Mechanical Engineering Technology - IAC Meeting

October 25, 2013

New Mexico State University
(ECIII, Second floor, IE Conference room)

Agenda

8:00-9:00 Introductions
- *Overview of the Current State of Affairs*
- *Approval of 2012 meeting notes*

9:00-9:45 Review of the current curriculum including updates
- *Discussion of Curriculum*

Break

10:00-10:30 Tour of Innovation Lab

10:30-11:15 Review of Student/Program Outcomes and Objectives

11:15-11:30 Eduardo Gamillo
- *Solid Modeling/SFCC Articulating and Certifications*

11:30 -1:00 Lunch at La Posta

1:00-2:00 Students Perspective and discussion

2:00-3:00 Continuous Improvement
- *Committee Recommendations/suggestions*
- *Closing remarks*

Minutes

Faculty Attendees- Eduardo Gamillo, Luke Nogales, Anthony Hyde
IAC members Attendees- ***David*** *Burke, Russell Ortiz, Crystal Enoch, Matt Serna, Clint Hall, Mark Petrie, Ed Pines*
2 Student Attendees-

Discussion of Curriculum

General consensus of IAC attendees feel like the overall program and curriculum were very good but tended to be general for some industries and types of jobs. Each member mentioned how one specific course they had taken was integral to their current jobs and also mentioned that the good thing about the MET curriculum was it allowed for many types of jobs in different industries. The faculty brought up various changes in the curriculum and updated the IAC members about recent changes in department, curriculum, graduates, jobs graduates accepted and locations of the jobs.

General Comments/Discussion from IAC members-

- All felt Integrating SolidWorks into the entire MET curriculum from freshmen to senior was very good.
- In the HVAC area – a required HVAC course would be good to help student gain employment in this area. HVAC careers were good for MET grads.
- In Manufacturing, quality control a must have course with statistical quality control and lean manufacturing a plus, also required advance manufacturing process course or Computer aided manufacturing course, instrumentation, safety implementation and documentation.

Noted student deficiencies-

- Budget and finance considerations, better understanding of business
- Project Management- scheduling, procurement and resource planning
- Communication and Presentation ability.
- Professional writing- proposals, memos and reports. (ET Students need this skill set.)

Comments on the addition of ET 305 becoming a required course- importance of the process of innovation, product design and design for manufacturability was discussed and was well received.

- Tour of the new Aggie Innovation Center

Student Comments;

- SolidWorks Integration into Curriculum was very good.
- Increased presentations- writing assignments were good.
- Eliminate ET 262 programming class –was not useful.
- ET402 Instrumentation needs major overall.
- Liked the diversity of faculty in MET Department- all the faculty were helpful, cared and wanted students to succeed.

Discussion on Outcomes and objectives in MET Program

The Student Outcomes, Program Educational Objectives and 2011 results of senior exam were given to each of the members as handouts for review.

The Student Outcomes were discussed as ABET requirements and the Program Educational Objectives were approved unanimously by the IAC committee members.

- Many concerns were brought up about the senior exam as a good measure of student success in program. Discussion – Attendees didn't feel the Senior Exam is a good measure of student's ability mainly due to length of time of having material prior to exam and the breadth and depth of the exam for a one hour period.
- Many of the IAC members were MET graduates and didn't feel the test was taken seriously when they were students and were not sure the results could be deciphered into something meaningful.

Continuous Improvement comments

- Continue with or add to minors available to MET Students. Minors are good.
- Increase presentations, writing and other soft skills are critical to student's success.
- No major changes in program or curriculum were needed, just tweaks and changes to or with adding or eliminating a few classes.
- Increase teamwork with other individuals outside the College of Engineering.
- Implement things from general comments of earlier discussion.