

**SOUTH DAKOTA BOARD OF REGENTS**

**Academic and Student Affairs**  
**Consent**

**AGENDA ITEM: 6 – F (2)**  
**DATE: August 2-4, 2022**

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**SUBJECT**

**New Site Request – USD – Minor in Computer Science (Online)**

**CONTROLLING STATUTE, RULE, OR POLICY**

[BOR Policy 2:23](#) – Program and Curriculum Approval

[BOR Policy 2:12](#) – Distance Education

**BACKGROUND / DISCUSSION**

The University of South Dakota (USD) requests approval to offer the minor in Computer Science online. Currently, a majority of the courses for this minor are offered online. A proposed program modification will allow for students to complete the minor online, which will provide online students more choice. Currently, there are relatively few minors available for online students.

**IMPACT AND RECOMMENDATION**

USD anticipates 20 online enrollments after four years of the program being online. The university requests no new resources.

Board office staff recommends approval to offer the minor online.

**ATTACHMENTS**

Attachment I – New Site Request: USD – Minor in Computer Science

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**DRAFT MOTION 20220802\_6-F(2):**

I move to approve USD’s new site proposal to offer the minor in Computer Science online.



## SOUTH DAKOTA BOARD OF REGENTS ACADEMIC AFFAIRS FORMS

### New Site Request

<b>UNIVERSITY:</b>	<b>USD</b>
<b>DEGREE(S) AND PROGRAM:</b>	<b>Computer Science Minor</b>
<b>NEW SITE(S):</b>	<b>Online</b>
<b>INTENDED DATE OF IMPLEMENTATION:</b>	<b>Fall 2022</b>
<b>CIP CODE:</b>	<b>11.0101</b>
<b>UNIVERSITY DEPARTMENT:</b>	<b>Computer Science</b>
<b>BANNER DEPARTMENT CODE:</b>	<b>UCSC</b>
<b>UNIVERSITY DIVISION:</b>	<b>Arts &amp; Sciences</b>
<b>BANNER DIVISION CODE:</b>	<b>2A</b>

<b>X</b>	<p><b>Please check this box to confirm that (place an “X” in the left box):</b></p> <ul style="list-style-type: none"> <li>The individual preparing this request has read <a href="#">AAC Guideline 2:11</a>, which pertains to new site requests, and that this request meets the requirements outlined in the guidelines.</li> <li>This request will not be posted to the university website for review of the Academic Affairs Committee until it is approved by the Executive Director and Chief Academic Officer.</li> </ul>
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#### 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.*

\_\_\_\_\_  
President of the University

\_\_\_\_\_  
Date

#### 1. What is the need for offering the program at the new physical site or through distance delivery?

Adding the online (Computer Science Minor) delivery modality will increase the opportunities for students to study and obtain a meaningful credential, particularly if those students are not enrolled on the Vermillion main campus. Further, there are relatively few minors currently offered online at USD. Adding this modality will provide an additional option for students majoring in other online programs that require a Computer Science minor. Importantly, since the beginning of COVID-19, we have been offering the required CSC classes online.

#### 2. Are any other Regental universities authorized to offer a similar program at the proposed site(s) or through distance delivery? If “yes,” identify the institutions and programs and explain why authorization is requested.

Both DSU and SDSMT have Computer Science minors. Only DSU offers a Computer Science minor with an online modality. Not to be confused, we are not asking for a new program but the added modality for the existing program.

#### 3. Are students enrolling in the program expected to be new to the university or redirected from other existing programs at the university? Complete the table below and explain the

**methodology used in developing the estimates.**

This request will not be likely to attract new degree seeking students to the university, as the minor is not a degree on its own. This will, however, provide flexibility to students currently completing online majors and therefore, the Department of Computer Science will potentially attract more students. It will bring growth in the number of minors from other online majors. As mentioned before, Computer Science courses do not require students to be physically in the class as programming/coding skills can be virtually validated/tested.

<i>Estimates</i>	<b>Fiscal Years*</b>			
	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>
	FY22	FY23	FY24	FY25
Students new to the university	0	0	0	0
Students from other university programs	5	10	15	20
=Total students in the program at the site	5	10	15	20
Program credit hours (major courses)**	45	90	135	180
Graduates				

\*Do not include current fiscal year.

\*\*This is the total number of credit hours generated by students in the program in the required or elective program courses. Use the same numbers in Appendix B – Budget.

**4. What is the perceived impact of this request on existing programs in the Regental system?**

Every major requires computing skills and we have received a significant number of requests from the existing USD students whether they can obtain a Computer Science minor online. Authorization to offer the Computer Science minor online would potentially allow us to support our future students as we have been offering the required number of courses online since the beginning of COVID-19. The online modality also provides flexibility in scheduling courses.

**5. Complete the table and explain any special circumstances. Attach a copy of the program as it appears in the current catalog. If there are corresponding program modifications requested, please attach the associated form. Explain the delivery of the new courses and attach any associated new course request forms.**

<b>Program Name (Degree)</b>	Credit hours	Credit hours currently available from this university online	Credit hours currently available from other universities available online	Credit hours currently available online	Credit hours new to this university for online delivery
Core Requirements	8	8	0	8	0
Electives	10	10	0	10	0
Total	18	10	0	18	0
<i>Total, Degree with Proposed Major</i>					

\*If the major will be available in more than one degree (e.g., BA, BS, BS Ed) at the new site(s) and the number or distribution of credits will vary with the degree, provide a separate table for each degree.

## Core Requirements

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### Required Courses (8 hours)

- [CSC 155 - Introduction to Computer Science & Programming](#) (Online)
- [CSC 155L - Introduction to Computer Science & Programming Laboratory](#) (Online)
- [CSC 255 - Intermediate Computer Programming](#) (Online)
- [CSC 255L - Intermediate Computer Programming Laboratory](#) (Online)

### Departmental Electives (10 hours)

Select upper-division CSC electives from the following:

- [CSC 324 - Machine Organization](#)
- [CSC 324L - Machine Organization Laboratory](#)
- [CSC 350 - Algorithms & Data Structures](#)
- [CSC 380 - Information Retrieval and Analysis](#) (Online)
- [CSC 408 - Social, Ethical, and Legal Aspects of Computing](#)
- [CSC 411 - Simulation](#)
- [CSC 425 - High Performance Computing](#) (Online)
- [CSC 433 - Computer Graphics](#) (C)
- [CSC 435 - Human Factors in Computer Systems](#)
- [CSC 445 - Introduction to Theory of Computation](#) (C)
- [CSC 447 - Artificial Intelligence](#) (C) (Online)
- [CSC 453 - Theory and Systems Fundamentals](#)
- [CSC 456 - Operating Systems](#) (C)
- [CSC 461 - Programming Languages](#) (C)
- [CSC 462 - Computer Networks and Security](#)
- [CSC 463 - Data Communications](#) (C)
- [CSC 471 - Numerical Analysis I](#)
- [CSC 475 - Operations Research](#)
- [CSC 480 - Capstone: Software Engineering](#)
- [CSC 481 - Systems Analysis](#) (C)
- [CSC 484 - Database Management Systems](#) (C)
- [CSC 492 - Topics](#) (C) (Online)
- [CSC 494 - Internship](#) (C)

### 6. How will the university provide student services comparable to those available for students on the main campus?

Student services will be provided by the Department of Computer Science as well as Academic Affairs. Services will be similar to those provided for other online programs. The Department of Computer Science has been offering online coursework since the beginning of COVID-19 and is accustomed to working with students from a distance. We also have available the expertise of the I.D. Weeks library, the CTL, and ITS to assist online students (and faculty serving students) in accessing and using resources to further their education.

### 7. Is this program accredited by a specialized accrediting body? If so, address any program accreditation issues and costs related to offering the program at the new site(s).

No, the Computer Science minor is not accredited.

### 8. Does the university request any exceptions to Board policy for delivery at the new site(s)? Explain requests for exceptions to Board policy.

None.

9. **Cost, Budget, and Resources related to new courses at the site: 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. Complete Appendix B – Budget using the system form.**  
No new costs are anticipated. The department currently offers required credits online for a minor. No additional courses are proposed.