|  |  |
| --- | --- |
|  |  |
| 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:** | **MS Information Assurance and Computer Security** |
| **CIP CODE:** | **11.1003** |
| **UNIVERSITY DEPARTMENT:** |  |
| **UNIVERSITY DIVISION:** | **Beacom College of Computer and 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 |  | 10/18/2017 |
| 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: 8/15/2018**
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. **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:** | **Masters of Science in Cyber Defense** |
|  | *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.** |
| INFA | 701 | Principles of Information Assurance | 3 |  | INFA | | 701 | Principles of Information Assurance | 3 |
| INFA | 713 | Managing Security Risks | 3 |  | INFA | | 713 | Managing Security Risks | 3 |
| ~~INFA~~ | ~~715~~ | ~~Data Privacy~~ | ~~3~~ |  |  | |  |  |  |
| INFA | 720 | Incident Response | 3 |  | INFA | | 720 | Incident Response | 3 |
| INFA | 721 | Computer Forensics | 3 |  | INFA | | 721 | Computer Forensics | 3 |
| INFA | 723 | Cryptography | 3 |  | INFA | | 723 | Cryptography | 3 |
| INFA | 735 | Offensive Security | 3 |  | INFA | | 735 | Offensive Security | 3 |
| ~~INFA~~ | ~~742~~ | ~~Ethics in Technology~~ | 3 |  |  | |  |  |  |
| ~~INFA~~ | ~~745~~ | ~~Compliance and Audit~~ | 3 |  |  | |  |  |  |
| ~~INFS~~ | ~~754~~ | ~~Network Security and Intrusion Detection~~ | 3 |  |  | |  |  |  |
|  |  |  |  |  | **INFA** | | **751** | **Wireless Security** | **3** |
|  |  |  |  |  | **INFA** | | **754** | **Intrusion Detection** | **3** |
|  |  |  |  |  | **INFA, CSC, INFS** | | **Electives- 700 or 800 level as approved by advisor** | | **6** |
| Total number of hours required for major, minor, or specialization | | | 30 |  | | Total number of hours required for major, minor, or specialization | | | 30 |
| Total number of hours required for degree | | | 30 |  | | Total number of hours required for degree | | | 30 |

1. **Explanation of the Change:**

Information Assurance was a term coined by the government and is traditionally understood as assessing vulnerabilities and risks in information technology systems. Cyber Defense is understood as defending computers and networks from cyber security attacks followed by investigating attacks when they occur. Our curriculum lines up closer to Cyber Defense than Information Assurance, therefore we are proposing changing the program title from Information Assurance and Computer Security to Cyber Defense. The name change will also be a powerful marketing tool for the Beacom College of Computer and Cyber Science.

With the change in name, so comes updated curriculum. The MS in Cyber Defense will remove two management based courses, INFA 742 Ethics in Technology and INFA 745 Compliance and Audit. We will also remove INFS Network Security and Intrusion Detection and create INFA 754 Intrusion Detection. Currently, we use a class from the MS Information Systems program and we request creating the Intrusion Detection course which will complement our INFA 735 Offensive Security and INFA 720 Incident Response courses.

Giving the varying backgrounds of our students, we would like to give the option of two electives (6 credits). This will allow our students to take any INFA, INFS, or CSC prefix course that is a 700- level or higher, with approval from their advisor. We believe the flexibility will be attractive to current students and prospective students.