



**SOUTH DAKOTA BOARD OF REGENTS**  
**ACADEMIC AFFAIRS FORMS**  
**Authority to Offer an Existing Course**

**USD**

**Biomedical Engineering**

**Institution**

**Division/Department**

*Elizabeth M. Freeburg*

5/8/18

**Institutional Approval Signature**

**Date**

**1. Is this a request to offer an existing common course or an existing unique course?**

Common Course

Unique Course

**2. Provide the complete description as it appears in the system database including pre-requisites and co-requisites.**

Prefix & No.	Course Title	Credits
CSC 170	Programming for Engineering & Science	3
CSC 170/L	Programming for Engineering & Science Lab	0

**Course Description**

This course teaches engineering and science students how to write software to solve problems in their disciplines. The emphasis on mathematics, numerical methods, and development for embedded systems will prepare students to incorporate computer solutions into courses in their majors. Topics will include an overview of the software development process, development environments, algorithm development, control structures, internal and external storage, testing, and debugging. Additional topics may include programming robots and processing sensor data.

**Pre-requisites or Co-requisites**

Prefix & No.	Course Title	Pre-req	Co-req
MATH 123	Calculus I	Yes	Yes

**3. Universities currently offering this course (place an "X" in the appropriate boxes):**

BHSU    DSU    NSU    SDSMT    SDSU    USD

**4. Does Offering the Course Create FTE Implications? Yes**

**5. Does Offering the Course Create Schedule Management Implications?** No

**Explain:** Using available FTE

**6. Existing program(s) in which course will be offered:** B.S. in Biomedical Engineering

**7. CIP Code for the course:** 11.0201

**8. Proposed instructional method by this university:** R-Lecture

**9. Proposed delivery method by this university:** 025 DDN Host Site/Send Site-020 DDN Receive

**10. University Dept. Code:** UBME

**11. Authority to offer effective beginning in what term?** Fall 2018

**12. Section Restriction:** 30 for Lecture, 120 for Lab