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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.*

|  |  |  |
| --- | --- | --- |
|  |  | 2/24/2021 |
| 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 2021
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 | | 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 | 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 | | 321 | Information Security Mgmt | 3 |
| CSC | 328 | Operating Environments | 3 |  | CSC | | 328 | Operating Environments | 3 |
| CSC | 163 | HW, Virtualization, Data Com | 3 |  | CSC | | 163 | HW, Virtualization, Data Com | 3 |
| CSC | 285 | Networking I | 3 |  | CSC | | 285 | Networking I | 3 |
| CSC | 385 | Networking II | 3 |  | CSC | | 385 | Networking II | 3 |
| CSC | 404 | Foundations of Computation | 3 |  | CSC | | 404 | Foundations of Computation | 3 |
| CSC | 420 | Cellular & Mobile | 3 |  | CSC | | 420 | Cellular & Mobile | 3 |
| CSC | 428 | Reverse Engineering | 3 |  | CSC | | 428 | Reverse Engineering | 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 | 456 | Operating Systems | 3 |  | CSC | | 456 | Operating Systems | 3 |
| ~~CIS~~ | ~~275~~ | ~~Web Programming I~~ | ~~3~~ |  |  | |  |  |  |
| ~~CIS~~ | ~~375~~ | ~~Web Programming II~~ | ~~3~~ |  |  | |  |  |  |
|  |  |  |  |  | CSC | | 334 | Web Development | 3 |
|  |  |  |  |  | CSC  CSC | | 434  439 | Web Software Security  OR Threat Hunting & IR | 3 |
|  |  |  |  |  |  | |  |  |  |
| Math | 201 | Intro to Discrete Math | 3 |  | Math | | 201 | Intro to Discrete Math | 3 |
| CIS/CSC 300/400 or MATH 123 and above, except CIS 350. | | | 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 is updated to align with accreditations standards and to ensure that knowledge units are properly addressed before the next review. Additionally, faculty have found that the web security area would benefit from increased depth. The choice of CSC 434 or CSC 439 reflects the many facets of security and allows the student to focus on the areas that is of interest to their career path.