Weber State University Manufacturing Engineering Technology Program

May 2015

Faculty Response to Site Visit Evaluation Report

Introduction

In May 2015 the Review Team made up of 4 individuals namely Michael Miles – Brigham Young University; Ryan Best – Lifetime Products, Inc.; Joel Clarkson – Salt Lake Community College; Joseph Wolfe, Jr. – Weber State University visited our campus on two different occasions. They visited with faculty, toured our facilities, attended our Advisory Board Meeting, and interviewed some students. Their report was thorough and is accepted as an unbiased assessment of our Manufacturing Engineering Technology program.

We generally agree with the review committee regarding their assessment of our program strengths in that our program curriculum covers all of the major areas that would be expected for an MFET program, including manufacturing processes and systems-related coursework. We also agree that our faculty in the program are well-qualified academically and have significant industrial experience within manufacturing industry which allows us to provide students with real-life examples in the context of the material they teach in their courses.

Our program has shown a mild uptrend in enrollment over the last 5 years as the review committee reported. We believe this is indeed a function of good job prospects for graduates, as well as a particular interest in the composites emphasis of the program, which is well-suited to serve the local Utah composites industry. The uptrend is also due to the success of the Welding Emphasis which has continued to grow over the last few years which the review committee did not mention.

Our assessment methods as pointed out by the committee, use primarily four different methods:

- 1. SME Certification Exams
- 2. Surveys (employer & student)
- 3. Senior Project Evaluations
- 4. Select student work

The combination of these assessment tools provide a comprehensive method of assessing our students and the effectiveness of our curriculum in meeting our educational objectives. As the committee reported, our assessment plan is very strong and should be a significant benefit over time in strengthening the program on a continuous basis. This plan has evolved over the last few years as Rick Orr, the Department Chair, has put in a significant effort in developing our assessment plan and implementation.

We also recognize that our laboratory facilities are another strength of the program as the committee reported. And thanks to our laboratory maintenance technicians, Roger Anderson and Cordell Gold, they are clean, well-lit, and well-maintained. We also believe our CAD labs are very well equipped with the latest hardware and software.

The review committee reported that oral presentations should be more of an expectation in our program. We do expect our students in a number of different courses and twice during their senior projects to make professional presentations to their peers, faculty, and to sponsors. The students are graded on these presentations and are given feedback on what they should do to improve their presentation skills.

The committee also mentioned that Project Management is also an expectation of engineering graduates and there should be more exposure to this topic within the required coursework. This is a challenge we agree with. Our current curriculum is likely lacking in this area in that most students will get minimal project management training in their senior project course, Mfet 4610. We will continue to discuss this challenge in our department meetings and advisory board meetings to address this issue. We are also looking at how we might more thoroughly teach some topics that are currently only given cursory coverage including material flow and plant layout.

We as faculty feel pleased that the review committee did not find any areas where they felt that our program did not meet standards for the bachelor's degree in Manufacturing Engineering Technology program.

The committee's recommendations for more upper level course work involving students in oral presentations is under advisement by the department and the program faculty. We will look at ways to better prepare our students in that important area including project management skills including ROI analysis and to teach students how manufacturing can be a driver of profitability and competitiveness.

Manufacturing Engineering Technology Faculty:

Rick Orr Kelly Harward George Comber Mark Baugh Kerry Tobin Andrew Deceuster