|  |  |
| --- | --- |
|  |  |
| S:\Communications\Logos and photos\SDBORLogos\final_sdbor_webreadyBW_trans.gif | **SOUTH DAKOTA BOARD OF REGENTS**  ACADEMIC AFFAIRS FORMS |
| Substantive Program Modification Form |
|  |  |

Use this form to request minor changes in existing programs (majors, minors, certificates, or specializations).

|  |  |
| --- | --- |
| **UNIVERSITY:** | DSU |
| **CURRENT PROGRAM TITLE:** | **BS in Computer Information Systems** |
| **CIP CODE:** | **11.0401** |
| **UNIVERSITY DEPARTMENT:** | **Information Systems** |
| **UNIVERSITY DIVISION:** | **College of BIS** |

**University Approval**

*To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.*

|  |  |  |
| --- | --- | --- |
| C:\Users\slaughts\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Dr. McKay Signature.jpg |  | 11/14/2018 |
| Vice President of Academic Affairs or  President of the University |  | Date |

|  |
| --- |
|  |

1. **This modification addresses a change in (*place an “X” in the appropriate box*):**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Total credits required within the discipline |  | Total credits of supportive course work |
|  |  |  |  |
|  | Total credits of elective course work |  | Total credits required for program |
|  |  |  |  |
|  | Program name |  | Existing specialization |
|  |  |  |  |
|  | CIP Code |  | Other (explain below) |

1. **Effective date of change: Spring 2019**
2. **Program Degree Level (*place an “X” in the appropriate box*):**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Associate |  | Bachelor’s |  | Master’s |  | Doctoral |  |

1. **Category (*place an “X” in the appropriate box*):**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Certificate |  | Specialization |  | Minor |  | Major |  |

1. **If a name change is proposed, the change will occur (*place an “X” in the appropriate box*):**

|  |  |
| --- | --- |
|  | On the effective date for all students |

|  |  |
| --- | --- |
|  | On the effective date for students new to the program (enrolled students will graduate from existing program) |
|  |

|  |  |
| --- | --- |
| **Proposed new name:** | **Specialization – Application Development** |
|  | *Reminder: Name changes may require updating related articulation agreements, site approvals, etc.* |

1. **Primary Aspects of the Modification (*add lines or adjust cell size as needed*):**

Existing Curriculum Proposed Curriculum (highlight changes)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Pref. | Num. | Title | Cr.  Hrs |  | Pref. | Num. | Title | Cr. Hrs |
| General Education | | | 30 |  | General Education | | | 30 |
| Required Core | | | 60 |  | Required Core | | | 66 |
| ACCT | 210 | Prin of Accounting I | 3 |  | ACCT | 210 | Prin of Accounting I | 3 |
| BADM | 220 | Business Statistics | 3 |  | BADM | 220 | Business Statistics | 3 |
| BADM | 344 | Managerial Communications | 3 |  | BADM | 344 | Managerial Communications | 3 |
| BADM | 350 | Legal Environment of Business | 3 |  | BADM | 350 | Legal Environment of Business | 3 |
| BADM | 360 | Organization and Mgmt | 3 |  | BADM | 360 | Organization and Mgmt | 3 |
| BADM | 370 | Marketing | 3 |  | BADM | 370 | Marketing | 3 |
| CIS | 251 | Business App Programming | 3 |  | CIS | 251 | Business Appl Programming | 3 |
| CIS | 325 | Management Information Systems | 3 |  | CIS | 325 | Management Information Systems | 3 |
| CIS | 332 | Structured Systems Analysis and Design | 3 |  | CIS | 332 | Structured Systems Analysis and Design | 3 |
| CIS | 338 | Project Management | 3 |  | CIS | 338 | Project Management | 3 |
| CIS | 427 | Info Systems Planning and Mgmt | 3 |  | CIS | 427 | Info Systems Planning and Mgmt | 3 |
| CIS | 484 | Database Mgmt Systems | 3 |  | CIS | 484 | Database Mgmt Systems | 3 |
| CSC | 105 | Introduction to Computers | 3 |  | CSC | 105 | Introduction to Computers | 3 |
| CSC | 145 | Information Security Fundamentals | 3 |  | CSC | 145 | Information Security Fundamentals | 3 |
| CSC | 150 | Computer Science I | 3 |  | CSC | 150 | Computer Science I | 3 |
| CSC | 363 | Hardware, Virtualization, and Data Communication | 3 |  | CSC | 363 | Hardware, Virtualization, and Data Communication | 3 |
|  |  |  |  |  | CSC | 383 | Networking I | 3 |
| ECON | 201 | Principles of Microeconomics | 3 |  | ECON | 201 | Principles of Microeconomics | 3 |
|  |  |  |  |  | Choose 3 credits from the following: | | | 3 |
|  |  |  |  |  | CIS | 206 | Advanced Applications | 1 |
|  |  |  |  |  | CIS | 207 | Adv. Applications: Spreadsheets | 1 |
|  |  |  |  |  | CIS | 208 | Adv. Applications: Database | 1 |
|  |  |  |  |  | CIS | 210 | Quickbooks I | 1 |
| Choose 9 credits from the following | | | 9 |  | Choose 9 credits from the following: | | | 9 |
| ACCT | 211 | Prin of Accounting II | 3 |  | ACCT | 211 | Prin of Accounting II | 3 |
| BADM | 310 | Business Finance | 3 |  | BADM | 310 | Business Finance | 3 |
|  |  |  |  |  | BADM | 321 | Business Statistics II | 3 |
|  |  |  |  |  | BADM | 425 | Production & Operations Mgmt | 3 |
|  |  |  |  |  | BADM | 435 | Mgmt Technology and Innovation | 3 |
|  |  |  |  |  | BADM | 460 | Human Resource Management | 3 |
| BADM | 472 | Marketing Technology | 3 |  | BADM | 472 | Marketing Technology | 3 |
|  |  |  |  |  | CIS | 275 | Web Application Programming I | 3 |
| CIS | 330 | COBOL I | 3 |  | CIS | 330 | COBOL I | 3 |
| CIS | 340 | Java Programming | 3 |  | CIS | 340 | Java Programming | 3 |
|  |  |  |  |  | CIS | 368 | Predictive Analytics | 3 |
|  |  |  |  |  | CIS | 372 | Programming for Analytics | 3 |
|  |  |  |  |  | CIS | 375 | Web Application Programming II | 3 |
|  |  |  |  |  | CIS | 384 | Decision Support Systems | 3 |
|  |  |  |  |  | CIS | 424 | Software Development with Agile Methodologies | 3 |
|  |  |  |  |  | CIS | 438 | Advanced Project Management | 3 |
|  |  |  |  |  | CIS | 474 | Business Intelligence & Big Data | 3 |
|  |  |  |  |  | CIS | 476 | Web Development Environments | 3 |
|  |  |  |  |  | CIS | 487 | Database Programming | 3 |
| CIS | 494 | Internship | 3 |  | CIS | 494 | Internship | 3 |
| CIS | 498 | UG Research/ Scholarship | 3 |  | CIS | 498 | UG Research/ Scholarship | 3 |
| CSC | 234 | Software Security | 3 |  | CSC | 234 | Software Security | 3 |
| CSC | 250 | Computer Science II | 3 |  | CSC | 250 | Computer Science II | 3 |
| CSC | 260 | Object Oriented Design | 3 |  | CSC | 260 | Object Oriented Design | 3 |
| CSC | 328 | Operating Environments | 3 |  | CSC | 328 | Operating Environments | 3 |
| ~~CSC~~ | ~~383~~ | ~~Networking I~~ | ~~3~~ |  |  |  |  |  |
| CSC | 385 | Networking II | 3 |  | CSC | 385 | Networking II | 3 |
| ~~CSC~~ | ~~388~~ | ~~Computer Forensics Fundamentals~~ | ~~3~~ |  |  |  |  |  |
|  |  |  |  |  | CSC | 430 | Windows Administration | 3 |
|  |  |  |  |  | CSC | 431 | UNIX/LINUX Administration | 3 |
| CSC | 451 | Mobile Dev Env | **3** |  | CSC | 451 | Mobile Dev Env | 3 |
|  |  |  |  |  | ECON | 202 | Principles of Macroeconomics | 3 |
|  |  |  |  |  | MATH | 201 | Intro to Discrete Math | 3 |
| Choose one Specialization | | | 18 |  | Choose one Specialization | | | 18 |
| Business Analytics | | |  |  | Business Analytics (NO CHANGE) | | |  |
|  | | |  |  |  | | |  |
| Program Management | | |  |  | Program Management (NO CHANGE) | | |  |
|  | | |  |  |  | | |  |
| Software and Web Development | | |  |  | **Application Development** | | |  |
| CIS | 275 | Web Application Programming I | 3 |  | CIS | 275 | Web Application Programming I | 3 |
| CIS | 375 | Web Application Programming II | 3 |  | CIS | 375 | Web Application Programming II | 3 |
| CIS | 424 | Software Development with Agile Methodologies | 3 |  | CIS | 424 | Software Development with Agile Methodologies | 3 |
| CIS | 476 | Web Development Environments | 3 |  | CIS | 476 | Web Development Environments | 3 |
| CIS | 487 | Database Programming | 3 |  | CIS | 487 | Database Programming | 3 |
| ~~MATH~~ | ~~201~~ | ~~Intro to Discrete Math~~ | ~~3~~ |  |  |  |  |  |
|  |  |  |  |  | CSC | 260 | Object Oriented Design | 3 |
| Electives | | | 12 |  | Electives | | | 6 |
| Total number of hours required for major, minor, or specialization | | | 108 |  | Total number of hours required for major, minor, or specialization | | | 114 |
| Total number of hours required for degree | | | 120 |  | Total number of hours required for degree | | | 120 |

1. **Explanation of the Change:**

Based on input from advisory board members, it was decided to add some advanced software applications and a networking course to the core for the IS degree. This reduced the general electives from 12 to 6 credits. Additional courses were added to the choices for the program electives to allow for students to utilize related coursework from other specializations and/or from a different computer major. Also based on input from advisory board members, it was decided to make object-oriented design a required course in the specialization and move discrete math to a choice in the major electives. The name of this specialization was changed to Application Development.