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|  | **SOUTH DAKOTA BOARD OF REGENTS**ACADEMIC AFFAIRS FORMS |
| Existing Courses: Minor Modifications |
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Use this form to request minor modifications of existing unique and common courses. Consult the system course database for information about existing courses before submitting this form. If the course revision is for an approved General Education course, please see the Revision to General Education Requirements Form.

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| DSU |  | BIS |  | Jun Liu |  | 9/25/2023 |
| **Institution** |  | **Division/Department** |  | **Originator** |  | **Date** |
|  |  |  |  |  |  |  |
| Dorine Bennett |  | College of Business & Information Systems |  |  |  | Click here to enter a date. |
| **Department Chair** |  | **School/College Dean** |  | **Institutional Approval Signature** |  | **Date** |

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**Section 1. Existing Course Title and Description**

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| **Prefix & No.** | **Course Title** | **Credits** |
| INFS 770 | Advanced Data Mining Applications | 3 |

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| --- | --- |
| **Effective Date:** | Click here to enter a date. |

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| **This course is a (*Place an “X” in the appropriate box*):** |
| ☒ | **Unique Course (see section 2)** |  | ☐ | **Common Course (see section 3)** |

**Section 2. Unique Courses: Requested Minor Modifications**

***Place an “X” in the appropriate boxes*.**

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| --- | --- | --- | --- | --- |
|  |  | **Current** |  | **New** |
| ☐ | **Prefix change**  |  | to |  |

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| --- | --- | --- | --- | --- |
| ☐ | **Course Number change**  |  | to |  |

*NOTE: You may only change a unique course number to a number not currently used in “active” status at another university. Consult the system database.*

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| ☐ | **Credit hours**  |  | to |  |

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| ☒ | **Course pre-requisites**  | INFS 768 | to | INFS 762 or INFS 768 |

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| ☐ | **Course co-requisites**  |  | to |  |

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| ☐ | **Registration restriction**  |  | to |  |

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| --- | --- | --- | --- | --- |
| ☐ | **Enrollment limitation**  |  | to |  |

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| --- | --- | --- | --- | --- |
| ☐ | **Repeatable for additional credit** |  | to |  |

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| ☐ | **Grading option**  |  | to |  |

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| --- | --- | --- |
| ☒ | **Course title change** | Advanced Machine Learning and Deep Learning Applications |

*NOTE: The Enrollment Services Center assigns the short, abbreviated course title that appears on transcripts. The short title is limited to 30 characters (including spaces); meaningful but concise titles are encouraged due to space limitations in the student information system.*

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| ☐ | **Cross-listing and equating with** |  |

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| ☐ | **Dual-listing at 400/500 level** |

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| ☒ | **Course description (that does not change course content). Complete table below:** |

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| *Existing description:* |
| This course provides an understanding of data mining methodology as well as hands-on experience with applying the methodology in data mining applications.  Throughout the course, students will work closely with data analysis following the data mining methodology.  Different aspects of data mining such as data import, data partitioning, variable transformation, model building, and model comparison will be covered.  Students will participate in one or more major data mining projects in the course.  Through formal presentations students will gain experience in delivering the findings to an audience in an effective manner.  Utilization of predictive analysis software is incorporated. |

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| *New description:* |
| This course provides an understanding and application of advanced machine learning methods such as ensemble learning, recommender systems, text mining, and deep learning. It also discusses the use of deep learning in advanced applications such as computer vision and natural language processing.  |
| Note: Course descriptions are short, concise summaries that typically do not exceed 75 words. DO: Address the content of the course and write descriptions using active verbs (e.g., explore, learn, develop, etc.). DO NOT: Repeat the title of the course, layout the syllabus, use pronouns such as “we” and “you,” or rely on specialized jargon, vague phrases, or clichés. |

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| ☐ | **Add course in x9x series** |
| *CIP Code:* |  |

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| *New CIP Code for this university?* |  | ☐ | Yes | ☐ | No |

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| *Will this university’s sections of the course be limited to S/U (pass/fail)?* |

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|  | ☐ | Yes | ☐ | No |

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| ☐ | **Delete Course (effective date):** | Click here to enter a date. |

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| **Justification for changes indicated in Section 2:** |
| INFS 770 provides an understanding of various advanced machine learning techniques and surveys advanced deep learning applications such as computer vision and natural language processing. The proposed course title and course description is more specific and better to describe the topics discussed in the class.  |

**Section 3. Common Courses: Requested Minor Modifications**

***Place an “X” in the appropriate boxes*.**

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|  |  | **Current** |  | **New** |
| ☐ | **Credit hours (within variable limits)**  |  | to |  |

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| ☐ | **University specific co-requisites**  |  | to |  |

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| ☐ | **Cross-listing and equating with** |  |

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| --- | --- |
| ☐ | **Dual-listing at 400/500 level** |

|  |  |
| --- | --- |
| ☐ | **Add course in x9x series** |
| *CIP Code:* |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *New CIP Code for this university?* | ☐ | Yes | ☐ | No |

|  |
| --- |
| *Will this university’s sections of the course be limited to S/U (pass/fail)?* |

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| --- | --- | --- | --- | --- |
|  | ☐ | Yes | ☐ | No |

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| ☐ | **x9x grading method**  |  | to |  |

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| **Justification for changes indicated in Section 3:** |
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**Section 4. Department and Course Codes (Completed by University Academic Affairs)**

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| 1. **University department code:**
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| 1. **Banner department code:**
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| 1. **Change university department code to:**
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