	EC 211	3
Core Curriculum Area III: Natural Science (with laboratory)	4	Core Curriculum Area II	3
		<b>16</b>	<b>15</b>

<b>Junior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
BUS 305	3	MG 413 <sup>4</sup>	3
BUS 350	3	MG 409	3
MK 303	3	MG 403	3
MG 302 <sup>4</sup>	3	FN 310	3
IS 303	3		
MG 425	3		
		<b>16</b>	<b>12</b>
<b>Senior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
MG 401	3	BUS 450	3
MG 416	3	MG 417	3
MG 445	3	International Business Elective <sup>3</sup>	3
Management Electives	6	General Electives	6
		<b>15</b>	<b>15</b>

**Total credit hours: 120**

- <sup>1</sup> Select one from: ARH 101, MU 120 or THR 100.
- <sup>2</sup> Select one from: HY 101, HY 102, HY 104, HY 105, HY 120 or HY 121.
- <sup>3</sup> Select one from: MG 415, MK 416, FN 412, EC 407, AC 440, IB 320, IB 439 or IB 495.
- <sup>4</sup> Junior Standing (60 semester hours of credit).

## Proposed Program of Study for a Major in Human Resource Management

<b>Freshman</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
EH 101	3	EH 102	3
MA 105	3	CMST 101	3
BUS 101	3	BUS 110	3
Core Curriculum Area II: Humanities, Fine Art <sup>1</sup>	3	Core Curriculum Area IV: History <sup>2</sup>	3
Core Curriculum Area IV: Social and Behavioral Science	3	Core Curriculum Area III: Natural Science (with laboratory)	4
		<b>15</b>	<b>16</b>
<b>Sophomore</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
QM 214	3	LS 246	3
AC 200	3	QM 215	3
EC 210	3	AC 201	3
Core Curriculum Area III: Natural Science (with laboratory)	4	EC 211	3
		<b>13</b>	<b>15</b>
<b>Junior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
BUS 305	3	MG 409	3
BUS 350	3	MG 413 <sup>4</sup>	3
MK 303	3	International Business Elective <sup>3</sup>	3
MG 302 <sup>4</sup>	3	MG 414	3
FN 310	3	Core Curriculum Area II: Literature	3

IS 303	3		
	<b>16</b>		<b>15</b>
<b>Senior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
MG 401		3 BUS 450	3
MG 411		3 MG 412	3
Managment Electives (300/400 level)		6 MG 403	3
General Elective		3 General Electives	6
	<b>15</b>		<b>15</b>

Total credit hours: 120

- <sup>1</sup> Select one from: ARH 101, MU 120 or THR 100.
- <sup>2</sup> Select one from: HY 101, HY 102, HY 104, HY 105, HY 120 or HY 121.
- <sup>3</sup> Select one from: MG 415, MK 416, FN 412, EC 407, AC 440, IB 320, IB 439 or IB 495.
- <sup>4</sup> Junior Standing (60 semester hours of credit)

### Proposed Program of Study for a Major in Information Systems

<b>Freshman</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
EH 101		3 EH 102	3
MA 105		3 CMST 101	3
BUS 101		3 BUS 110	3
Core Curriculum Area II: Humanities, Fine Art <sup>1</sup>		3 Core Curriculum Area III: Natural Science (with laboratory)	4
Core Curriculum Area IV: Social and Behavioral Science		3 Core Curriculum Area IV: History <sup>2</sup>	3
	<b>15</b>		<b>16</b>

<b>Sophomore</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
QM 214		3 LS 246	3
AC 200		3 QM 215	3
EC 210		3 AC 201	3
Core Curriculum Area II: Literature		3 EC 211	3
Core Curriculum Area III: Natural Science (with laboratory)		4 IS 204	3
	<b>16</b>		<b>15</b>

<b>Junior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
BUS 305		1 FN 310	3
BUS 350		3 IS 301	3
IS 303		3 MG 403	3
IS 321		3 IS 302	3
MK 303		3 Core Curriculum Area II	3
MG 302		3	
	<b>16</b>		<b>15</b>

<b>Senior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
MG 417		3 BUS 450	3
IS 302		3 Information Systems Elective	3
Experiential Education Requirement		International Business Elective <sup>3</sup>	3

Information Systems Elective	3	General Elective	3
General Electives	6		
	<b>15</b>		<b>12</b>

Total credit hours: 120

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

<b>Freshman</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
EH 101		3 EH 102	3
MA 105		3 CMST 101	3
BUS 101		3 BUS 110	3
Core Curriculum Area II: Humanities, Fine Art <sup>1</sup>		3 Core Curriculum Area III: Natural Science (with laboratory)	4
Core Curriculum Area IV: Social and Behavioral Science		3 Core Curriculum Area IV: History <sup>2</sup>	3
	<b>15</b>		<b>16</b>

<b>Sophomore</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
QM 214		3 LS 246	3
AC 200		3 QM 215	3
EC 210		3 AC 201	3
Core Curriculum Area II: Literature		3 EC 211	3
Core Curriculum Area III: Natural Science (with laboratory)		4 IS 204	3
	<b>16</b>		<b>15</b>

<b>Junior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
BUS 305		1 IS 301	3
BUS 350		3 IS 302	3
IS 303		3 FN 310	3
IS 321		3 MG 403	3
MK 303		3 Core Curriculum Area II: Humanities, Fine Art <sup>1</sup>	3
MG 302		3	
	<b>16</b>		<b>15</b>

<b>Senior</b>			
<b>First Term</b>	<b>Hours</b>	<b>Second Term</b>	<b>Hours</b>
MG 417		3 BUS 450	3
IS 417		3 IS 418	3
Information Systems Elective		3 International Business Elective <sup>3</sup>	3
General Electives		6 General Elective	3
	<b>15</b>		<b>12</b>

Total credit hours: 120

## 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
MA 105		3 CMST 101	3
BUS 101		3 BUS 110	3
Core Curriculum Area II: Humanities, Fine Art <sup>1</sup>		3 Core Curriculum Area III: Natural Science (with laboratory)	4
Core Curriculum Area IV: Social and Behavioral Science		3 Core Curriculum Area IV: History <sup>2</sup>	3
		<b>15</b>	<b>16</b>
Sophomore			
First Term	Hours	Second Term	Hours
QM 214		3 LS 246	3
AC 200		3 QM 215	3
EC 210		3 AC 201	3
Core Curriculum Area II: Literature		3 EC 211	3
Core Curriculum Area III: Natural Science (with laboratory)		4 IS 204	3
		<b>16</b>	<b>15</b>
Junior			
First Term	Hours	Second Term	Hours
BUS 305		1 FN 310	3
BUS 350		3 IS 301	3
IS 303		3 MG 403	3
IS 321		3 IS 302	3
MK 303		3 Core Curriculum Area II: Humanities, Fine Art	3
MG 302		3	
		<b>16</b>	<b>15</b>
Senior			
First Term	Hours	Second Term	Hours
MG 417		3 BUS 450	3
IS 413		3 IS 414	3
Information Systems Elective		3 International Business Elective <sup>3</sup>	3
Experiential Education Requirement		General Elective	3
General Electives		6	
		<b>15</b>	<b>12</b>
<b>Total credit hours: 120</b>			

<sup>1</sup> Select one from: ARH 101, MU 120 or THR 100.

<sup>2</sup> Select one from : HY 101, HY 102, HY 104, HY 105, HY 120 or HY 121.

<sup>3</sup> Select one from MG 415, MK 416, EC 407, FN 412, IB 320, IB 439, IB 495 or AC 440.

## 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
MA 105		3 CMST 101	3
BUS 110		3 Core Curriculum Area II: Fine Art <sup>1</sup>	3
BUS 101		3 Core Curriculum Area IV: History <sup>2</sup>	3
Core Curriculum Area IV: Social and Behavioral Science		3 Core Curriculum Area III: Natural Science (with laboratory)	4
		<b>15</b>	<b>16</b>
Sophomore			
First Term	Hours	Second Term	Hours
QM 214		3 LS 246	3
AC 200		3 QM 215	3
EC 210		3 AC 201	3
Core Curriculum Area III: Natural Science (with laboratory)		4 EC 211	3
Core Curriculum Area II: Literature		3 Core Curriculum Area II	3
		<b>16</b>	<b>15</b>
Junior			
First Term	Hours	Second Term	Hours
BUS 305		1 MG 403	3
BUS 350		3 MG 401	3
MK 303		3 MG 409	3
MG 302		3 IS 303	3
FN 310		3 International Business requirement <sup>4</sup>	3
		<b>13</b>	<b>15</b>
Senior			
First Term	Hours	Second Term	Hours
MG 417		3 BUS 450	3
MG 425		3 Major Electives <sup>3</sup>	6
MG 445		3 General Electives	6
Major Electives <sup>3</sup>		6	
		<b>15</b>	<b>15</b>
<b>Total credit hours: 120</b>			

<sup>1</sup> Select one from: ARH 101, MU 120 or THR 100

<sup>2</sup> Select one from: HY 101, HY 102, HY 120 or HY 121

<sup>3</sup> Select four from MG 416, MG 413, MG 418, MG 445, and any 300/400 advisor approved course.

<sup>4</sup> Choose from MG 415, MK 416, EC 407, FN 412, AC 440, IB 320 IB 439 or IB 495



## Proposed Program of Study for a Major in Entrepreneurship

### Freshman

First Term	Hours	Second Term	Hours
EH 101		3 BUS 110	3
BUS 101		3 EH 102	3
MA 105		3 CMST 101	3
Core Curriculum Area II: Humanities, Fine Art <sup>1</sup>		3 Core Curriculum Area II: Humanities	3
Core Curriculum Area IV: Social and Behavioral Science, History <sup>2</sup>		3 Core Curriculum Area IV: Natural Science (with Lab)	4
		<b>15</b>	<b>16</b>

### Sophomore

First Term	Hours	Second Term	Hours
ENT 270		3 ENT Elective	3
AC 200		3 AC 201	3
EC 210		3 EC 211	3
QM 214		3 QM 215	3
Core Curriculum Area IV: Natural Science (with Lab)		4 Core Curriculum Area IV: Social and Behavioral Science	3
		<b>16</b>	<b>15</b>

### Junior

First Term	Hours	Second Term	Hours
ENT 350		3 ENT 422	3
ENT 421		3 BUS 350	3
LS 246		3 MG 302	3
FN 310		3 ENT 320	3
MK 303		3 BUS 305	1
		Core Curriculum Area II: Humanities and Fine Art, Literature	3
		<b>15</b>	<b>16</b>

### Senior

First Term	Hours	Second Term	Hours
ENT Elective		3 ENT 425	3
MG 403		3 BUS 450	3
IS 303		3 International Business <sup>3</sup>	3
General Elective		3 General Elective	3
General Elective		3	
		<b>15</b>	<b>12</b>

**Total credit hours: 120**

<sup>1</sup> Select one from: ARH 101, MU 120, or THR 100.  
<sup>2</sup> Select one from: HY 101, HY 102, HY 104, HY 105, HY 120 or HY 121.  
<sup>3</sup> Select one from: MG 415, MK 416, FN 412, EC 407, AC 440, IB 320, IB 439 or IB 495.

## IS-Information Systems Courses

### 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 introductory course on database management systems. Emphasis is placed on providing students with the fundamental knowledge necessary to model business data needs, design logical data models, and design, implement, and use of a physical database in application development.

**Prerequisites:** IS 321 [Min Grade: C]

### IS 302. Business Data Communications. 3 Hours.

A study of data communications technologies used for business. The technologies include local and wide area networks, as well as telephony. Network management and security are also emphasized.

### IS 303. Information Systems. 3 Hours.

A survey course covering the theory and application of management information systems in business environments. Includes planning, development and implementation of business strategies that leverage information systems for competitive advantage.

### IS 321. Systems Analysis. 3 Hours.

Focuses on the planning, decision making tasks and requisite skills necessary for the analysis of information systems.

### IS 413. Introduction to Information Security. 3 Hours.

This course serves as an introduction to the field of information security where students will develop a basic understanding of the information security principles. Students will be able to understand the business value of information security and its legal/ ethical considerations. Students will also gain an appreciation for security planning and risk management and how risk may be mitigated through technical, physical, and administrative controls.

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

Primary objectives of the course are for the student to develop an understanding of key information security concepts, develop an understanding of how people, technology, and organizational policies should be developed and managed to safeguard an organization's information resources, learn how to manage under uncertainty and risk, develop policies and procedures to make information systems secure, and learn how to audit and recover from security breaches.

**Prerequisites:** IS 413 [Min Grade: C]

### IS 417. Introduction to Business Intelligence. 3 Hours.

This course covers topics of knowledge management and business intelligence from an organizational IT perspective. The content of the course includes discussion of and readings on the nature of knowledge; knowledge discovery, generation, capture, transfer, sharing, and application; and includes discussion of the core IT capabilities necessary to deliver Business Intelligence in organizations. The development and use of data warehouses and data marts to support business analytics is discussed.

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

A course in Business Analytics focusing on the extraction and preparation of data for analysis, applying analysis methods, and reporting analysis results. Students will also examine issues related to data stewardship and provenance.

### 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.**

Introductory course covering the four functions of management: planning, organizing, leading, and controlling. Strategic planning, teamwork, decision-making, and communication are emphasized.

**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.**

The purpose of this course is to expose students to the historical origins of NPOs/NGOs, their favored tax status, and demands of transparency and accountability of achieving their stated missions. This course also exposes students to the challenges of managing a voluntary workforce, identifying revenue streams to fund activities, and developing strategies to ensure value creation in the nonprofit setting. This course is experiential. Students will explore the various aspects of the nonprofit sector academically and will also get 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.**

Organizational behavior is the study of individuals and their behavior in the workplace. The course looks at behaviors across individual, group, and organizational levels. Broad topics include organizational behavior and leadership, understanding individuals in organizations, motivating employees, building relationships, 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.**

Primary focus is 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 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 know about international business. We will consider cultural, political, and geographic differences and develop strategies to attempt to maximize business opportunities in view of these differences.

**Prerequisites:** MG 302 [Min Grade: C] or BUS 311 [Min Grade: C]

**MG 416. Supply Chain Management. 3 Hours.**

Course takes operational view of the mechanism for matching supply and demand through the management of material and information flow. This framework is used to understand strategic, design and operational issues insupply management.

**Prerequisites:** (MG 403 [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. This is a service/experiential learning designated course.

**MG 438. Managerial Communication Skills. 3 Hours.**

An advanced business communications course for undergraduates focusing on the verbal and nonverbal communication skills required of managers in today's business environment.

**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. Must be a management major, at least junior standing, C or better in MG 302 and GPA of 2.0 overall. Sponsoring business may require additional courses.

**Prerequisites:** MG 302 [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. Management Seminar/SL. 3 Hours.**

Selected management topics. This is a designated service-learning course integrating academic learning, civic learning and meaningful service to the community.

**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-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.

**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:** (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:** (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 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 QM 215 [Min Grade: C] and EC 210 [Min Grade: C]