# The College of Business Administration <br> \author{ P.N. Saksena, Dean 

}

Steven Frankforter, Associate Dean for Accreditation and Graduate Programs
Chlotia Garrison, Associate Dean for Undergraduate Programs

## Undergraduate Degree Programs and Requirements

Four undergraduate programs are offered by the College of Business Administration: the Bachelor of Science in Business Administration, the Bachelor of Science in Computer Science, the Bachelor of Arts in Economics, and the Bachelor of Science in Digital Information Design. The baccalaureate degree program in Business Administration is accredited by AACSB International--The Association to Advance Collegiate Schools of Business and the baccalaureate degree in Computer Science is accredited by ABET (www.abet.org).

The College of Business Administration delivers transformative education to the most diverse student body in the heart of the Carolinas. The College will promote student success with professional development, innovative programs, experiential learning, and regional partnerships, through quality instruction, applied and pedagogical research, and impactful service.

Ten areas of concentration are available within the Bachelor of Science in Business Administration degree program. These concentrations are accounting, computer information systems, economics, entrepreneurship, finance, health care management, human resource management, international business, marketing, and management. Two of these concentrations, accounting and management, can be earned through our evening program. The accounting concentration offers an integrated undergraduate/graduate curriculum that allows for optimum efficiency in continuing into a graduate program with an accounting emphasis.

The Business degree program prepares undergraduates for careers in the business world by offering an academically challenging program that produces a new kind of leader for business, industry, government, the arts, and health services. This new leader leaves the program with the skills needed to function as a professional in the complex organizations of the 21st century. The core business curriculum includes two integrating threads: professional development and technology with analytics. Throughout the business foundation and core courses, professional development opportunities are provided through classroom assignments and interaction with business professionals. In addition, each concentration has identified a course that will include a professional development component as students face graduation and search for positions in their field. Analytical skills are increasingly important in the business world. Technology and business analytics are emphasized throughout the entire business program. Along with an integrated curriculum, the faculty and business leaders have developed a comprehensive list of competencies that students must attain before graduation from this program. The competency categories for the business degree are communication, teamwork/diversity, adaptability, problem solving, accountability and ethics. Most business courses also emphasize team projects in addition to individual assignments. Internship experiences are integrated into some concentrations and encouraged in others.

The College of Business Administration is dedicated to offering quality classroom instruction and to enhancing personal development through interaction between faculty and students. A faculty open-door policy facilitates this approach. Quality classroom instruction is provided by a faculty who meet the high standards of scholarship required for AACSB and ABET accreditation.

A number of scholarships are awarded annually to College of Business Administration students. Eligibility is determined on the basis of outstanding academic performance.

The College of Business Administration offers minors in the areas of accounting, business administration, computer science, digital information design, economics, entrepreneurship, finance, financial planning, health care management, hospitality and hotel management, human resource management, management, marketing, professional business, and risk assurance. For specific requirements for individual minors, see page 136.

## Academic Advising

Academic advising is an integral part of the learning process in the College of Business Administration. The role of the academic adviser is to assist in making appropriate decisions about academic programs and career goals, provide academic information about Winthrop University and degree programs, and suggest appropriate involvement in on-campus, off-campus and experiential opportunities. Freshmen are assigned a faculty adviser after summer orientation. Not only will advisers help with program selections and scheduling, but they will also be available to assist with the adjustment to university life throughout the first year. Students who transfer after their freshman year are assigned an adviser in the academic concentration of their choice.

Transfer evaluations are completed by the Office of Student Services. The subject matter and the level of the course are considered for evaluation. Upper-level courses in the core and concentration, which have been completed prior to achieving junior status, may be used to meet elective requirements, but must be replaced in the core or concentration by approved advanced courses (if not transferred from an AACSB accredited institution). Upper-level business and computer science courses may not transfer from two-year institutions. In addition to the requirement that the final 30 hours be completed at Winthrop, only $50 \%$ of the business core and concentration may transfer toward a business administration degree. CSCI majors must complete 30 hours of computer science courses numbered above 299. Only nine hours of upper-level courses may transfer into the program and must be from an ABET-accredited program.

The Director of Student Services in the College of Business Administration is:
Gay Randolph, Office of Student Services
226 Thurmond Building
(803) 323-4833, Fax (803) 323-3960
randolphg@winthrop.edu.

## Faculty

Professors
Barbara Burgess-Wilkerson
Melissa Carsten
Steven Frankforter, Associate Dean
and Graduate Director
Chlotia Garrison, Associate Dean
Willis Lewis
Michael Matthews
Louis J. Pantuosco, Chair, Accounting,
Finance, \& Economics
Hemant Patwardhan
Cara Peters
D. Keith Robbins, Chair, Management \& Marketing
Jane B. Thomas
P. N. Sakena, Dean

Associate Professors<br>Antonia Berbrick<br>Andrew Besmer<br>Adriana Cordis<br>Stephen Dannelly, Chair,<br>Computer Science \& Quantitative Methods<br>Marguerite Doman<br>Philip Gibson<br>Tracy Griggs<br>Malayka Klimchak<br>Stephanie Lawson<br>Nicki Washington<br>Michael Whitney

Assistant Professors

Jimmy Cheng<br>Edie Dille<br>Terri Guidry<br>Joanna Jackson<br>Jayne Maas<br>Kent Miller<br>Nicholas Moellman<br>Max Ostinelli<br>Alex Perri<br>Charles Randle<br>Gay Randolph<br>Anna Romanova<br>Shirley (Yi) Shen<br>Larry Stevens<br>Danko Tarabar<br>Celeste Tiller<br>Vanessa Valdez<br>Gang Wang

## Bachelor of Science in Business Administration

Students enrolled in the Bachelor of Science in Business Administration program or enrolled in business classes may not enroll in courses numbered above 299 unless they have at least a 2.0 grade-point average, completed 54 hours, and a grade of C- or better in HMXP 102.

Transfer students must complete HMXP102 prior to taking upper-level courses in the College of Business Administration. Students who transfer in 54 or more semester hours must complete this course within their first semester. If, during this time, such students do not earn a C- or better in HMXP 102, they will not be permitted to take additional courses above 299 until this general education requirement is met.

Within the 120 hours required for this degree, the student must include 40 hours in courses numbered above 299. Students pursuing a Bachelor of Science in Business Administration must select one of ten concentrations. Many students choose to fulfill elective hours with a second concentration or business administration minor. No more than six hours of business course credit may overlap between two concentrations or a concentration and a business minor. Business students must have six distinct hours in their business minor.

## Accelerated Programs

The Management and Human Resource Management concentrations have opportunities for students to complete an undergraduate and graduate degree in five years with a total of 150 hours: 120 undergraduate and 36 graduate hours where the programs would share six 500 -level hours. The combined program includes increased rigor, when compared to the undergraduate program, while allowing certain classes to overlap between the B.S. and the M.B.A. degrees.

Students must complete an Intent to Pursue a Combined Program form prior taking any of the 500-level courses for graduate credit as an undergraduate student; must have a 3.0 undergraduate GPA at the time of completion of the Intent to Pursue a Combined Program form and prior to taking each of the 500 -level courses for graduate credit; and are limited to a maximum load of 16 credit hours when taking the 500-level courses for graduate credit.

## Bachelor of Science in Business Administration

| General Education Courses | nester Hours |  |
| :---: | :---: | :---: |
| ACAD 101 | Principles of the Learning Academy | 1 |
| Shared Skills and Proficiencies |  |  |
| Writing and Critical Thinking (C- or better required for each course) |  |  |
| WRIT 101, HMXP 102, CRTW 201 | Composition; The Human Experience: Who Am I? |  |
|  | Crit Reading, Thinking, \& Writing | 9 |
| Oral Communication | Met in major with MGMT 365 | 0 |
| Technology | Met in major with CSCI 101 \& labs | 0 |
| Intensive Writing | Met in major with MGMT 365 | 0 |
| Constitution Requirement | See approved list, p. 15; may be met by other req | 0-3 |
| Physical Activity | See approved list, p. 15 | 1 |
| Thinking Critically Across Disciplines* |  |  |
| Global Perspectives | See approved list, p. 15 | 3 |
| Historical Perspectives | See approved list, p. 15 | 3 |
| Introducing Students to Broad Disciplinary Perspectives* |  |  |
| Social Science | See approved list, p. 15; must include 2 designators 3 hours met in major with ECON 215 | 3 |
| Humanities and Arts | See approved list, p. 15; must include 2 designators | 6 |
| Quantitative Skills and Natural Science* (3 courses) |  | 6-8 |
| Quantitative Skills | See approved list, p. 15; 3 hours met in major with MATH | (0-4) |
| Natural Science | See approved list, p. 15 [Must include a lab science. If 2 courses taken, must be in 2 different groups: Life, Physical, Earth]. | (3-8) |
| *No more than two courses in the major may count toward requirements in these areas |  |  |
| Subtotal |  | 32-37 |
| Business Administration Program R | nts | 72-88 |
| Foundation Courses (C- or better | or each course) | 27-28 |
| BADM 180 | Business Issues and Careers | 3 |
| CSCI 101, 101B, 101C \& 101D; OR | E Intro to Comp \& Info Processing, Excel, Access, Adv, Excel | 3 |
| MATH 105, 151 or 201 | Applied Calculus, Applied College Algebra, Calculus I | 3-4 |
| ACCT 280 | Introduction to Financial Accounting | 3 |
| ACCT 281 | Introduction to Managerial Accounting | 3 |
| ECON 215 | Principles of Microeconomics | 3 |
| ECON 216 | Principles of Macroeconomics | 3 |
| QMTH 205 | Business Statistics | 3 |
| QMTH 210 | Business Analytics | 3 |
| Core Courses (C- or better required for each course) |  | 21 |
| BADM 250 | Legal \& Ethical Environ of Business | 3 |
| FINC 311 | Principles of Finance | 3 |
| MGMT 220 | Business Information Systems | 3 |
| MGMT 321 | Management and Leadership | 3 |
| MGMT 365 | Business Communication \& Professional Development | 3 |
| MGMT 480 | Business Policy | 3 |
| MKTG 380 | Principles of Marketing | 3 |
| Applied Quantitative Skills-Choose one of the following: (C- or better required) |  | 3 |
| BADM 571 | Applied Analytics and Data Visualization | 3 |
| ACCT 304 | Accounting Analytics | 3 |
| CSCI 250 | Programming for Business | 3 |
| ECON 306 | Econometrics | 3 |
| High Impact Practice Experience - Choose one of the following: (C- or Better Required) Internship |  | 3 |
|  |  |  |
| ACCT 491 | Accounting Internship | 3 |
| BADM 491 | Internship in General Business | 3 |
| BADM 492 | Internship in International Business | 3 |
| CSCI 491 | Software Development Internship | 3 |
| CSCI 492 | Information Systems Internship | 3 |
| ECON 491 | Internship in Economics | 3 |
| ENTR 491 | Internship in Entrepreneurship | 3 |
| FINC 491 | Internship in Finance | 3 |
| MGMT 491 | Internship in Management | 3 |
| MGMT 493 | Internship in Hospitality Management | 3 |
| MKTG 491 | Internship in Marketing | 3 |

Study Abroad
BADM $200 \quad$ International Field Experience 3
BADM $400 \quad$ International Field Experience
Business Research
ACCT 495
BADM 391
BADM 595
ECON 495
CSCI 471
MCNR 300
Service Learning
BADM 381
3

Accounting Research and Communication 3
Business Research Seminar 3
Research in Business Administration 3
Research in Economics 3
Research in Computer Science 3
McNair Research Experience 3
Service Learning and Leadership 3

## Business Acumen Credits

Students will participate in non-credit activities related to business, career and professional development, leadership, guest speakers/panel events, and club and organization leadership hosted by the CBA. Each CBA approved non-credit activity earns 1 point. Students are required to earn: 8 points for first-time Freshman/ 6 points for Transfer students.

| Business Concentration Requirement; choose one of the following: (C- or better required for each course) | 18-27 |  |
| :--- | :--- | :--- |
| Accounting, below | Computer Information Systems, below |  |
| Economics, page 73 | Entrepreneurship, page 73 |  |
| Finance, page 73 | Health Care Management, page 74 |  |
| Human Resource Management, page 74 | International Business, page 74 |  |
| Management, page 75 | Marketing, page 76 |  |
| Electives (Number varies depending on hours required for concentration.) | $\mathbf{0 - 1 6}$ |  |
| Total | $\mathbf{1 2 0}$ |  |

See pages 15-17 for additional degree requirements.

Bachelor of Science in Business Administration - Accounting
General Education, see page 71 32-40
Foundation, Core, Applied Quantitative, and High Impact Practice Experience Courses, see pages 71-72 54-55
Accounting Concentration 24
ACCT 303 Accounting Information Systems 3
ACCT 305 Intermediate Accounting I 3
ACCT 306 Intermediate Accounting II 3
ACCT 309 Cost Accounting 3
ACCT 401 Introduction to Tax 3
ACCT 407 Advanced Topics in Financial Accounting 3
ACCT 509 Auditing Principles \& Procedures 3
One High Impact Practice Course (ACCT 491 and 495 may count in either the core or concentration but not both. Must incor-
porate case studies, projects, research or internships, etc. to satisfy HIP requirement.) 3
ACCT 491 Accounting Internship

ACCT 495 Accounting Research and Communication
ACCT 515 Audit Analytics
ACCT $520 \quad$ Internal Auditing
ACCT 521 Fraud and Forensics
Electives 0-10
$\begin{array}{ll}\text { Total } & 120\end{array}$

| Bachelor of Science in Business Administration - Computer Information Systems |  |  |
| :---: | :---: | :---: |
| Foundation, Core, Applied Quantit | High Impact Practice Experience Courses, see pages 71-72 | 54-55 |
| Computer Information Systems Co |  | 28 |
| CSCI 207 \& 208 | Intro to Computer Sci I \& II | 8 |
| CSCI 210 | Programming Tools | 1 |
| CSCI 290, 293 or 295 or 297 or 392 | JavaScript Program, C\#, Visual Basic, Scripting, Prgm in Java | 1 |
| CSCI 355 | Database Processing | 3 |
| CSCI 475 | Software Engineering I | 3 |
| CSCI 476 or 491 | Software Engineering II, Internship in Comp Sci | 3 |
| MATH 261 or QMTH 310 | Found of Discrete Mathematics, Intro to Data Mining | 3 |
| Two of: |  | 6 |
| ACCT 303 | Accounting Information Systems | 3 |

CSCI 365
CSCI 441
CSCI 451
CSCI 466
CSCI 521
Electives
Total
Information Security3
Web Application Design ..... 3
Mobile Application Development ..... 3
Network Processing ..... 3
Software Project Management ..... 30-7
Total
Bachelor of Science in Business Administration - Economics120-122
General Education, see page 71 ..... 32-40
Foundation, Core, Applied Quantitative, and High Impact Practice Experience Courses, see pages 71-72 ..... 54-55
Economics Concentration ..... 18
ECON 315 Microeconomic Theory ..... 3
ECON 316 Macroeconomic Theory ..... 3
ECON 335 Money and Banking3
Three of any ECON above 299 ..... 9
Electives ..... 6-16
Total ..... 120
Bachelor of Science in Business Administration - Entrepreneurship

| General Education, see page 71 |  | $\mathbf{3 2 - 4 0}$ |
| :--- | :--- | :--- |
| Foundation, Core, Applied Quantitative, and High Impact Practice Experience Courses, see pages 71-72 | $54-55$ |  |
| Entrepreneurship Concentration |  | $\mathbf{1 8}$ |
| ENTR 373 | Intro to Entrepreneurship | 3 |
| ENTR 374 | Strategic Entrepreneurial Growth | 3 |
| ENTR 473 | Entrepreneurial Finance | 3 |
| ENTR 579 | Business Plan Development | 3 |
| Two of: |  |  |
| BADM 561 | Electronic Commerce for Managers | 3 |
| ENTR 491 | Internship in Entrepreneurship | 3 |
| MGMT 322 | Introduction to Talent Management | 3 |
| MKTG 387 | Promotion Management and Digital Marketing | 3 |
| MKTG 385 | Marketing Research | 3 |
| MKTG 485 | Services Marketing | 3 |
| MKTG 581 | Marketing for Global Competitiveness | 3 |
| Electives |  | $\mathbf{3}$ |
| Total |  | $\mathbf{6 - 1 8}$ |

## Bachelor of Science in Business Administration - Finance

General Education, see page 71 ..... 32-40
Foundation, Core, Applied Quantitative, and High Impact Practice Experience Courses, see pages 71-72 ..... 54-55
Take one of two tracks:
Finance Concentration--Corporate Finance Track ..... 21
FINC 312 Intermediate Corporate Financial Management ..... 3
FINC 498 Adv Corp Financial Mgmt ..... 3
FINC 512 Investments ..... 3
FINC 513 Banking and Financial Service Management ..... 3
FINC 514 International Financial Management ..... 3
ACCT 305 Intermediate Accounting I ..... 3
One of:
ECON 335 Money and Banking ..... 3
FINC 491 Internship in Finance ..... 3
Electives ..... 4-13
Total ..... 120
Finance Concentration--Financial Planning Track ..... 21
ACCT 401 Introduction to Tax ..... 3
BADM 501 Estate Planning ..... 3
FINC 315 Principles of Financial Planning ..... 3
FINC 512 Investments ..... 3
FINC 515 Insurance and Risk Management ..... 3

| COLLEGE OF BUSINESS ADMINISTRATION--HEALTHCARE MGMT/HUMAN RESOURCE MGMT/INT'L BUSINESS |  |  |
| :---: | :---: | :---: |
| FINC 516 | Employee Benefits and Retirement Planning | 3 |
| FINC 420 | Financial Plan Development | 3 |
| Electives |  | 4-13 |
| Total |  | 120 |
| Note: Anyone completing any combination of 15 hours of FINC from the above lists plus 3 hours of ACCT, BADM or ECON from the above lists would qualify for the Finance option, general track. |  |  |
| Bachelor of Science in Business Administration - Health Care Management |  |  |
| General Educa |  | 32-40 |
| Foundation, C | High Impact Practice Experience Courses, see pages 71-72 | 54-55 |
| Health Care M |  | 21 |
| HCMT 200 | Intro to Health Care Management | 3 |
| HCMT 300 | The Health Care Manager | 3 |
| HCMT 302 | Health Care Planning \& Marketing | 3 |
| HCMT 303 | Health Care Organizations \& the Legal Environ | 3 |
| HCMT 491 | Health Care Management Internship | 3 |
| HCMT 492 | Econ \& Health Care Finance | 3 |
| HCMT 493 | Seminar in Health Care Management | 3 |
| Required in | ween Jr \& Sr year. |  |
| Electives |  | 4-13 |
| Total |  | 120 |
| Bachelor of Science in Business Administration - Human Resource Management |  |  |
| General Educa |  | 32-40 |
| Foundation, C | High Impact Practice Experience Courses, see pages 71-72 | 54-55 |
| Human Resou |  | 18 |
| MGMT 322 | Introduction to Talent Management | 3 |
| MGMT 323 | Acquiring Talent | 3 |
| MGMT 325 | Organizational Theory and Behavior | 3 |
| MGMT 522 | Growing and Developing Talent | 3 |
| MGMT 524 | Employment Law | 3 |
| MGMT 526 | Talent Management Seminar | 3 |
| Electives |  | 6-18 |
| Total |  | 120 |
| Bachelor of Science in Business Administration - Human Resource Management (Accelerated) |  |  |
| General Educa |  | 32-40 |
| Foundation, C | High Impact Practice Experience Courses, see pages 71-72 | 54-55 |
| Human Resou |  | 18 |
| MGMT 322 | Introduction to Talent Management | 3 |
| MGMT 323 | Acquiring Talent | 3 |
| MGMT 491 | Management Internship | 3 |
| MGMT 522 | Growing and Developing Talent | 3 |
| MGMT 524 | Employment Law | 3 |
| MGMT 526 | Talent Management Seminar | 3 |
| Electives |  | 7-16 |
| Total |  | 120 |

## Bachelor of Science in Business Administration - International Business

| General Education, see page 71 |  | $\mathbf{3 2 - 4 0}$ |
| :--- | :--- | :--- |
| Foundation, Core, Applied Quantitative, and High Impact Practice Experience Courses, see pages 71-72 | $\mathbf{5 4 - 5 5}$ |  |
| International Business Concentration |  | $\mathbf{2 1}$ |
| MGMT 200 | Introduction to International Business | 3 |
| ECON 521 | International Trade \& Investment | 3 |
| FINC 514 | International Financial Management | 3 |
| MGMT 529 | International Management | 3 |
| MKTG 581 | Marketing for Global Competitiveness | 3 |


| One of: |  |  |
| :---: | :---: | :---: |
| BADM 492 | Internship in International Business | 3 |
| BADM 400 | International Field Experience |  |
| BADM 401 | Business and Study Abroad |  |
| Choose 3 hours from ANTH 301, 321; FREN 302; GEOG 303, 306; GERM 301; |  |  |
| HIST 334, 345, 351, 547, 548 | 302; PLSC 332, 335, 338; RELG 300; SPAN 421,422 | 3 |
| Courses that support the concentration |  | 0-6 |
| Foreign language (non-native speakers of English must obtain permission from the department) |  |  |
| Electives |  | 0-13 |
| Total |  | 120 |
| Bachelor of Science in Business Administration - Management |  |  |
| General Education, see page 71 |  | 32-40 |
| Foundation, Core, Applied Quantitative, and High Impact Practice Experience Courses, see pages 71-72 |  | 54-55 |
| Take one of two tracks (Management, Hotel and Hospitality Management) |  |  |
| Management Track: |  | 18 |
| MGMT 475 | Leadership Theory and Development | 3 |
| MGMT 575 or PHIL 575 | Business Ethics | 3 |
| Two of: |  |  |
| BADM 561 | Electronic Commerce for Managers | 3 |
| ENTR 373 | Introduction to Entrepreneurship | 3 |
| MGMT 322 | Introduction to Talent Management | 3 |
| MGMT 325 | Organizational Theory \& Behavior | 3 |
| MGMT 330 | Sustainable Business Practices | 3 |
| MGMT 491 | Internship in Management | 3 |
| MGMT 529 | International Management | 3 |
| Two additional courses over 299 from the following designators: |  |  |
| ACCT, BADM, CSCI, ECON, ENTR, FINC, HCMT, MGMT, MKTG, QMTH |  | 6 |
| Hotel and Hospitality Management Track: |  |  |
| MGMT 475 | Leadership Theory and Development | 3 |
| MGMT 575 or PHIL 575 | Business Ethics | 3 |
| MGMT 360 | Hotel Management | 3 |
| MGMT 460 | Hospitality Management Strategies | 3 |
| MGMT 493 | Internship in Hospitality Management | 3 |
| MGMT 322 or MKTG 485 | Intro to Talent Mgmt, Services Marketing | 3 |
| Electives |  | 7-16 |
| Total |  | 120 |
| At least 9 hours (including MGMT 475 and MGMT 575/PHIL 575) must be courses numbered over 399. |  |  |
| Only one internship, regardless of designator, may be counted toward the required concentration credit hours. |  |  |
| Bachelor of Science in Business Administration - Management (Accelerated) |  |  |
| General Education, see page 71 |  | 32-43 |
| Foundation, Core, Applied | High Impact Practice Experience Courses, see pages 71-72 | 54-55 |
| Management Concentration (must earn a C- or better) |  | 18 |
| MGMT 475 | Leadership Theory and Development | 3 |
| MGMT 575 or PHIL 575 | Business Ethics | 3 |
| MGMT 491 | Management Internship | 3 |
| One of the following: |  | 3 |
| ENTR 373 | Introduction to Entrepreneurship |  |
| MGMT 322 | Introduction to Talent Management |  |
| MGMT 330 | Sustainable Business Practices |  |
| One of the following: |  | 3 |
| BADM 561 | Electronic Commerce for Managers |  |
| BADM 571 | Business Analytics |  |
| MGMT 522 | Growing and Developing Talent |  |
| MGMT 529 | International Management |  |
| One additional course over 299 from the following designators: |  | 3 |
| ACCT,BADM, CSCI, ECON, ENTR, FINC, HCMT, MGMT, MKTG, QMTH |  |  |
| Electives |  | 6-18 |
| Total |  | 120 |

## COLLEGE OF BUSINESS ADMINISTRATION--MARKETING/COMPUTER SCIENCE <br> Bachelor of Science in Business Administration - Marketing

| General Education, see page 71 |  | $\mathbf{3 2 - 4 0}$ |
| :--- | :--- | :--- |
| Foundation, Core, Applied Quantitative, and High Impact Practice Experience Courses, see pages 71-72 | $\mathbf{5 4 - 5 5}$ |  |
| Marketing Concentration |  | $\mathbf{1 8}$ |
| MKTG 381 | Consumer Behavior | 3 |
| MKTG 387 | Digital Marketing and Promotion Management | 3 |
| MKTG 385 | Marketing Research | 3 |
| MKTG 489 | Marketing Strategy | 3 |
| Choose two from the following: | Business Analytics |  |
| BADM 571 | Sales and Relationship Marketing | 3 |
| MKTG 483 | Services Marketing | 3 |
| MKTG 485 | Internship in Marketing | 3 |
| MKTG 491 | Marketing for Global Competitiveness | 3 |
| MKTG 581 |  | 3 |
| Electives |  | $\mathbf{7 - 1 6}$ |
| Total | $\mathbf{1 2 0}$ |  |

See pages 15-17 for additional degree requirements.

## Bachelor of Science in Computer Science

The Bachelor of Science in Computer Science is accredited by the Computing Accreditation Commission of ABET (www.abet.org).

The goals of the Bachelor of Science in Computer Science are to prepare students for careers in software design and implementation and for graduate study in Computer Science. The students in this program are provided with a background that allows them to progress toward leadership roles.

These goals are implemented by a curriculum that carefully blends theory and applications. After completing a two semester introductory sequence in computer science, the student takes a series of courses that provide a strong background in the basic mathematical tools of calculus, logic, discrete mathematics, and probability and statistics and that provide a good background in the natural and social sciences and the humanities.

Transfer students bringing in upper level Computer Sciences courses may transfer those courses from any school with programs in Computer Science accredited by the Computing Accrediting Commission of ABET.

| General Education Courses |  | Semester Hours |
| :---: | :---: | :---: |
| ACAD 101 | Principles of the Learning Academy | 1 |
| Shared Skills and Proficiencies |  |  |
| Writing and Critical Thinking (C- or better required in each course) |  |  |
| WRIT 101, HMXP 102, CRTW 201 | Composition; The Human Experience: Who Am I? Crit Reading, Thinking, \& Writing | 9 |
| Oral Communication | Met in major with CSCI 327 | 0 |
| Technology | Met in major with CSCI 207 and 327 | 0 |
| Intensive Writing | Met in major with CSCI 327 | 0 |
| Constitution Requirement | See approved list, p. 15; may be met by other req | 0-3 |
| Physical Activity | See approved list, p. 15 | 1 |
| Thinking Critically Across Disciplines |  |  |
| Global Perspectives | See approved list, p. 15 | 3 |
| Historical Perspectives | See approved list, p. 15 | 3 |
| Introducing Students to Broad Disciplinary Perspectives |  |  |
| Social Science | See approved list, p. 15; must include 2 designators | 6 |
| Humanities and Arts | See approved list, p. 15; must include 2 designators | 6 |
| Quantitative Skills and Natural Science (3 courses) |  |  |
| Quantitative Skills | Met in major with MATH 201 and 202 | 0 |
| Natural Science | Met in major with science requirement | 0 |
| Subtotal |  | 29-32 |
| Computer Science Program Requirements |  | 46 |
| CSCI 207 | Introduction to Computer Science I | 4 |
| CSCI 208 | Introduction to Computer Science II | 4 |
| CSCI 210 | Programming Tools | 1 |
| CSCI 271 | Algorithm Analysis and Data Structures | 4 |
| CSCI 311 | Computer Architecture and Organization | 4 |
| CSCI 327 | Social Implications of Computing | 3 |
| CSCI 411 | Operating Systems | 3 |
| CSCI 432 | Computer Science Theory | 3 |

CSCI courses numbered above 299 (max 3 hrs from combination of 471, 491 and 492) ..... 9
Choose two different courses from: CSCI 290, 293, 295, 297, 392, or 395 ..... 2
Students are required to complete the CSCI culminating assessment exam in the semester in which they graduate. Thisassessment exam is administered by the Computer Science $\mathcal{E}$ Quantitative Methods Department Chair.
Additional Math and Science Requirements ..... 30
MATH 201 and 202 Calculus I, Calculus II ..... 8
MAED 200 Introduction to Mathematica ..... 1
MATH 261 Foundations of Discrete Mathematics ..... 3
QMTH 205 or MATH 341 Business Statistics, Statistical Methods ..... 3
PHYS 211 or BIOL 220/222 or 221/223 Physics with Calculus, Princi of Cell \& Molecular Biol/Lab ..... 4
Princ in Ecology, Evolution, \& Biodiversity/Lab
Additional lab science from PHYS 211, 212, any 4-hour lab courses counts for that BIOL majors or minors,any 4-hours lab course that cournts for CHEM majors or minors, GEOL lab courses that count in the GEOLminor4
MATH course(s) over 299 and/ or CHEM 105 and/or science course(s) from the above list ..... 7
Minor ..... 0-24
Recommended: Math, Digital Information Design, Risk Assurance, Accounting, and Business Administration(Students may not choose Computer Science as a minor.)
Electives ..... 0-15
Total ..... 120

A cumulative 2.0 GPA or better is required on courses in the Computer Science Program Requirements.
Note: Degree requirements may not be waived.

## See pages 15-17 for additional degree requirements.

## Bachelor of Arts in Economics

Economics provides students with an analytical training that is a valuable asset in any career. Many graduates enter the workforce directly and find employment in such diverse areas as banking and finance, management, government service, labor relations, policy research, sports management, consulting, journalism, and marketing. Other students use economics as a foundation for graduate programs in law, business, economics, and policy studies.

| General Education Courses |  | Semester Hours |
| :---: | :---: | :---: |
| ACAD 101 | Principles of the Learning Academy | 1 |
| Shared Skills and Proficiencies |  |  |
| Writing and Critical Thinking (C- | required in each course) |  |
| WRIT 101, HMXP 102, CRTW 201 | Composition; The Human Experience: Who Am I? Crit Reading, Thinking, \& Writing | 9 |
| Oral Communication | See approved list, p. 15 may be met by other req | 0-3 |
| Technology | Met in major with CSCI 101 and labs | 0 |
| Intensive Writing | See approved list, p. 15; may be met by other req | 0-3 |
| Constitution Requirement | See approved list, p. 15; may be met by other req | 0-3 |
| Physical Activity | See approved list, p. 15 | 1 |
| Thinking CriticallyAcross Discipli |  |  |
| Global Perspectives | See approved list, p. 15 | 3 |
| Historical Perspectives | See approved list, p. 15 | 3 |
| Introducing Students to Broad Disc | erspectives |  |
| Social Science | See approved list, p. 15; must include 2 designators 3 hours met in major with ECON 215 | 3 |
| Humanities and Arts | See approved list, p. 15; must include 2 designators | 6 |
| Quantitative Skills and Natural Sci | urses) | 9-12 |
| Quantitative Skills | 3 hours met in major with MATH | (0-4) |
| Natural Science | See approved list, p. 15 [Must include a lab science. If 2 courses taken, must be in 2 different groups: Life, Physical, Earth]. | 2 (3-8) |
| Subtotal |  | 32-43 |
| Economics Courses |  | 30 |
| ECON 215 | Prin of Microeconomics | 3 |
| ECON 216 | Prin of Macroeconomics | 3 |
| ECON 315 | Microeconomic Analysis | 3 |
| ECON 316 | Macroeconomic Analysis | 3 |

Courses Supporting the Major
MATH 105 or $201 \quad$ Applied Calculus, Calculus I 3-4
QMTH 205
Business Statistics 3
QMTH $210 \quad$ Business Analytics 3
CSCI 101, 101B, 101D and 101A, C or P Intro to Information Processing, Excel, Advanced Excel 3
Minor
Electives 10-31
Total 120
Not more than 36 semester hours in any one subject designator may be applied toward the major for a Bachelor of Arts degree. See page 14 for more information.

See pages 15-17 for additional degree requirements.
Students majoring in Digital Information Design have four concentrations to choose from: Digital Commerce, Digital Mass Media , Interactive Media, and Web Application Development. Within the program, all students take a 29 semes-ter-hour core of courses emphasizing basic and advanced skills in design, digital information, communication theory and the Internet, information systems and organizations, visual design of complex systems, law and ethics, and seminar courses. Students from all tracks work together in a final senior experience that involves collaborating with real-world clients.

## Bachelor of Science in Digital Information Design with a concentration in Digital Commerce

| General Education Courses |  | Semester Hours |
| :---: | :---: | :---: |
| ACAD 101 | Principles of the Learning Academy | 1 |
| Shared Skills and Proficiencies |  |  |
| Writing and Critical Thinking (C | equired in each course) |  |
| WRIT 101, HMXP 102, CRTW 201 | Composition; The Human Experience: Who Am I? |  |
|  | Crit Reading, Thinking, \& Writing | 9 |
| Oral Communication | See approved list, p. 15 | 3 |
| Technology | Met in major with CSCI 151 | 0 |
| Intensive Writing | See approved list, p. 15; may be met by other req | 0-3 |
| Constitution Requirement | See approved list, p. 15; may be met by other req | 0-3 |
| Physical Activity | See approved list, p. 15 | 1 |
| Thinking Critically Across Discipli |  |  |
| Global Perspectives | See approved list, p. 15 | 3 |
| Historical Perspectives | See approved list, p. 15 | 3 |
| Introducing Students to Broad Dis | erspectives* |  |
| Social Science | See approved list, p. 15; must include 2 designators | 6 |
| Humanities and Arts | See approved list, p. 15; must include 2 designators | 6 |
| Quantitative Skills and Natural Sc | urses) | 9-12 |
| Quantitative Skills |  |  |
| MATH 151 or a MATH that inclu | us or has Calculus as a pre-requisite | (3-4) |
| Additional Quantitative course |  | (0-4) |
| Natural Science | See approved list, p. 16 [Must include a lab science. If 2 courses taken, must be in 2 different groups: Life, Physical, Earth]. | 2 (3-8) |
| *No more than two courses in the major | toward requirements in these areas |  |
| Subtotal |  | 41-50 |
| Information Design Core |  | 28 |
| CSCI 151 | Overview of Computer Science | 3 |
| DIFD 141 | Introduction to Web Application Design | 4 |
| DESF 161 | Intro to Computer Imaging | 3 |
| VCOM 262 | Introduction to Web Design | 3 |
| DIFD 311 | Digital Culture and Society | 3 |
| DIFD 321 | Information Systems and Organizations | 3 |
| DIFD 322 | Visual Design of Complex Systems | 3 |
| DIFD 415 | Law and Ethics for Digital Media | 3 |
| DIFD 451 | Senior Synthesis | 3 |
| Digital Commerce Concentration |  | 31 |
| CSCI 101 B \& D | Microsft Excel \& Advanced Excel | 1 |
| ACCT 280 | Intro to Financial Accounting | 3 |
| QMTH 205 \& 210 | Business Statistics and Applied Analytics | 6 |
| MKTG 380 | Principles of Marketing | 3 |
| MGMT 220 | Business Information Systems | 3 |
| BADM 561 | Electronic Commerce for Managers | 3 |

See approved list, p. 16 [Must include a lab science. If 2
different groups:
Life, Physical, Earth].
*No more than two courses in the major may count toward requirements in these areas
Subtotal
Overview of Computer Science 3
Introduction to Web Application Design 4
a
Di.en Cult

Information Systems and Organizations 3
Visual Design of Complex Systems 3
Law and Ethics for Digital Media 3
Senior Synthesis 3
Microsft Excel \& Advanced Excel 1
Intro to Financial Accounting 3
Business Statistics and Applied Analytics 6
Principles of Marketing
Electronic Commerce for Managers 3

COLLEGE OF BUSINESS ADMINISTRATION--DIGITAL INFORMATION DESIGN-DIGITAL MASS MEDIA

| MCOM 226 | Multimedia Storytelling and Production | 3 |
| :--- | :--- | :--- |
| MCOM 341 | Advertising Priciples | 3 |
| Choose 2 courses from the following: |  | 6 |
| MKTG 381, 385, 387, 485,581 | $\mathbf{1 1 - 2 0}$ |  |
| Electives | $\mathbf{1 2 0}$ |  |

See pages 15-17 for additional degree requirements.

## Bachelor of Science in Digital Information Design with a concentration in Digital Mass Media



## Bachelor of Science in Digital Information Design with a concentration in Interactive Media

| General Education Courses |  | Semester Hours |
| :---: | :---: | :---: |
| ACAD 101 | Principles of the Learning Academy | 1 |
| Shared Skills and Proficiencies |  |  |
| Writing and Critical Thinking (C- or better required in each course) |  |  |
| WRIT 101, HMXP 102, CRTW 201 | Composition; The Human Experience: Who Am I? |  |
|  | Crit Reading, Thinking, \& Writing | 9 |
| Oral Communication | Met in major with WRIT 465 | 0 |
| Technology | Met in major with CSCI 151 | 0 |
| Intensive Writing | Met in major with WRIT 465 | 0 |
| Constitution Requirement | See approved list, p. 15; may be met by other req | 0-3 |
| Physical Activity | See approved list, p. 15 | 1 |
| Thinking CriticallyAcross Disciplines* |  |  |
| Global Perspectives | See approved list, p. 15 | 3 |
| Historical Perspectives | Met in major with ARTH 176 | 0 |
| Introducing Students to Broad Disciplinary Perspectives* |  |  |
| Social Science | See approved list, p. 15; must include 2 designators | 6 |
| Humanities and Arts | See approved list, p. 15; must include 2 designators | 6 |
| Quantitative Skills and Natural Science* (3 c | urses) | 9-12 |
| Quantitative Skills |  |  |
| MATH 151 or a MATH that includes Calcu | us or has Calculus as a pre-requisite | (3-4) |
| Additional Quantitative course |  | (0-4) |
| Natural Science | See approved list, p. 15 [Must include a lab science. If 2 courses taken, must be in 2 different groups: Life, Physical, Earth]. | 2 (3-8) |
| *No more than two courses in the major may count toward requirements in these areas |  |  |
| Subtotal |  | 35-41 |
| Information Design Core |  | 28 |
| CSCI 151 | Overview of Computer Science | 3 |
| DIFD 141 | Introduction to Web Application Design | 4 |
| DESF 161 | Intro to Computer Imaging | 3 |
| VCOM 262 | Introduction to Web Design | 3 |
| DIFD 311 | Digital Culture and Society | 3 |
| DIFD 321 | Information Systems and Organizations | 3 |
| DIFD 322 | Visual Design of Complex Systems | 3 |
| DIFD 415 | Law and Ethics for Digital Media | 3 |
| DIFD 451 | Senior Synthesis | 3 |
| Interactive Media Concentration |  | 55 |
| ARTH 176 | Intro to Art History from Renaissance to Present | 3 |
| CSCI 207 | Intro to Computer Science | 4 |
| CSCI 243 | Programming for the Web | 3 |
| DESF 120 | Design Drawing | 3 |
| DESF 150 | Design Studio Skills | 3 |
| DESF 154 | Design and Color | 3 |
| DESF 151 | Design Fundamentals | 3 |
| DESF 189 | Design Studio Fundamentals | 0 |
| VCOM 258 | Introduction to Typography | 3 |
| VCOM 259 | Introduction to Graphic Design | 3 |
| VCOM 300 | Specialization Portfolio Review | 0 |
| VCOM 355 | Design Concepts | 3 |
| VCOM 362 | Interactive Media | 3 |
| VCOM 363 | Multimedia Design I | 3 |
| VCOM 374 | History of Graphic Design and Illustration | 3 |
| VCOM 462 | Interface Design in Alternative e-media | 3 |
| VCOM 463 | Multimedia Design II | 3 |
| VCOM 578 | Professional Portfolio and Practices | 3 |
| Choose two courses from one of the following groups: 6 |  |  |
| Mass communication: MCOM 226 \& 241 | Multimedia Storytelling \& Prod, Media Writing |  |
| Music: MUST 531 \& 532 | Computer Music Composition I \& II |  |
| Illustr/Graph Design: <br> VCOM 222, 358, 392, 453 | Visual Thinking, Intermed Typography, Sp Topics, Corp | orp Ident |


| COLLEGE OF BUSINESS ADMINISTRATION--DIGITAL INFORMATION DESIGN-WEB APPLICATION DEVELOPMENT |  |  |
| :--- | :--- | :---: |
| Course Supporting the Concentration |  | $\mathbf{3}$ |
| WRIT 465 | Preparation of Oral and Written Reports | 3 |
| Electives |  | $\mathbf{0}$ |
| Total | $\mathbf{1 2 1 - 1 2 7}$ |  |

See pages 15-17 for additional degree requirements.

## Bachelor of Science in Digital Information Design with a concentration in Web Application Development

| General Education Courses |  | Semester Hours |
| :---: | :---: | :---: |
| ACAD 101 | Principles of the Learning Academy | 1 |
| Shared Skills and Proficiencies |  |  |
| Writing and Critical Thinking (C- or beter | required in each course) |  |
| WRIT 101, HMXP 102, CRTW 201 | Composition; The Human Experience: Who Am I? |  |
|  | Crit Reading, Thinking, \& Writing | 9 |
| Oral Communication | See approved list, p. 15; CSCI 327 recommended | 3 |
| Technology | Met in major with CSCI 151 | 0 |
| Intensive Writing | See approved list, p. 15; CSCI 327 recommended | 0-3 |
| Constitution Requirement | See approved list, p. 15; may be met by other req | 0-3 |
| Physical Activity | See approved list, p. 15 | 1 |
| Thinking Critically Across Disciplines* |  |  |
| Global Perspectives | See approved list, p. 15 | 3 |
| Historical Perspectives | See approved list, p. 15 | 3 |
| Introducing Students to Broad Disciplin | erspectives* |  |
| Social Science | See approved list, p. 15; must include 2 designators | 6 |
| Humanities and Arts | See approved list, p. 15; must include 2 designators | 6 |
| Quantitative Skills and Natural Science | ourses) | 9-12 |
| Quantitative Skills |  |  |
| MATH 151 or a MATH that includes | us or has Calculus as a pre-requisite | (3-4) |
| Additional Quantitative course |  | (0-4) |
| Natural Science | See approved list, p. 15 [Must include a lab science. If 2 courses taken, must be in 2 different groups: Life, Physical, Earth]. | 2 (3-8) |
| *No more than two courses in the major may | toward requirements in these areas |  |
| Subtotal |  | 41-50 |
| Information Design Core |  | 28 |
| CSCI 151 | Overview of Computer Science | 3 |
| DIFD 141 | Introduction to Web Application Design | 4 |
| DESF 161 | Intro to Computer Imaging | 3 |
| VCOM 262 | Introduction to Web Design | 3 |
| DIFD 311 | Digital Culture and Society | 3 |
| DIFD 321 | Information Systems and Organizations | 3 |
| DIFD 322 | Visual Design of Complex Systems | 3 |
| DIFD 415 | Law and Ethics for Digital Media | 3 |
| DIFD 451 | Senior Synthesis | 3 |
| Web Application Design Concentration |  | 37.5 |
| QMTH 205 | Applied Statistics | 3 |
| CSCI 101B | Microsoft Excel | 0.5 |
| CSCI 207 \& 208 | Intro to Computer Science I \& II | 8 |
| CSCI 210 | Programming Tools | 1 |
| CSCI 243 | Programming for the Web | 3 |
| CSCI 355 | Database Processing | 3 |
| CSCI 290 | JavaScript | 1 |
| CSCI 441 | Web Application Design and Development | 3 |
| CSCI 475 \& 476 | Software Engineering I \& II | 6 |
| CSCI 521 | Software Project Management | 3 |
| VCOM 362 | Interactive Media | 3 |
| VCOM 462 | Interface Design in Alternative e-media | 3 |
| Electives |  | 4.5-13.5 |
| Total |  | 120 |

See pages 15-17 for additional degree requirements.

