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| S:\Communications\Logos and photos\SDBORLogos\final_sdbor_webreadyBW_trans.gif | **SOUTH DAKOTA BOARD OF REGENTS**  ACADEMIC AFFAIRS FORMS |
| New Course Request |
|  |  |

Use this form to request a new common or unique course. Consult the system database through Colleague or the [Course Inventory Report](http://apps.sdbor.edu/ris-reporting/CourseInventoryOptions.cfm) for information about existing courses before submitting this form.

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| --- | --- | --- | --- | --- |
| DSU |  | **College of Business and Information Systems** | | |
| **Institution** |  | **Division/Department** | | |
| C:\Users\slaughts\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Dr. McKay Signature.jpg | | |  | 1/17/2019 |
| **Institutional Approval Signature** | | |  | **Date** |

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

If the course contains a lecture and laboratory component, identify both the lecture and laboratory numbers (xxx and xxxL) and credit hours associated with each. Provide the complete description as you wish it to appear in the system database in Colleague and the [Course Inventory Report](http://apps.sdbor.edu/ris-reporting/CourseInventoryOptions.cfm) including pre-requisites, co-requisites, and registration restrictions.

|  |  |  |
| --- | --- | --- |
| **Prefix & No.** | **Course Title** | **Credits** |
| INFS 778 | Deep Learning | 3 |

*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 Colleague.*

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| **Course Description** |  |
| This course introduces the basic concepts and applications of deep learning. Representative deep learning models such as Deep Neural Networks, Convolutional Neural Networks, and Recurrent Neural Networks (LSTM) will be covered in detail. Popular Python deep learning libraries will be introduced. The course also includes discussions on advanced topics such as transfer learning, hyperparameter tuning, regularization, optimization of DNNs, and others. | |

*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.*

**Pre-requisites or Co-requisites (add lines as needed)**

|  |  |  |
| --- | --- | --- |
| **Prefix & No.** | **Course Title** | **Pre-Req/Co-Req?** |
| INFS 768 | Predictive Analytics Decisions | **Pre-Req** |
| INFS 772 | Programming for Data Analytics | **Pre-Req** |

**Registration Restrictions**

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| N/A |

**Section 2. Review of Course**

1. **Was the course first offered as an experimental course (*place an “X” in the appropriate box*)?**

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| --- | --- | --- | --- |
|  | Yes *(if yes, provide the course information below)* |  | No |

INFS 792 Topics: Deep Learning, was offered in Summer 2018

1. **Will this be a unique or common course (*place an “X” in the appropriate box*)?**

*If the request is for a unique course, verify that you have reviewed the common course catalog via Colleague and the system* [*Course Inventory Report*](http://apps.sdbor.edu/ris-reporting/CourseInventoryOptions.cfm) *to determine if a comparable common course already exists. List the two closest course matches in the common course catalog and provide a brief narrative explaining why the proposed course differs from those listed. If a search of the common course catalog determines an existing common course exists, complete the Authority to Offer an Existing Course Form.*

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| --- | --- |
|  | **Unique Course** |

|  |  |  |
| --- | --- | --- |
| **Prefix & No.** | **Course Title** | **Credits** |
| INFS 768 | Predictive Analytics Decisions | 3 |
| INFS 772 | Programming for Data Analytics | 3 |
| *Provide explanation of differences between proposed course and existing system catalog courses below:* | | |
| The course extends what the students have learned in the above two courses (predictive models and Python modules for data analytics) into deep neural network models for computer vision and sequential data and the high-level library specialized for DNN models such as Keras. | | |

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|  | **Common Course** | | | | *Indicate universities that are proposing this common course:* | | | | | | | | |
|  |  | | | |  | | | | | | | | |
|  |  | BHSU |  | DSU | |  | NSU |  | SDSMT |  | SDSU |  | USD |

**Section 3. Other Course Information**

1. **Are there instructional staffing impacts?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **No**. Replacement of |  | | |
|  |  | (course prefix, course number, name of course, credits) | | |
|  |  | \*Attach course deletion form | | |
|  |  |  | | |
| Effective date of deletion: | | | Click here to enter a date. |  |

|  |  |
| --- | --- |
|  | **No**. Schedule Management, explain below:  Initially, the course will be handled by existing faculty. If new assignments necessitate, faculty will be relieved of other graduate-level courses and adjuncts will be hired to cover it. |

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|  | **Yes**. Specify below: |

1. **Existing program(s) in which course will be offered**: DSU, MS in Analytics
2. **Proposed instructional method by university**: Lecture
3. **Proposed delivery method by university**: 001 & 018
4. **Term change will be effective**: Summer 2019
5. **Can students repeat the course for additional credit?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Yes, total credit limit: |  |  |  | No |

1. **Will grade for this course be limited to S/U (pass/fail)?**

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

1. **Will section enrollment be capped?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Yes, max per section: | 25 |  |  | No |

1. **Will this course equate (i.e., be considered the same course for degree completion) with any other unique or common courses in the common course system database in Colleague and the** [**Course Inventory Report**](http://apps.sdbor.edu/ris-reporting/CourseInventoryOptions.cfm)**?**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes |  | No |
| *If yes, indicate the course(s) to which the course will equate (add lines as needed):* | | | |
|  | | | |

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| --- | --- |
| **Prefix & No.** | **Course Title** |
|  |  |

1. **Is this prefix approved for your university?**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes |  | No |
| *If no, provide a brief justification below:* | | | |
|  | | | |

**Section 4. Department and Course Codes (Completed by University Academic Affairs)**

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| --- | --- |
| 1. **University Department Code:** | DINFS |

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| 1. **Proposed** [**CIP Code**](http://nces.ed.gov/ipeds/cipcode/default.aspx?y=55)**:** | 11.0201 | | | |
|  |  | | | |
| *Is this a new CIP code for the university?* |  | Yes |  | No |