Program AssessmentReport for MS MFG Submitted on November 30, 2022 to Office of Academic Excellence

Section 1 t Program Missionand Educational Objectives

x Program Mission:

The mission of the Manufacturing Engineering Technology Master of Scie Degree program is to produce engineering graduates with an advanced technical education that allows them to take on leadership roles in globally competitive manufacturing industries.

x Program Educationa Objectives

The educational objectives of the program are to:

- 1. Provide manufacturing and nomanufacturing engineers with advanced technical and managerial skills that allow them to be the leaders in manufacturing industries.
- 2. Expand graduates' expertise through industingsed applied research, lattrased design and analysis.
- 3. Strengthen graduates' ability to work productively in a global manufacturing environment.
- x Relationship of Program Educational Objectives to Oregon Tledictsion:

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x Background:

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x Program Graduates:

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Section3 t Program Student Learning Outcomes

The graduates of the Master of Science Degree program in Manufacturing Engineering Technology must demonstrate:

- 1. The ability to solve engineering problems using science and design technology.
- 2. The ability to integrate current computer tools for use in solving manufacturing problems.
- The ability to use advanced manufacturing methods and materials to improve current manufacturing processes using a variety of tools, such as: product life cycle management, quality and inventory control, and planning techniques.
- 4. The ability toincorporate business, financial and management tools to improve manufacturing processes.
- 5. The ability to communicate effectively in both written and oral forms.

Section4 t Curriculum Map

The Master of Science in Manufacturing Enginee Teghnology requires completing 45 credit hours of graduate work, with at least 30 credit hours of graduate coursework from the following four Curriculum Content Areas (CCAs):

- 1. Engineering Science and Design Technology
- 2. Manufacturing Software and Computer Integration
- 3. Advanced Manufacturing Materials and Processes Technology
- 4. Business, Financial and Management Processes

In addition to the 30 CCA credit hours, students must complete 12 credits toward thesis or 9 credits toward an approved project and three credits in graduate seminars. Students must take at least one course in each of the four CCAs and three courses in aleast one CCA. All graduate courses are three credits each.

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