# WRIGHT STATE UNIVERSITY

# Program Assessment Report (PAR)

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**Biomedical Engineering (BME) Masters Degree**

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**ACADEMIC YEAR COVERED BY THIS REPORT: 2021-2022**

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## I. PROGRAM LEARNING OUTCOMES

Program Learning Outcomes - Apply techniques and tools for the design and implementation of biomedical systems; - Communicate effectively in written and oral forms, at a high level of knowledge; - Work in teams.

## II. PROCEDURES USED FOR ASSESSMENT

### A. Direct Assessment

Methods of assessment Assessment of the program learning outcomes is conducted by evaluating all 7000 level program courses and the applicable program learning outcomes within that course, during the semester they are taught. Since all students are required to take 9 credit hours of 7000 level course and the choice of the courses is flexible, we will ensure that the program learning outcomes are assessed for all students.

### B. Scoring of Student Work

Scoring: The students' level of performance was scored based on the following criteria, (based on a bell curve assessment for ABET) - We want at least 80% of the students to score 70% or better - We want at least 15% of students to score 85% or better The course evaluation is conducted by the instructor teaching the course. We have a spreadsheet template for all the assessments.

### C. Indirect Assessment

Indirect Assessment - 1 Program of Study components All MSBME students' programs of study include a chosen focus area and meet the following criteria to accomplish the standards of depth and breadth expected of master's degree students with uniformity while maintaining flexible program options: • 30 credits total • 18 credits of degree-specific coursework • 12 credits of 7000-level coursework in the BIE Department • 6 credits of applied math/computations coursework A program of study is submitted by every graduate student going into their second semester. In this case, we are assessing whether the program of study meets the following administrative requirements. A program of study is not approved if it does not meet the requirements, so it is accurate to say that, by this measure, the outcome is met with 100% compliance. Indirect Assessment- 2 Final GPA distribution All graduate students are required to complete their programs with a 3.0 GPA or higher. Mastery of In-Depth Content The Graduate School requires that no more than 6 credits of graduate coursework completed with a grade of "C" may count toward a student's master's degree program. Students may not graduate unless they meet these two criteria, so it is accurate to say that, by these measures, this outcome is met with 100% compliance. Indirect Assessment 3 Evaluation is done by indirect assessment of secondary data and student exit surveys. MSBME graduate placement data is indicated on exit surveys submitted by students on a voluntary basis.

## III. ASSESSMENT RESULTS/INFORMATION:

Direct Assessment of 7000 courses collected in the 2021-2022 year.

Students are achieving the learning outcomes based on the data collected. The data and analysis are attached.

[Analysis]

## IV. ACTIONS TO IMPROVE STUDENT LEARNING

Primary themes from exit interviews are discussed annually at faculty meetings for purposes of program improvement. Discussions will continue with the Advisory Board or result in course content or course offering changes to accommodate the needs of the program constituents, as necessary.

## V. SUPPORTING DOCUMENTS

Additional documentation, when provided, is stored in the internal Academic Program Assessment of Student Learning SharePoint site.