Core Curriculum:

Economics: 3 hours. Choose one of the following courses:
ECON 189 Core Seminar in Econ OR ECON 201 Macroeconomics

Course                                      Hours Grade Term

English/Writing: 3 hours.

Course                                      Hours Grade Term
ENGL 103 Introductory Writing

English/Literature: 3 hours. Choose one of the following courses:
ENGL 189 Core Seminar in Literature (pre: ENGL 103)
ENGL 202 American Literary Experience (pre: ENGL 103)
ENGL 203 World Literature (pre: ENGL 103)
ENGL 204 British Literary Experience I (pre: ENGL 103)
ENGL 206 British Literary Experience II (pre: ENGL 103)

Course                                      Hours Grade Term

Fine Arts: 3 hours. Choose a single course or combination of courses from the following disciplines to total a minimum of three credit hours; includes core seminars:
Art (ART)                                    Dance (DANC) Music (MUS)
Art History (ARH)                            Film (FVA) Theatre Arts (THEA)

Course                                      Hours Grade Term

Global Studies: 3 hours. Choose one option associated with one of the following degree programs:
• Bachelor of Arts degree:
  Only option: One (1) foreign language course or equivalent at the 202 level
• Bachelor of Science degree:
  Option #1: One (1) foreign language course or equivalent at the 102 level
  or Option #2: One (1) International Studies (IS) course at the 300-level (pre: ENGL 103 & soph status)

Course                                      Hours Grade Term

History: 3 hours. Choose one HIST course at the 100 or 200 level:

Course                                      Hours Grade Term

Humanities: 3 hours. Choose one HUM course (pre: ENGL 103 & ENGL/literature core requirement).

Course                                      Hours Grade Term

Laboratory Science: 4 hours. Select any 4 hour 100-level laboratory science course:

Course                                      Hours Grade Term

Mathematics: 3-4 hours. Select one of the following courses:
MATH 110 Math of Motion & Change (pre: MATH 104)
MATH 112 Modern Applications of Math (pre: MATH 104)
MATH 114 Discover, Decode, Decide (pre: MATH 104)
MATH 140 Calculus I (pre: “C” or better in MATH 110)
MATH 189 Core Seminar in Mathematics (pre: MATH 104)

Course                                      Hours Grade Term

Philosophy: 3 hours. Choose one of the following courses:
PHIL 101 Introduction to Philosophy,
PHIL 189 Core Seminar in Philosophy OR PHIL 212 Ethics

Course                                      Hours Grade Term

Social Science: 3 hours. Choose one of the following courses:
GEOG 189 Core Seminar in Geography
GEOG 200 World Geography
POL 189 Core Seminar in Political Science
POL 205 American National Government & Politics
POL 208 International Politics
PSYC 189 Core Seminar in Psychology
PSYC 201 Introductory Psychology
SOC 189 Core Seminar in Sociology
SOC 203 Introductory Sociology

Course                                      Hours Grade Term

Technology: 3 hours. Choose one of the following courses:
CS 150 Personal Productivity Using Technology
DSIM 203R Applied Business & Economic Analysis
MUS 150 Intro to Music Technology (pre: MUS 141; co: MUS 142)
XXX xxx Technology Intensive (TI) course in the major approved by the department as an equivalent

Course                                      Hours Grade Term

Notes:
• Students must earn a minimum grade of "C-" in ENGL 103 and should complete this introductory writing course in their 1st year of enrollment.
• All students enrolled in ENGL 103 must pass an Exit Exam at the end of the term. Students not passing this exit exam are required to enroll in ENGL 214WI prior to reaching 60 hours. It is not necessary to pass this exam in order to pass ENGL 103. ENGL 214WI counts as an elective course.
• Students not qualified to begin at the ENGL 103 level may be required to take ENGL 101 prior to enrolling in ENGL 103. The hours earned for ENGL 101 will count as elective hours in the degree program.
• It is recommended that students complete Technology, Mathematics, and foreign language (if applicable to degree chosen) requirements by end of their sophomore year.
• Placement in a “Core” Mathematics course assumes the student is qualified beyond the MATH 104 level. If not, students may be required to take MATH 100 and/or MATH 104 prior to enrolling in a higher level Mathematics course. The hours earned for MATH 100 and/or MATH 104 will count as elective hours in the degree program.
• Placement in foreign language is determined by previous college background and/or foreign language placement test.
2016-2017 JU Catalog: INFORMATION SYSTEMS

Major Requirements

Computing Science Core: 25 hours.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Grade</th>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>CS 158 Application Developm't I</td>
<td>4</td>
<td></td>
<td></td>
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<tr>
<td>CS 160 Application Developm't II</td>
<td>4</td>
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<tr>
<td>(pre: CS 158 or consent of CS faculty)</td>
<td></td>
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<tr>
<td>CS 330 Network/Wireless Comm (pre: CS 158)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>CS 360 Database Design &amp; Dev. (pre: CS 160)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>CS 365SI Sys Anal &amp; Logical Des (pre: CS 160)</td>
<td>3</td>
<td></td>
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<tr>
<td>(fulfills speech intensive requirement)</td>
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<tr>
<td>CS 366 Physical Design &amp; Impl'nt (pre: CS 360 and CS 365SI)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>CS 376 Soc Issues &amp; Prof Prac (pre: junior status)</td>
<td>2</td>
<td></td>
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<tr>
<td>CS 455WI Project Mgt &amp; Practice</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>(pre: CS 366 or CS 395SI; sr status and consent of CS faculty advisor)</td>
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<tr>
<td>(fulfills Writing Intensive requirement)</td>
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</table>

Computing Science Electives: 9 hours.

- Select three (3) CS courses numbered 300 or above.
- CS electives may include one (1) internship and one (1) independent study course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Grade</th>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>DSIM 380 Applied Business and Economics</td>
<td>3</td>
<td></td>
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<tr>
<td>MGT 301 Principles of Management (pre: jr status)</td>
<td>3</td>
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<tr>
<td>MGT 310 Organizational Behavior &amp; Leadership Skills (pre: jr status)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>MGT 401 Design &amp; Change Mgt (pre: jr status &amp; MGT 310)</td>
<td>3</td>
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</table>

Quantitative Analysis course: 3 hours.


OR

MATH 205: Elementary Statistics required for Geographic Information Systems and Human Centric Digital Design concentration. (pre: MATH 104)

<table>
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<tr>
<th>Course</th>
<th>Hours</th>
<th>Grade</th>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>DSIM 307 Intro to Business Analytics (pre: DSIM 203R &amp; pre: or co: DSIM 301)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSIM 370 Mgt of Info Technology (pre: DSIM 203R)</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DSIM 405 Adv Stats and Econometrics (pre: DSIM 203R, DSIM 301, ECON 201, ECON 202)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>DSIM 415 Management Science (pre: DSIM 301 &amp; 305)</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>DSIM 420 Visual Analytics (pre: DSIM 203R, DSIM 301, DSIM 370)</td>
<td>3</td>
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</tbody>
</table>

Notes:
- Students pursuing a degree in Information Systems must complete the CS core, CS electives, the required quantitative analysis course, and required supporting concentration.
- A minimum grade of "C" is required in any course used as a prerequisite to a CS course.

Supporting Concentration Courses – 15 hours (minimum)

Students must select a concentration in collaboration with a Computing Science faculty. Concentrations are available in Geographical Information Systems, Management Information Systems, Human Centric Digital Design, and Business Analytics. The supporting concentration courses are selected as a cohesive body of knowledge and serve to prepare the student to function as an IS professional in that environment.

Supporting Concentration Courses – 15 (minimum) – 18 hours.

Geographic Information Systems

Students must complete a minimum of 15 hours, one course from each of the five categories below:
1) GEOG 200 World Geography (fulfills Social Science requirement)
2) GEOG 230 Earth Science
   or GEOG 314 Population Geography
   or GEOG 400 Special Topics in Geography
3) GEOG 350TI Geographic Information Systems (fulfills Technology requirement)
4) GEOG 455 Adv Geographic Info Systems (pre: GEOG 200 & 350TI)
5) GEOG 387/388/487/488 Independent Study
   or GEOG 390/490 Internship

OR

Management Information Systems

Students must complete the following 18 credit hours in Management/Decision Science Information Management classes:

DSIM 203RI Applied Business and Economics Analysis (fulfills Technology & Experiential Learning requirement)

DSIM 305 Quantitative Business Methods (pre: DSIM 301)

DSIM 370 Mgt of Info Technology (pre: DSIM 203R, jr status)

MGT 301 Principles of Management (pre: jr status)

MGT 310 Organizational Behavior & Leadership Skills (pre: jr status)

MGT 401 Design & Change Mgt (pre: jr status & MGT 310)

OR

Human Centric Digital Design

Students must complete the following 15 credit hours in Art classes. Any one of these ART courses will fulfill the Fine Arts requirement:

ART 254 Digital Art
ART 255 Typography (pre: ART 254)
ART 263 Web Design (pre: ART 254)
ART 360 Graphic Design (pre: ART 255)
ART 362 Mobile Design (pre: ART 263)

OR

Business Analytics

Students must complete the following 18 credit hours in Management/Decision Science Information Management classes:

DSIM 203RI Applied Business and Economics Analysis (fulfills Technology & Experiential Learning requirement)

DSIM 307 Intro to Business Analytics (pre: DSIM 203R & pre: or co: DSIM 301)

DSIM 370 Mgt of Info Technology (pre: DSIM 203R, jr status)

DSIM 405 Adv Stats and Econometrics (pre: DSIM 203R, DSIM 301, ECON 201, ECON 202)

DSIM 415 Management Science (pre: DSIM 301 & 305)

DSIM 420 Visual Analytics (pre: DSIM 203R, DSIM 301, DSIM 370)
General Electives: Additional hours needed to total 120 hours for degree: approximately 20 - 30 hours (depends on BA or BS degree and concentration chosen) for Information Systems majors.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
<th>Grade</th>
<th>Term</th>
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</thead>
<tbody>
<tr>
<td>XXX xxx</td>
<td>3</td>
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</table>

NOTE: The Experiential Learning requirement will be fulfilled if student takes DSIM 203RI for the Management Information Systems or Business Analytics concentrations.

Experiential Learning Requirement: 3 hours.
Experiential Learning course is defined as one of the following:
- Undergraduate research, Departmental Honors, or Research Intensive (RI)
- Internship
- Study Abroad, JU 409 required co-requisite
- Service Learning, JU 408 required co-requisite

A grade of "C" or better is required in the Experiential Learning course. The Experiential Learning course may be a course from the University Core Curriculum, major, minor, or elective courses.

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>XXX xxx</td>
<td>3</td>
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</table>

Additional General Requirements for all Baccalaureate Degrees. Indicate with "(    )" that requirement is met.
- 120 hours (minimum) required for degree (    )
- Final 30 hours must be completed at JU (    )
- 12 hours in major courses 300 level or above must be completed at JU (    )
- 42 hours must be 300 level or above (    )
- QEP-Experiential Learning course (3 hours) required for all majors, satisfied by a core, major, minor or elective course (    )
- Cum 2.00 GPA in all coursework at JU (    )
- Cum 2.00 GPA in major area coursework at JU (    )
- Cum 2.00 GPA in minor area coursework at JU (    )