Section 2: Programs and Curriculum

Title: Collaborative Biomedical Engineering Graduate Program Administration Guidelines

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<th>Number (Current Format)</th>
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<th>Date Last Revised</th>
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Reference:

1. Collaborative Purpose

The ability to maintain a vibrant set of Biomedical Engineering graduate degree programs options for students in South Dakota continues to be of critical interest to the South Dakota Board of Regents (SDBOR). As a result, the SDBOR has established a framework within both policy and guidelines to encourage institutions to identify collaborative opportunities that will allow for the sharing of faculty resources, expertise and infrastructure to improve efficiencies and reduce unnecessary duplication. Specifically Program Productivity and Section Size policies and guidelines have created exemptions to foster an environment for faculty across institutions to collaborate on common degree programs. Within this context, the purpose of the Collaborative Biomedical Engineering Program is to provide a framework for the common delivery of graduate M.S./Ph.D. Biomedical Engineering programs (both face-to-face and via distance) for South Dakota Mines and University of South Dakota.

2. Partners & Institutional Leads

2.1. Participating Institutions: South Dakota Mines and University of South Dakota collaborate on the graduate biomedical engineering program. A student can elect to be a degree seeking at either one of the collaborating institutions.

2.2. Each participating institution will identify a designated institutional representative appointed by the Chief Academic Affairs Officer who will be responsible for coordinating activities with other partner institutions pursuant to the terms of this agreement.

2.3. Changes to the agreement may be made from time-to-time and must be agreed upon by the designated institutional representatives.

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1 Section 3 of the Program Productivity Review Guidelines establishes that degree programs flagged for review may explore options for degree program consolidation. When this coordination occurs and institutions can provide “Evidence that multi-institution collaboration will meet graduate production thresholds,” benchmarks can be achieved by the sum of all graduates at the participating institutions.

2 Section 2.6 of current AAC Section Size Guidelines established that “Collaborative courses with a selected instructional method code that result from a shared program agreement among Regental institutions shall be excluded.”
3. **Common Assessment Structure**

3.1. Individual Program Assessment (Graduate Programs in Biomedical Engineering)

3.1.1. Participating institutions agree to assess student learning outcomes in a manner consistent with assessment best practices. Should either of the participating institutions seek ABET accreditation for its graduate program, the other participating institution would be required to participate in all accreditation required assessment protocols in support of the accredited member.

3.1.2. If an institution proceeds with ABET accreditation of a graduate degree program, this agreement will be amended as appropriate.

4. **Curriculum**

4.1. A common curriculum will be used by participating institutions that includes a core and elective options for students to achieve the degree program.

Graduate Biomedical Engineering Core Coursework

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<tr>
<td>BME 710 Experimental Design &amp; Data Analysis in Biomedical Engineering</td>
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<tr>
<td>BME 790 Seminar</td>
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4.2. Shared Curriculum Matrix

4.2.1. Beginning with the Fall 2021 term the departments at South Dakota Mines and University of South Dakota who manage the delivery of the curriculum will agree which courses are to be offered and by whom following a multi-year plan and in accordance to processes established.

4.2.2. The shared graduate curriculum shall include:

4.2.2.1. Shared and/or common courses

4.2.2.2. Courses provided via a remote modality between institutions

4.2.2.3. Shared and/or common course materials, including syllabi

4.2.3. In addition to the common core curriculum to be completed by all students, an additional rotation of free elective hours will be provided, and students will be allowed to enroll depending on interest.

4.2.4. The rotation will include the delivery of courses offered during the Fall and Spring terms, and ensure equal distribution of course offerings across institutions that also ensures that students may successfully complete the degree requirements in a timely fashion.

5. **Textbook & Instructional Resources**

5.1. Consistent with BOR Policy 1:11 – Academic Freedom and Responsibility institutional faculty are given academic freedom to select textbook and instructional materials they deem appropriate for the upper division coursework delivered through the consortium.

5.2. Faculty from each institution teaching BME courses required in the core curriculum will utilize a common set of textbooks and instructional materials. These instructional resources will be selected by a team of faculty with representation from each institution.

5.2.1. Once selected, an instructional resource committee will be tasked with routinely evaluating the viability of the resources for meeting established learning outcomes and/or cross curricular skills.
5.2.2. This committee will be tasked with identifying additional or new resources in the future if the need arises.

6. **Funding Model**

   6.1. Tuition revenue generated by the home institution offering a course will remain with that home institution.

   6.2. For common courses, separate sections will be created at each institution.

   6.3. Students pursuing the completion of the degree at a main campus location will be assessed the on-campus rate approved by the SDBOR.

   6.4. Students not enrolled in coursework at a main campus location will be assessed the established off-campus rate approved by the SDBOR.

**SOURCE:**
AAC May 2022.