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

Use this form to request minor changes in existing programs (majors, minors, certificates, or specializations). The university Vice President for Academic Affairs approves minor program modifications and they are included in the Annual Minor Program Modification Summary form.

|  |  |
| --- | --- |
| **UNIVERSITY:** | DSU |
| **PROGRAM TITLE:** | **BS in Cyber Operations** |
| **CIP CODE:** | 11.1003 |
| **UNIVERSITY DEPARTMENT:** | **Beacom College of Computer & Cyber Sciences** |
| **UNIVERSITY DIVISION:** | **Beacom College of Computer & Cyber Sciences** |

**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 |  | 2/13/2018 |
| 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*):**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Course *deletions* that do not change the nature of the program, or distribution of courses in the program, or change of total credit hours required |  | Course *additions* that do not change the nature of the program, or distribution of courses in the program, or change of total credit hours required |
|  | Revised courses in the program. |  |  |

1. **Effective date of change:** Fall 2018
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. **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 |
| \*Majors who test directly into MATH 201 will not need to complete MATH 102, but must take 3 credits of general electives. | | |  |  | \*Majors who test directly into MATH 201 will not need to complete MATH 102, but must take 3 credits of general electives. | | | |  |
|  | | |  |  |  | | | |  |
| Required Courses | | | 78 |  | Required Courses | | | | **78** |
| CSC | 105 | Intro to Computers | 3 |  | CSC | | 105 | Intro to Computers | 3 |
|  |  |  |  |  | **CSC** | | **134** | **Intro to Cyber Operations** | **3** |
| CSC | 150 | Computer Science I | 3 |  | CSC | | 150 | Computer Science I | 3 |
| CSC | 234 | Software Security | 3 |  | CSC | | 234 | Software Security | 3 |
| ~~CSC~~ | ~~245~~ | ~~Info Sec Fund~~ | ~~3~~ |  |  | |  |  |  |
| CSC | 250 | Computer Science II | 3 |  | CSC | | 250 | Computer Science II | 3 |
| CSC | 300 | Data Structures | 3 |  | CSC | | 300 | Data Structures | 3 |
| CSC | 314 | Assembly Language | 3 |  | CSC | | 314 | Assembly Language | 3 |
|  |  |  |  |  | **CSC** | | **321** | **Information Security Mgmt** | **3** |
| CSC | 328 | Operating Environments | 3 |  | CSC | | 328 | Operating Environments | 3 |
| CSC | 363 | HW, Virtualization, Data Com | 3 |  | CSC | | 363 | HW, Virtualization, Data Com | 3 |
| CSC | 383 | Networking I | 3 |  | CSC | | 383 | Networking I | 3 |
| CSC | 385 | Networking II | 3 |  | CSC | | 385 | Networking II | 3 |
|  |  |  |  |  | **CSC** | | **404** | **Foundations of Computation** | **3** |
| CSC | 420 | Cellular & Mobile | 3 |  | CSC | | 420 | Cellular & Mobile | 3 |
| CSC | 432 | Malware Analysis | 3 |  | CSC | | 432 | Malware Analysis | 3 |
| CSC | 436 | Offensive Security | 3 |  | CSC | | 436 | Offensive Security | 3 |
| CSC | 437 | Survey of Enterprise Systems | 3 |  | CSC | | 437 | Survey of Enterprise Systems | 3 |
| CSC | 438 | Defensive Security | 3 |  | CSC | | 438 | Defensive Security | 3 |
| ~~CSC~~ | ~~444~~ | ~~Reverse Engineering~~ | ~~3~~ |  | **CSC** | | **428** | **Reverse Engineering** | **3** |
| CSC | 456 | Operating Systems | 3 |  | CSC | | 456 | Operating Systems | 3 |
| CIS | 275 | Web Programming I | 3 |  | CIS | | 275 | Web Programming I | 3 |
| ~~CIS 321 Information Security Management~~  ~~or~~  ~~CIS 332 Systems Analysis & Design~~ | | | ~~3~~ |  |  | | | |  |
| CIS | 375 | Web Programming II | 3 |  | CIS | | 375 | Web Programming II | 3 |
| ~~CIS~~ | ~~484~~ | ~~Database Mgmt Sys~~ | ~~3~~ |  |  | |  |  |  |
| Math | 201 | Intro to Discrete Math | 3 |  | Math | | 201 | Intro to Discrete Math | 3 |
| CIS/CSC 300-400 OR  MATH 123 and above | | | 9 |  | CIS/CSC 300-400 OR  MATH 123 and above **(except CIS 350)** | | | | 9 |
|  |  |  |  |  |  | |  |  |  |
| Electives | | | 12 |  | Electives | | | | 12 |
|  |  |  |  |  |  | |  |  |  |
| Total number of hours required for major, minor, or specialization | | | 78 |  | | Total number of hours required for major, minor, or specialization | | | 78 |
| Total number of hours required for degree | | | 120 |  | | Total number of hours required for degree | | | 120 |

1. **Explanation of the Change:**

The Cyber Operations program updated to align with accreditations standards and feedback provided from the last program review.

* CSC 321 is required rather than allowing the choice of CIS 332 or CSC 321.
* CSC 134 is required and replaces CSC 245 in the degree.
* CSC 404 is required and replaces CIS 484 in the degree. The CSC 404 course addresses several Cyber Operations knowledge units while CIS 484 topics are not mandated.
* CSC 428 is the new number for CSC 444.

CIS 350 substantially overlaps with CSC 363 content so it is excluded from the selection of classes that can be used to meet the CIS/CSC 300-400 level course requirements.