## The College of Business Administration

Roger D. Weikle, Dean

Steven Frankforter, Associate Dean for Administration Laura Ullrich, Assistant Dean for Innovation and Production

#### **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 AA-CSB International--The Association to Advance Collegiate Schools of Business and the baccalaureate degree in Computer Science is accredited by ABET (www.abet.org).

Our mission is to prepare students in a learning-centered environment, through effective teaching, scholarship, and service, with the professional and leadership skills necessary for positions in the global marketplace, while fostering lifelong learning and service to the external community.

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.

For those students working toward a degree outside of the College of Business Administration, minors in the areas of accounting, business administration, computer science, digital information design, economics, entrepreneurship, health care management, human resource management, marketing and professional business are offered. For specific requirements for individual minors, see page 139.

#### **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 and keep the same adviser during the freshman year. Not only will advisers help with program selections and scheduling, but will also be available to assist with the adjustment to university life throughout the first year. At the end of the freshman year, a concentration in the College of Business will be chosen and an adviser will be assigned from that area. 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.

**Assistant Professors** 

#### Faculty

**Professors** Charles E. Alvis Keith Benson Robert H. Breakfield Qidong Cao Clarence Coleman Steven Frankforter Barbara K Fuller Chlotia Garrison Louis J. Pantuosco Cara Peters Emma Jane Riddle D. Keith Robbins, Chair Management & Marketing Marilyn Smith Gary L. Stone

William I. Thacker

Roger D. Weikle, Dean

Jane B. Thomas

Associate Professors
Antonia Berbrick
Barbara Burgess-Wilkerson
Melissa Carsten
Stephen Dannelly, Chair
Computer Science & Quantitative Methods
Malayka Klimchak
Willis Lewis
Michael Matthews
Hemant Patwardhan
Brooke Stanley
Robert Stonebraker
Laura Ullrich
Nicki Washington

Andrew Besmer Patrice Burleson Adriana Cordis Marguerite Doman Philip Gibson Tracy Griggs Terri Guidry Peggy W. Hager Stephanie Lawson **Iavne Maas** Steven Martin Portia Plante Gay Randolph Anna Romanova Celeste Tiller Michael Whitney Glyn Winterbotham

#### **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 HMXP 102 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.

### **Bachelor of Science in Business Administration**

| General Education Courses                          |  | Semester Hou | ırs |
|--|--|--------------|-----|
| ACAD 101   | Principles of the Learning Academy                       | 1            |     |
| Shared Skills and Proficiencies                    | . ,  |              |     |
| Writing and Critical Thinking (C- or better a      | required for 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. 16                                 | 3            |     |
| Technology   | Met in major with CSCI 101 & labs                        | 3            |     |
| Intensive Writing                                  | See approved list, p. 16; may be met by other req        | 0-3          |     |
| Constitution Requirement                           | See approved list, p. 16; may be met by other req        | 0-3          |     |
| Physical Activity                                  | See approved list, p. 16                                 | 1            |     |
| Thinking CriticallyAcross Disciplines*             | •  |              |     |
| Global Perspectives                                | See approved list, p. 16                                 | 3            |     |
| Historical Perspectives                            | See approved list, p. 16                                 | 3            |     |
| Introducing Students to Broad Disciplinary P       |  |              |     |
| Social Science                                     | See approved list, p. 16; must include 2 designators     | 3            |     |
|  | 3 hours met in major with ECON 215                       |              |     |
| <b>Humanities and Arts</b>                         | See approved list, p. 16; must include 2 designators     | 6            |     |
| Quantitative Skills and Natural Science* (3 co     |  | 6-8          |     |
| Quantitative Skills                                | Met in major with MATH                                   | (0-4)        |     |
| Natural Science                                    | See approved list, p. 16 [Must include a lab science. If | , ,          |     |
| - 1-1-1-1-1  | courses taken, must be in 2 different groups:            | _ (0 0)      |     |
|  | Life, Physical, Earth].                                  |              |     |
| *No more than two courses in the major may count   |  |              |     |
| Subtotal   | return requirements in these thems                       | 32-43        | 1   |
| <b>Business Administration Program Requireme</b>   | nts  | 70-80        |     |
| Foundation Courses (C- or better required for      |  | 24-25        |     |
| CSCI 101, 101B, 101C & 101D                        | Intro to Comp & Info Processing, Excel, Access, Adv,     |              |     |
| MATH 105, 151 or 201                               | Applied Calculus, Applied College Algebra, Calculus      |              |     |
| QMTH 205   | Business Statistics                                      | 3            |     |
| QMTH 210   | Business Analytics                                       | 3            |     |
| ECON 215   | Principles of Microeconomics                             | 3            |     |
| ECON 216   | Principles of Macroeconomics                             | 3            |     |
| ACCT 280   | Introducation to Financial Accounting                    | 3            |     |
| ACCT 281   |  | 3            |     |
|  | Introduction to Managerial Accounting                    |              |     |
| Core Courses (C- or better required for each       |  | 28           |     |
| BADM 180   | Business Issues and Careers                              | 3            |     |
| BADM 250 or ACCT 351 <sup>+</sup>                  | Legal & Ethical Environ of Business, Business Law for    |              |     |
| FINC 111   | Financial Literacy                                       | 1            |     |
| FINC 311   | Principles of Finance                                    | 3            |     |
| MGMT 321   | Management and Leadership                                | 3            |     |
| MGMT 326   | Sustainable Operations                                   | 3            |     |
| MGMT 341   | Information Systems and Business Analytics               | 3            |     |
| MGMT 355   | Business Communication and Professional Developm         |              |     |
| MGMT 480   | Business Policy  | 3            |     |
| MKTG 380   | Principles of Marketing                                  | 3            |     |
|  | one of the following: (C- or better required for each co | ourse) 18-27 | ,   |
| Accounting, page 67                                | Computer Infomation Systems, page 67                     |              |     |
| Economics, page 67                                 | Entrepreneurship, page 67                                |              |     |
| Finance, page 68                                   | Health Care Management, page 68                          |              |     |
| Human Resource Mangement, page 69                  | International Business, page 69                          |              |     |
| Management, page 69                                | Marketing, page 70                                       |              |     |
| <b>Electives</b> (Number varies depending on hours | required for concentration.)                             | 0-18         |     |
| Total  |  | 120          |     |
| *Recommended for Accounting concentration          |  |              |     |

|  | ce in Business Administration - Accounting            | LINLUN             |
|--|---|--------------------|
| General Education, see page 66             | reconting   | 32-43              |
| Foundation and Core Courses, see page 66   |   | 52- <del>1</del> 3 |
|  |   |                    |
| 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 509                                   | Auditing Principles & Procedures                      | 3                  |
| ACCT course above 299                      | O I   | 3                  |
| One course from PHIL 230, 575 or MGMT 5    | 75  | 3                  |
| Electives                                  |   | 0-12               |
| Total                                      |   | 120                |
| Total                                      |   | 120                |
|  | ness Administration - Computer Information Systems    | 22.42              |
| General Education, see page 66             |   | 32-43              |
| Foundation and Core Courses, see page 66   |   | <b>52-53</b>       |
| Computer Information Systems Concentration |   | 27                 |
| CSCI 207 & 208                             | Intro to Computer Sci I & II                          | 8                  |
| CSCI 293 or 295 or 297 or 392              | C#, Visual Basic, Scripting, Java Languages           | 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                  |
|  | Tourid of Discrete Mathematics, fitto to Data Milling |                    |
| Two of:                                    | A I'm . I'm fa man a Garage Continue                  | 6                  |
| ACCT 303                                   | Accounting Information Systems                        | 3                  |
| CSCI 365                                   | Information Security                                  | 3                  |
| CSCI 441                                   | Web Application Design                                | 3                  |
| CSCI 451                                   | Mobile Application Development                        | 3                  |
| CSCI 466                                   | Network Processing                                    | 3                  |
| CSCI 521                                   | Software Project Management                           | 3                  |
| Electives                                  | , 0   | 0-9                |
| Total                                      |   | 120-123            |
|  |   |                    |
| Bachelor of Scien                          | nce in Business Administration - Economics            |                    |
| General Education, see page 66             |   | 32-43              |
| Foundation and Core Courses, see page 66   |   | 52-53              |
| <b>Economics Concentration</b>             |   | 18                 |
| ECON 315                                   | Microeconomic Theory                                  | 3                  |
| ECON 316                                   | Macroeconomic Theory                                  | 3                  |
| ECON 335                                   | Money and Banking                                     | 3                  |
| Three of any ECON above 299                | Money and banking                                     | 9                  |
| Electives                                  |   | 16-18              |
|  |   |                    |
| Total                                      |   | 120                |
| Bachelor of Science                        | in Business Administration - Entrepreneurship         |                    |
| C 1F1 ('                                   |   | 00.40              |
| General Education, see page 66             |   | 32-43              |
| Foundation and Core Courses, see page 66   |   | 52-53              |
| Entrepreneurship Concentration             |   | 18                 |
| 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:                                    | ı   |                    |
| BADM 561                                   | Electronic Commerce for Managers                      | 3                  |
| MGMT 322                                   | Introduction to Talent Management                     | 3                  |
| 17101711 022                               | maroauction to ruleth management                      | J                  |

|           | COLLEGE OF BUSINESS ADMINISTRATIONFINANCE/HEA | LTHCARE MGMT |
|-----------|---|--------------|
| MKTG 485  | Services Marketing                            | 3            |
| MKTG 387  | Promotion Management and Digital Marketing    | 3            |
| MKTG 385  | Marketing Research                            | 3            |
| ENTR 491  | Internship in Entrepreneurship                | 3            |
| MKTG 581  | Marketing for Global Competitiveness          | 3            |
| Electives |   | 6-18         |
| Total     |   | 120          |
|           |   |              |

### **Bachelor of Science in Business Administration - Finance**

| General Education, see page 66<br>Foundation and Core Courses, see page 66<br>Take one of two tracks: |   | 32-43<br>52-53 |
|---|---|----------------|
| Finance ConcentrationCorporate Finance Tr   | ack   | 18             |
| 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              |
| One of:   | O .   |                |
| ACCT 305  | Intermediate Accounting I                   | 3              |
| ECON 335  | Money and Banking                           | 3              |
| FINC 491  | Internship in Finance                       | 3              |
| Electives   | *   | 6-18           |
| Total   |   | 120            |
| Finance ConcentrationFinancial Planning Tr  | rack  | 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              |
| FINC 516  | Employee Benefits and Retirement Planning   | 3              |
| FINC 420  | Financial Plan Development                  | 3              |
| Electives   | -   | 3-18           |
| 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 Education, see page 66<br>Foundation and Core Courses, see page 66 |   | 32-43<br>52-53 |
|--|---|----------------|
| Health Care Management Concentration                                       |   | 21             |
| HCMT 200   | Intro to Health Care Mgmt                     | 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 internship to be taken summer be                                  | etween Jr & Sr year.                          |                |
| Electives  | ·   | 3-15           |
| Total  |   | 120            |

# COLLEGE OF BUSINESS ADMINISTRATION--HUMAN RESOURCE MGMT/INT'L BUSINESS/MANAGEMENT Bachelor of Science in Business Administration - Human Resource Management

| General Education, see page 66 Foundation and Core Courses, see page 66 Human Resource Management Concentratio MGMT 322 | Introduction to Talent Management                                  | 32-43<br>52-53<br>18 |
|---|--|----------------------|
| MGMT 323  | Acquiring Talent   | 3                    |
| MGMT 325  | Organizational Theory and Behavior                                 | 3                    |
| MGMT 522  | Growing and Developing Talent                                      | 3                    |
| MGMT 524<br>MGMT 526  | Employment Law   | 3<br>3               |
| Electives   | Talent Management Seminar  | 6-18                 |
| Total   |  | 120                  |
| Total   |  | 120                  |
| Bachelor of Science in  | Business Administration - International Business                   |                      |
| General Education, see page 66  |  | 32-43                |
| Foundation and Core Courses, see page 66  |  | 52-53                |
| International Business Concentration  |  | 18                   |
| 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   | N 302; GEOG 303, 306; GERM 301;                                    |                      |
| HIST 334, 345, 351, 547, 548, 560, 561; MCO   | M 302; PLSC 332, 335, 338; RELG 300;                               |                      |
| SPAN 421,422  |  | 3                    |
| Courses that support the concentration  |  | 0-6                  |
| Foreign language (non-native speakers of E  | inglish must obtain permission from the department)                |                      |
| Electives   |  | 0-18                 |
| Total   |  | 120                  |
| Bachelor of Science   | ce in Business Administration - Management                         |                      |
| General Education, see page 66  |  | 32-43                |
| Foundation and Core Courses, see page 66  |  | 52-53                |
| Management Concentration  |  | 18                   |
| MGMT 475  | Leadership Theory and Development                                  | 3                    |
| MGMT 575 or PHIL 575  | Business Ethics  | 3                    |
| Two of:   | Later de ation to Enterpressonalis                                 | 2                    |
| ENTR 373  | Introduction to Entrepreneurship                                   | 3                    |
| BADM 561<br>MGMT 322  | Electronic Commerce for Managers                                   | 3                    |
|   | Introduction to Talent Management                                  | 3                    |
| MGMT 325  | Organizational Theory & Behavior<br>Sustainable Business Practices | 3                    |
| MGMT 330  |  | 3<br>3               |
| MGMT 491<br>MGMT 529  | Internship in Management<br>International Management               | 3                    |
| Two additional courses over 299 from the fo   |  | 3                    |
| ACCT, BADM, CSCI, ECON, ENTR, FINC  |  | 6                    |
| Electives   |  | 6 10                 |
| Total   |  | 6-18<br>120          |
|   | AT 575/PHIL 575) must be courses numbered over 399.                | 140                  |
| The least 5 hours (including MiGMI 475 and MiGM   | 11 57 5/1 111L 57 5/1 HUSE DE COUTSES HUHIDETEU OUET 533.          |                      |

Only one internship, regardless of designator, may be counted toward the required concentration credit hours.

#### Bachelor of Science in Business Administration - Marketing

| General Education, see page 66           |  | <b>32-4</b> 3 |
|--|--|---------------|
| Foundation and Core Courses, see page 66 |  | <b>52-5</b> 3 |
| Marketing Concentration                  |  | 18            |
| MKTG 381                                 | Consumer Behavior                          | 3             |
| MKTG 387                                 | Promotion Management and Digital Marketing | 3             |
| MKTG 385                                 | Marketing Research                         | 3             |
| MKTG 489                                 | Marketing Strategy                         | 3             |
| One of:                                  | 0,   |               |
| MKTG 485                                 | Services Marketing                         | 3             |
| MKTG 483                                 | Sales and Relationship Marketing           | 3             |
| MKTG 581                                 | Marketing for Global Competitiveness       | 3             |
| One of:                                  | -  |               |
| BADM 561                                 | Electronic Commerce for Managers           | 3             |
| VCOM 354                                 | Basic Design Applications                  | 3             |
| QMTH 310                                 | Introduction to Data Mining                | 3             |
| Electives                                | <u> </u>                                   | 6-18          |
| Total                                    |  | 120           |

#### **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, 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 r | equired 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. 16; may be met by other req    | 0-3            |
| Physical Activity                             | See approved list, p. 16                             | 1              |
| Thinking Critically Across Disciplines        | •  |                |
| Global Perspectives                           | See approved list, p. 16                             | 3              |
| Historical Perspectives                       | See approved list, p. 16                             | 3              |
| Introducing Students to Broad Disciplinary I  | Perspectives Perspectives                            |                |
| Social Science                                | See approved list, p. 16; must include 2 designators | 6              |
| <b>Humanities and Arts</b>                    | See approved list, p. 16; must include 2 designators | 6              |
| Quantitative Skills and Natural Science (3 co | urses)   |                |
| 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 211                                      | Intro to Assembly Language and Comp Architecture     | 3              |
| CSCI 271                                      | Algorithm Analysis and Data Structures               | 3              |
| CSCI 311                                      | Computer Architecture and Organization               | 3              |
| CSCI 327                                      | Social Implications of Computing                     | 3              |

| CSCI 371  | Theoretical Foundations   | 3    |
|---|---|------|
| CSCI 411  | Operating Systems   | 3    |
| CSCI 431  | Organization of Programming Languages                           | 3    |
| CSCI 475  | Software Engineering I  | 3    |
| CSCI 476  | Software Engineering II   | 3    |
| CSCI courses numbered above 299 (excludin       | g CSCI 514, max 3 hrs from combination of 471 and 491)          | 9    |
| Choose two different courses from: CSCI 291     | , 292, 293, 295, 297, 392, or 395                               | 2    |
| Students are required to complete the CSCI culm | inating assessment exam in the semester in which they graduate. | This |
| assessment exam is administered by the Compute  | er Science & 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 203/204                        | Physics with Calculus, Principles of Biology & Lab              | 4    |
| Additional science from PHYS 211, 212, BIO      | L 203/204, 205, 206, 303, 304, 307, 308 (all 4-hour lab courses |      |
| that majors can take), GEOL lab courses that    | count in the GEOL minor   | 4    |
| MATH course(s) over 299 and/or CHEM 105         | 5 and/or science course(s) from the above list                  | 7    |
| Second Discipline (may count courses in othe    | r areas)  | 0-24 |
| Choose one of the following or a minor (other   | er than CSCI):  |      |
| Information Systems: ACCT 280-281, 303 or 30    | 9; MGMT 321, and one of FINC 311, MKTG 380                      |      |
| Physics and Mathematics: PHYS 301, and one of   | of PHYS 315, 321, or 350; MATH 301 and 305                      |      |
| Electives                                       |   | 0-15 |
| Total   |   | 120  |
| A cumulative 2.0 GPA or better is required on o | courses in the Computer Science Program Requirements.           |      |

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

See pages 16-18 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.

|  | Semester Hours   |
|--|--|
| Principles of the Learning Academy   | 1  |
| 1 0 7  |  |
| eauired in each course)  |  |
|  |  |
|  | 9  |
|  | 0-3  |
|  | 0  |
|  | 0-3  |
|  | 0-3  |
|  | 1  |
|  |  |
| See approved list, p. 16   | 3  |
| See approved list, p. 16   | 3  |
| Historical Perspectives See approved list, p. 16 Introducing Students to Broad Disciplinary Perspectives |  |
| See approved list, p. 16; must include 2 designators   | 3  |
| 3 hours met in major with ECON 215   |  |
| See approved list, p. 16; must include 2 designators   | 6  |
| urses)   | 9-12   |
| 3 hours met in major with MATH   | (0-4)  |
| See approved list, p. 16 [Must include a lab science. If   | 2 (3-8)  |
| courses taken, must be in 2 different groups:  |  |
| Life, Physical, Earth].  |  |
|  | 32-43  |
|  | 30   |
| Prin of Microeconomics   | 3  |
| Prin of Macroeconomics   | 3  |
| Microeconomic Analysis   | 3  |
|  | See approved list, p. 16 Perspectives See approved list, p. 16; must include 2 designators 3 hours met in major with ECON 215 See approved list, p. 16; must include 2 designators urses) 3 hours met in major with MATH See approved list, p. 16 [Must include a lab science. If courses taken, must be in 2 different groups: Life, Physical, Earth].  Prin of Microeconomics Prin of Macroeconomics |

|                                       | COLLEGE OF BUSINESS ADMINISTRATION                     | <b>ECONOMICS</b> |
|---------------------------------------|--|------------------|
| ECON 316                              | Macroeconomic Analysis                                 | 3                |
| Six courses from ECON above 299       | ·  | 18               |
| Courses Supporting the Major          |  |                  |
| MATH 105 or 201                       | Applied Calculus, Calculus I                           | 3-4              |
| QMTH 205                              | Business Statistics                                    | 3                |
| QMTH 210                              | Business Analytics                                     | 3                |
| CSCI 101, 101B, 101D and 101A, C or P | Intro to Information Processing, Excel, Advanced Excel | 3                |
| Minor                                 | · ·  | 15-24            |
| 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.

Students majoring in Digital Information Design have four concentrations to choose from: Digital Commerce, Digital Mass Media , Interactive Media, and Web Application Design. Within the program, all students take a 30 semester-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- or better r    | 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. 16                                 | 3              |
| Technology                                       | Met in major with CSCI 151                               | 0              |
| Intensive Writing                                | See approved list, p. 16; may be met by other req        | 0-3            |
| Constitution Requirement                         | See approved list, p. 16; may be met by other req        | 0-3            |
| Physical Activity                                | See approved list, p. 16                                 | 1              |
| Thinking Critically Across Disciplines*          |  |                |
| Global Perspectives                              | See approved list, p. 16                                 | 3              |
| Historical Perspectives                          | See approved list, p. 16                                 | 3              |
| Introducing Students to Broad Disciplinary I     |  |                |
| Social Science                                   | See approved list, p. 16; must include 2 designators     | 6              |
| Humanities and Arts                              | See approved list, p. 16; must include 2 designators     | 6              |
| Quantitative Skills and Natural Science* (3 co   |  | 9-12           |
| Quantitative Skills                              | ,  |                |
| MATH 151 or a MATH that includes Calcu           | lus 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 |                |
|  | courses taken, must be in 2 different groups:            |                |
|  | Life, Physical, Earth].                                  |                |
| *No more than two courses in the major may count |  |                |
| Subtotal   | ,  | 41-50          |
| Information Design Core                          |  | 30             |
| CSCI 151   | Overview of Computer Science                             | 3              |
| DIFD 141   | Introduction to Web Application Design                   | 4              |
| DIFD 151   | Introduction to Information Design                       | 1              |
| VCOM 261   | Electronic Image Making                                  | 3              |
| VCOM 262   | Introduction to Web Design                               | 3              |
| DIFD 211   | Communication Theory and the Internet                    | 3              |
| DIFD 321   | Information Systems and Organizations                    | 3              |
| DIFD 322   | Visual Design of Complex Systems                         | 3              |
| DIFD 351   | Information Design Seminar: Special Topics               | 1              |
| 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 341   | Information Systems and Business Analytics               | 3              |
| BADM 561   | Electronic Commerce for Managers                         | 3              |
| MCOM 226   | Multimedia Storytelling and Production                   | 3              |
| MCOM 341   | Advertising Principles                                   | 3              |
| Choose 2 courses from the following:             | •  |                |
| MKTG 381, 385, 387, 485, 581                     |  | 6              |
| Electives  |  | 9-18           |
| Total  |  | 120            |
| C 1  | 6 10 for additional dogram requirements                  |                |

# COLLEGE OF BUSINESS ADMINISTRATION--DIGITAL INFORMATION DESIGN/DIGITAL MASS MEDIA Bachelor of Science in Digital Information Design with a concentration in Digital Mass Media

| General Education Courses                       |  | Semester Hours |
|---|--|----------------|
| ACAD 101  | Principles of the Learning Academy                       | 1              |
| Shared Skills and Proficiencies                 | 1 0 7  |                |
| Writing and Critical Thinking                   |  |                |
| WRIT 101+, HMXP 102+, CRTW 201**                | Composition; The Human Experience: Who Am I?             |                |
|   | Crit Reading, Thinking, & Writing                        | 9              |
| Oral Communication                              | Met in major with SPCH 201                               | 0              |
| Technology                                      | Met in major with CSCI 151                               | 0              |
| Intensive Writing                               | Met in major with MCOM 441                               | 0              |
| Constitution Requirement                        | See approved list, p. 16; may be met by other req        | 0-3            |
| Physical Activity                               | See approved list, p. 16                                 | 1              |
| Thinking Critically Across Disciplines*         |  |                |
| Global Perspectives                             | See approved list, p. 16                                 | 3              |
| Historical Perspectives                         | See approved list, p. 16                                 | 3              |
| Introducing Students to Broad Disciplinary      | Perspectives*  |                |
| Social Science                                  | See approved list, p. 16; must include 2 designators     | 6              |
| Humanities and Arts                             | See approved list, p. 16; must include 2 designators     | 6              |
| Quantitative Skills and Natural Science* (3     |  | 9-12           |
| Quantitative Skills                             |  |                |
| MATH 151 or a MATH that includes Calcu          | ılus 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 (3-8)        |
|   | courses taken, must be in 2 different groups:            |                |
|   | Life, Physical, Earth].                                  |                |
| *No more than two courses in the major may coun | t toward requirements in these areas                     |                |
| Subtotal  | ,  | 38-44          |
| Information Design Core                         |  | 30             |
| CSCI 151  | Overview of Computer Science                             | 3              |
| DIFD 141  | Introduction to Web Application Design                   | 4              |
| DIFD 151  | Introduction to Information Design                       | 1              |
| VCOM 261  | Electronic Image Making                                  | 3              |
| VCOM 262  | Introduction to Web Design                               | 3              |
| DIFD 211  | Communication Theory and the Internet                    | 3              |
| DIFD 321  | Information Systems and Organizations                    | 3              |
| DIFD 351  | Information Design Seminar: Special Topics               | 1              |
| DIFD 322  | Visual Design of Complex Systems                         | 3              |
| DIFD 415  | Law and Ethics for Digital Media                         | 3              |
| DIFD 451  | Senior Synthesis   | 3              |
| Digital Mass Media Concentration                | ,  | 27.5           |
| CSCI 101B                                       | Excel  | 0.5            |
| MCOM 241**                                      | Media Writing  | 3              |
| MCOM 226**                                      | Multimedia Storytelling and Production                   | 3              |
| MCOM 342  | Advanced Reporting and Writing                           | 3              |
| MCOM 346  | Television Production                                    | 3              |
| MCOM 441  | Reporting Public Affairs                                 | 3              |
| VCOM 363  | Multimedia Design I                                      | 3              |
| QMTH 205  | Applied Statistics                                       | 3              |
| Choose 2 courses from the following (Inter-     |  | 6              |
| MCOM 333, 345, 349, 471, 461, 462, 463          | • • /  |                |
| Courses Supporting the Concentration            |  | 3              |
| SPCH 201  | Public Speaking  | 3              |
| Electives                                       |  | 15.5-21.5      |
| Total   |  | 120            |
| <sup>+</sup> Requires B- or higher              |  |                |

<sup>\*</sup>Requires B- or higher \*\*Requires C- or higher

# COLLEGE OF BUSINESS ADMINISTRATION--DIGITAL INFORMATION DESIGN/INTERACTIVE 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                          | 1 0 7   |                |
| Writing and Critical Thinking (C- or better re           | equired 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. 16; may be met by other req             | 0-3            |
| Physical Activity Thinking CriticallyAcross Disciplines* | See approved list, p. 16                                      | 1              |
| Global Perspectives                                      | See approved list, p. 16                                      | 3              |
| Historical Perspectives                                  | Met in major with ARTH 176                                    | 0              |
| Introducing Students to Broad Disciplinary P             |   | O              |
| Social Science   | See approved list, p. 16; must include 2 designators          | 6              |
| <b>Humanities and Arts</b>                               | See approved list, p. 16; must include 2 designators          | 6              |
| Quantitative Skills and Natural Science* (3 co           |   | 9-12           |
| Quantitative Skills                                      | ,   |                |
| MATH 151 or a MATH that includes Calcul                  | lus 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    | (3-8)          |
|  | courses taken, must be in 2 different groups:                 |                |
|  | Life, Physical, Earth].                                       |                |
| *No more than two courses in the major may count         | toward requirements in these areas                            | 0= 44          |
| Subtotal   |   | 35-41          |
| Information Design Core                                  | Oxorgians of Computer Science                                 | 30             |
| CSCI 151<br>DIFD 141                                     | Overview of Computer Science                                  | 3              |
| DIFD 141<br>DIFD 151                                     | Introduction to Web Application Design                        | 4              |
| VCOM 261   | Introduction to Information Design<br>Electronic Image Making | 1 3            |
| VCOM 262   | Introduction to Web Design                                    | 3              |
| DIFD 211   | Communication Theory and the Internet                         | 3              |
| DIFD 321   | Information Systems and Organizations                         | 3              |
| DIFD 322   | Visual Design of Complex Systems                              | 3              |
| DIFD 351   | Information Design Seminar: Special Topics                    | 1              |
| DIFD 415   | Law and Ethics for Digital Media                              | 3              |
| DIFD 451   | Senior Synthesis  | 3              |
| Interactive Media Concentration                          | •   | 52             |
| ARTH 176   | Intro to Art History from Renaissance to Present              | 3              |
| CSCI 241 & 242   | Client/Server Programming for the World Wide Web              |                |
| VCOM 120   | Rapid Visualization Drawing                                   | 3              |
| VCOM 150   | Design Studio Skills  | 3              |
| VCOM 151   | Design Fundamentals   | 3              |
| VCOM 258   | Design and Color  | 3<br>3         |
| VCOM 258<br>VCOM 259                                     | Introduction to Typography Introduction to Graphic Design     | 3              |
| VCOM 259<br>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              |
| Choose two courses within the following gro              | oups:   | 6              |
| Mass communication: MCOM 226 & 342                       | Multimedia Storytelling & Prod, Adv Reporting & Wr.           | iting 6        |
| Music: MUST 531 & 532                                    | Computer Music Composition I & II                             | 6              |
| Illustr/Graph Design: VCOM 222, 358, 361                 | Visual Thinking, Intermed Typography, Digital Illustr         | a 9            |
| Course Supporting the Concentration                      |   | 3              |
| WRIT 465   | Preparation of Oral and Written Reports                       | 3              |
| Electives  |   | 0              |
| Total  | ( 10 f11:1:1 1  | 120-126        |

# COLLEGE OF BUSINESS ADMINISTRATION--DIGITAL INFORMATION DESIGN/WEB APPLICATION DESIGN Bachelor of Science in Digital Information Design with a concentration in Web Application Design

| General Education Courses  |  | Semester Hours |
|--|--|----------------|
| ACAD 101   | Principles of the Learning Academy                       | 1              |
| Shared Skills and Proficiencies  | Timespies of the Sentimeg Tennemy                        | -              |
| 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   | See approved list, p. 16; CSCI 327 recommended           | 3              |
| Technology   | Met in major with CSCI 151                               | 0              |
| Intensive Writing  | See approved list, p. 16; CSCI 327 recommended           | 0-3            |
| Constitution Requirement   | See approved list, p. 16; may be met by other req        | 0-3            |
| Physical Activity  | See approved list, p. 16                                 | 1              |
| Thinking Critically Across Disciplines*  |  |                |
| Global Perspectives  | See approved list, p. 16                                 | 3              |
| Historical Perspectives  | See approved list, p. 16                                 | 3              |
| Introducing Students to Broad Disciplinary   |  |                |
| Social Science   | See approved list, p. 16; must include 2 designators     | 6              |
| Humanities and Arts  | See approved list, p. 16; must include 2 designators     | 6              |
| Quantitative Skills and Natural Science* (3  | courses)   | 9-12           |
| Quantitative Skills  |  |                |
| MATH 151 or a MATH that includes Calc  | ulus 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 (3-8)        |
|  | courses taken, must be in 2 different groups:            |                |
| and the second s | Life, Physical, Earth].                                  |                |
| *No more than two courses in the major may cour  | it toward requirements in these areas                    |                |
| Subtotal   |  | 38-50          |
| Information Design Core  |  | 30             |
| CSCI 151   | Overview of Computer Science                             | 3              |
| DIFD 141   | Introduction to Web Application Design                   | 4              |
| DIFD 151   | Introduction to Information Design                       | 1              |
| VCOM 261   | Electronic Image Making                                  | 3              |
| VCOM 262   | Introduction to Web Design                               | 3              |
| DIFD 211   | Communication Theory and the Internet                    | 3              |
| DIFD 321   | Information Systems and Organizations                    | 3              |
| DIFD 322   | Visual Design of Complex Systems                         | 3              |
| DIFD 351   | Information Design Seminar: Special Topics               | 1              |
| DIFD 415<br>DIFD 451   | Law and Ethics for Digital Media                         | 3<br>3         |
|  | Senior Synthesis   | 31.5           |
| Web Application Design Concentration<br>QMTH 205   | Applied Statistics                                       | 31.5           |
| CSCI 101B  | Microsoft Excel  | 0.5            |
| CSCI 241 & 242   | Client/Server Programming for the World Wide Web         |                |
| CSCI 355   | Database Processing                                      | 3              |
| CSCI 441   | Web Application Design and Development                   | 3              |
| CSCI 471<br>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  |  | 8.5-20.5       |
| Total  |  | 120            |
| Canadaa  | 16. 10 for additional domas requirements                 | -              |