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

Use this form to propose a new baccalaureate degree minor (the minor may include existing and/or new courses. An academic minor within a degree program enables a student to make an inquiry into a discipline or field of study beyond the major or to investigate a particular content theme. Minors provide a broad introduction to a subject and therefore develop only limited competency. Minors consist of a specific set of objectives achieved through a series of courses. Course offerings occur in a specific department or may draw from several departments (as in the case of a topical or thematic focus). In some cases, all coursework within a minor proscribed; in others cases, a few courses may form the basis for a wide range of choices. Regental undergraduate minors typically consist of 18 credit hours. Proposals to establish new minors as well as proposals to modify existing minors must recognize and address this limit. The Board of Regents, Executive Director, and/or their designees may request additional information about the proposal. After the university President approves the proposal, submit a signed copy to the Executive Director through the system Chief Academic Officer. Only post the New Baccalaureate Degree Minor Form to the university website for review by other universities after approval by the Executive Director and Chief Academic Officer.

|  |  |
| --- | --- |
| **UNIVERSITY:** | DSU |
| **TITLE OF PROPOSED MINOR:** | **Finance Technology** |
| **DEGREE(S) IN WHICH MINOR MAY BE EARNED:** | **B.B.A. (except Finance)**  **B.S. in Computer Information Systems**  **B.S. in Professional Accountancy** |
| **EXISTING RELATED MAJORS OR MINORS:** | **BBA, Finance** |
| **INTENDED DATE OF IMPLEMENTATION:** | **Fall 2020** |
| **PROPOSED CIP CODE:** | **52.0801** |
| **UNIVERSITY DEPARTMENT:** | **Business** |
| **UNIVERSITY DIVISION:** | **College of Business and Information Systems** |

**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.*

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| --- | --- | --- |
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| President of the University |  | Date |

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

1. **Do you have a major in this field (*place an “X” in the appropriate box*)?**
2. **If you do not have a major in this field, explain how the proposed minor relates to your university mission.**

Given that Dakota State University is known for its information technology related programs national wide, this FinTech minor is a good fit of the University mission to educate the new generation of workforce about innovative technology in the finance field.

This minor utilizes the collaboration from three different disciplines at DSU to strengthen graduates’ career outlook. The proposed minor will enhance other existing degree programs (see below) by providing a technology focus within the finance field:

B.B.A., Accounting, Business Technology, Management or Marketing (excluding Finance)

B.S. in Computer Information Systems

B.S. in Professional Accountancy

1. **What is the nature/purpose of the proposed minor?**

The Financial Technology minor is intended to provide additional skill set focusing on innovative technology such as machine learning, AI, Data Mining, IoT, and other developing technology related to the financial service industry.

1. **How will the proposed minor benefit students?**

Given a changing landscape in the financial service industry and evolving disruptive technologies, acquiring solely finance knowledge is not enough as technology becomes essential and integral part of the financial service industry. Students pursuing their career in the banking and financial service industry will greatly benefited if they have acquired knowledge of finance in relation to data science and cyber technology.

1. **Describe the workforce demand for graduates in related fields, including national demand and demand within South Dakota.**

According to the SD Governor’s office of Economics Development, South Dakota is one of the major national hubs for financial service companies, including Wells Fargo, Citi, TCF and other intermediate sized commercial banks. Financial service industry accounts for more than 15% of SD GDP, which makes the financial service industry the largest employers in the State.

According to the Bureau of Labor Statistics, employment in Finance has grown up by 10.3% from 2003 to 2013. The employment is expected to grow by 5.52% from 2016 to 2026.

FinTech industry along has grown tremendously over the past 10 years and is continuing to expand. According to the 2017 FinTech report by Mckinsey & Company, FinTech related activities within Capital Market Infrastructure has gone up by 300% from 2000 to 2017, which posits great opportunity for this area of finance to grow explosively.

1. **Provide estimated enrollments and completions in the table below and explain the methodology used in developing the estimates (*replace “XX” in the table with the appropriate year*).**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Fiscal Years\*** | | | |
|  | **1st** | **2nd** | **3rd** | **4th** |
| *Estimates* | **FY19** | **FY20** | **FY21** | **FY22** |
| **Students enrolled in the minor (fall)** | **5** | **6** | **8** | **10** |
| **Completions by graduates** |  | **5** | **6** | **8** |

\*Do not include current fiscal year.

It is expected that minor will be of greatest interest to current DSU students. Enrollment estimates are based on the average number of students currently enrolled in other minors at DSU

1. **What is the rationale for the curriculum? Demonstrate/provide evidence that the curriculum is consistent with current national standards.**

It is now becoming obvious that the accelerating pace of technological change is the most creative force—and, the most destructive one-in the financial services ecosystem today.

According to several research institutions like Globe X and PWC.com, FinTech is emerging as a powerful theme in 2018 and going forward, driven by the rapid adoption of cutting-edge technologies across the financial services industry, such as mobile banking and payment, financial software and automatic algorithm, and alternative lending and funding platforms such as crowdfunding and microfinancing. In this piece, we look at the major trends that are propelling FinTech’s growth, including:

The digitalization of financial services

The rising number of payment options at retailers

Tapping into the emerging markets’ middle class

The expansion of FinTech beyond traditional financial services

With all been said and as the start-up and existing firms are gearing up for the new era of financial service industry, a new group of workforces with innovative skills is in high demand. DSU as a higher education provider should move ahead of the current and future trends and design a curriculum that could better prepare the future workforce. In conclusion, The offering of this FinTech minor could pave our way to offer a novel Finance program that meets the future of the finance industry.

1. **Complete the tables below. Explain any exceptions to Board policy requested.**
2. **Distribution of Credit Hours**

|  |  |  |
| --- | --- | --- |
| **Minor in Financial Technology** | **Credit Hours** | **Percent** |
| Requirements in minor | 18 | 100% |
| Electives in minor | 0 | 0% |
| Total | 18 | 100% |

1. **Required Courses in the Minor**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Prefix** | **Number** | **Course Title**  *(add or delete rows as needed)* | **Credit Hours** | **New**  **(yes, no)** |
| BADM | 310 | Business Finance | 3 | No |
| BADM | 411 | Investments | 3 | No |
| BADM | 415 | Financial Institutions and Markets | 3 | No |
| CIS | 474 | Business Intelligence and Big Data | 3 | No |
| CIS | 484 | Database Management Systems | 3 | No |
| CSC | 145 | Information Security Fundamentals | 3 | No |
|  |  | Subtotal | 18 |  |

It is noted that BADM 310 does require two additional prerequisite courses, ACCT 210 and ACCT 211, which are not listed as part of the minor. These courses are taken as part of the core requirements for the BBA and BS in Professional Accountancy majors and will not require additional coursework for the minor. For other B.S. degrees, these courses may be taken as part of the core requirements or as electives.

CIS 484 does require CIS 123 or CIS 130 or CSC 150 as a prerequisite, which is not listed as a part of the minor. The BBA and BS majors do require one of these courses to be taken as part of the program requirement and will not require additional coursework for the minor.

1. **Elective Courses in the Minor:** **List courses available as electives in the program. Indicate any proposed new courses added specifically for the minor.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Prefix** | **Number** | **Course Title**  *(add or delete rows as needed)* | **Credit Hours** | **New**  **(yes, no)** |
|  |  | None |  | Choose an item. |
|  |  | Subtotal |  |  |

1. **What are the learning outcomes expected for all students who complete the minor? How will students achieve these outcomes?**

Learning outcomes:

Demonstrate a thorough understanding of the application of technology for finance.

Solve financial related problems with emerging technological approaches.

Measurement of the learning outcomes:

Target 70% or more of the students will score 70% or higher on a project assignment applying innovative technologies for financial decision making.

Target 70% or more of the students will score 70% or higher on examinations/cases/quizzes/homework assignments that require the students to demonstrate understanding of the impact of emerging technologies on the field of finance.

1. **What instructional approaches and technologies will instructors use to teach courses in the minor?**

Microsoft Excel and some advanced data analytic tools will be utilized as instructional approaches to teach courses.

1. **Delivery Location[[1]](#footnote-1)**
2. **Complete the following charts to indicate if the university seeks authorization to deliver the entire program on campus, at any off campus location (e.g., UC Sioux Falls, Capital University Center, Black Hills State University-Rapid City, etc.) or deliver the entire program through distance technology (e.g., as an online program)?**

|  |  |  |
| --- | --- | --- |
|  | **Yes/No** | ***Intended Start Date*** |
| **On campus** | Yes | **Fall 2020** |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes/No** | ***If Yes, list location(s)*** | ***Intended Start Date*** |
| **Off campus** | No |  | Choose an item.Choose an item. |

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes/No** | ***If Yes, identify delivery methods[[2]](#footnote-2)*** | ***Intended Start Date*** |
| **Distance Delivery (online/other distance delivery methods)** | Yes |  | **Fall 2020** |

1. **Complete the following chart to indicate if the university seeks authorization to deliver more than 50% but less than 100% of the certificate through distance learning (e.g., as an online program)? [[3]](#footnote-3)**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes/No** | ***If Yes, identify delivery methods*** | ***Intended Start Date*** |
| **Distance Delivery (online/other distance delivery methods)** | Choose an item. |  | Choose an item.Choose an item. |

1. **Does the University request any exceptions to any Board policy for this minor? Explain any requests for exceptions to Board Policy.**

None

1. **Cost, Budget, and Resources: Explain the amount and source(s) of any one-time and continuing investments in personnel, professional development, release time, time redirected from other assignments, instructional technology & software, other operations and maintenance, facilities, etc., needed to implement the proposed minor.** *Address off-campus or distance delivery separately.*

The courses in the minor are already offered by DSU and will not require additional investment.

1. **New Course Approval: New courses required to implement the new minor may receive approval in conjunction with program approval or receive approval separately. Please check the appropriate statement (*place an “X” in the appropriate box*).**

|  |  |
| --- | --- |
|  | YES, |

*the university is seeking approval of new courses related to the proposed program in conjunction with program approval. All New Course Request forms are included as Appendix C and match those described in section 7.*

|  |  |
| --- | --- |
|  | NO, |

*the university is not seeking approval of all new courses related to the proposed program in conjunction with program approval; the institution will submit new course approval requests separately or at a later date in accordance with Academic Affairs Guidelines.*

1. **Additional Information:** *Additional information is optional. Use this space to provide pertinent information not requested above. Limit the number and length of additional attachments. Identify all attachments with capital letters. Letters of support are not necessary and are rarely included with Board materials. The University may include responses to questions from the Board or the Executive Director as appendices to the original proposal where applicable. Delete this item if not used.*

Appendix A – Outcomes

DSU, Finance Technology Minor

**Individual Student Outcomes and Program Courses**

*List specific individual student outcomes—knowledge and competencies—in each row. Label each column with a course prefix and number. Indicate required courses with an asterisk (\*). Indicate with an X the courses that will provide the student with an opportunity to acquire the knowledge or competency listed in the row. All students should acquire the program knowledge and competencies regardless of the electives selected. Modify the table as necessary to provide the requested information for the proposed program.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Program Courses that Address the Outcomes** | | | | | |
| **Individual Student Outcome** | **BADM 310\*** | **BADM 411\*** | **BADM 415\*** | **CIS 474\*** | **CIS 484\*** | **CSC 145\*** |
| Demonstrate a thorough understanding of the application of technology for finance. |  |  | **X** | **X** | **X** |  |
| Solve financial related problems with emerging technological approaches. | **X** | **X** | **X** | **X** |  |  |
| Demonstrate an understanding of how cybersecurity protects financial data using systems, network and computer security. |  |  | **X** |  | **X** | **X** |

*Expand the table as necessary to include all student outcomes. Outcomes in this table are to be the same ones identified in the text.*

1. The accreditation requirements of the Higher Learning Commission (HLC) require Board approval for a university to offer programs off-campus and through distance delivery. [↑](#footnote-ref-1)
2. Delivery methods are defined in [AAC Guideline 5.5](https://www.sdbor.edu/administrative-offices/academics/academic-affairs-guidelines/Documents/5_Guidelines/5_5_Guideline.pdf). [↑](#footnote-ref-2)
3. This question responds to HLC definitions for distance delivery. [↑](#footnote-ref-3)