

***School of Engineering and Applied Science
Department of Engineering Technology
Advisory Council Meeting***

Friday, October 31, 2008

***Marcum Conference Center, Room 186
Miami University, Oxford, OH***

AGENDA

- 12:00 - 12:45 Lunch and Socializing*
- 12:45 - 1:30 General Session*
- *Introductory remarks and welcome
Ayo Abatan, Chair of Engineering Technology*
 - *Overview of ENT issues and initiatives*
- 1:30 – 3:20 Departmental Break-Out Sessions**
- 1:30 - 1:40 Break*
- 3:20 - 3:30 ENT Wrap up Session*

*In general, ENT program sessions will include discussions about ABET accreditation results, assessment processes with results, and program directions for EMET, MET, and ECET.

ENT	Engineering Technology
EMET	Electro-Mechanical Engineering Technology
MET	Mechanical Engineering Technology
ECET	Electrical and Computer Engineering Technology

***Electro/Mechanical Engineering Technology
Advisory Council***

Friday, October 31, 2008

12:15 – 3:30 PM

***Marcum Conference Center, Room 186
Miami University, Oxford OH***

1. Report on minutes from last meeting.
2. Revised assessment outcomes and the use of Checkbox for assessment in all EMET courses.
3. TAC/ABET visit to distance sites.
4. Revised lab structure in ENT 401 and ENT 418 with demonstrations.
5. EMET Senior Design projects for 2008.
6. Recruiting and retention of EMET Students

**Electromechanical Engineering Technology (BS) Minutes
Advisory Council
October 31, 2008
Miami University, Oxford OH**

Present: Brian Hobson Force Control, Ken Warfield-Shawnee State, Ken Ekegren-North Central, Ray Scott, Dave Hergert-Miami University, Greg Gibbs-Miami University, Mysore Narayanan-Miami University, Rob Speckert-Miami University, Chris Chisler-Student

1. The last meeting minutes were approved without comment.
2. Greg Gibbs was introduced as the new ENT Distance Coordinator.

3. Dave discuss the ABET distance site review on 11/6/08 and 11/7/08. Ken Ekegren will give a demonstration of the electric car that Senior Design students are working on. This will be at North Central State College.
4. Dave talked about the revised lab structure in ENT 401 and 418. Demonstrations were given of new labs including an XY plotter that students will design and build, a cam design for a servo motor, an accelerometer project, and an encoder and tachometer for a gearmotor. Ken Ekegren suggested the stands for the encoder and servo-cam be made of something other than wood. Ray Scott offered to build the stands out of plastic with a laser cutter. Dave will follow up on this.
5. Dave discussed the status of the new industrial automation EMET course. It will be sent for approval in Spring 2009, and be offered for the first time in Spring 2010. This course will replace ENT 412 Neural Networks and Fuzzy Logic.
6. Rob and Dave discussed new distance learning teaching methods using Elluminate and the Axis camera.
7. Rob and Dave discussed new distance sites at Edison State, Southern State, Terra Tech. The consensus was to not add more sites (other than these) at this time.
8. There was a discussion of changes to the EMET assessment process. All course assessment will be done with Checkbox with the exception of student evaluations.
9. Senior Design presentation day will occur on April 24, 2008.

The meeting adjourned at 3:30 pm.
Respectively submitted by David Hergert

***Electrical & Computer Engineering Technology
Advisory Council***

Friday, October 31, 2008

12:15 – 3:30 PM

Marcum Conference Center, Room 186

Miami University, Oxford OH

1. Review of the minutes from the last meeting and any actions taken.
2. How the new ENT 297 course went and future plans.
3. How the new ENT 192 course went and future plans.
4. The results of the ABET review - what went well and actions to be taken.
5. Recruiting activity and how we can improve.
6. TAGS, CTAGS and Stackable Certificates.
7. Revisit the focus of planned ECET BS. Computers, electronics, communications, other?

**Advisory Council Minutes – ECET
October 31, 2008**

Attending were:

Industry: Donald Meineke Jr, Mike Flaherty

Faculty and Staff: Nizar Tayem, Roger Seifried, Frank Toner, Don Becker

Course changes

The ENT 297 Microprocessors II course went well and included hands-on cable and SMT soldering. This course will be taught using asynchronous, online lectures and hands-on labs on-campus next semester.

Students are responding well to our efforts to make the ENT 192 Circuit Analysis I course more interesting.

ABET Review

As a result of the review, we were accredited for 6 years which is the maximum time for accreditation. A summary of the results of the review and our plans to address items was reviewed. See below.

Recruiting activity. Our work in setting up high school electrical programs was received well.

BS ECET

Those in attendance like the controls focus of the proposed Bachelors degree.

Online courses

The directive to put courses on line was discussed. Comments from the industry members were.

Concern that we should also be training people to show up, and show up on time, and online does not develop this type of discipline.

Education is a two way process that may not be there with online.

Online is good for students who travel with their jobs.

TAG, CTAG and Stackable Certificates

The state TAG, CTAG and Stackable Certificates programs were explained as we understand them.

Suggestions/recommendations from the industry members

- Today's engineers often need to work with the customers and we need to develop:
 - better writing skills, particular of reports
 - better interpersonal relationships
 - better ability to work with other people
- Team approach is good and we should assign teams, rather than letting students select their own, since this is how it is likely be in industry.
- Consider energy related projects.
- Add more analog I/O in addition to the discrete of the PLC course such as doing do a lab controlling a VFD. Also include data communications at the systems level and HMI. Maybe include this in an advanced PLC course in the planned Bachelor's degree if there is not enough room in the current PLC course.

Next meeting

Review the AS ECET curriculum. Send out ahead of time for review.

Prepared by: Roger Seifried 11/7/08

***Mechanical Engineering Technology – AD and BS
Advisory Council
Friday, October 31, 2008, 12:15 – 3:30 PM
Marcum Conference Center, Room 186
Miami University, Oxford OH***

1. Old Business - Anything from the last meeting
2. ABET Accreditation / Program Review for AS and BS Programs
 - Full 6 Yr. Accreditation for AS and BS MET Programs
 - What next?
3. Update on AS Mechanical Program
4. Update on BS Mechanical Program
 - Math MTH 245 / 347 Differential Equations for Engineering
 - ENT 312 Thermodynamics / ENT 415 Heat Transfer
 - ENT 404 Mechanical Instrumentation
 - ENT 333 Comp. Methods for Eng. Tech.
 - EAS 101 / 102
 - New design course
 - Other updates
5. Recruiting Update:
 - Update on efforts
 - Local industries focus
 - Letters non accepted local Oxford students
 - Collaboration with Sinclair and Cincinnati State
 - Visits to local high schools
 - Ideas?
6. Five Year Plan and Beyond:
 - Ways of collaborating with SEAS on students admissions
 - Workshops at Hamilton and Middletown campus
 - Prompt applied research through industrial collaborations.
 - Ideas?
7. Interaction with local industry and development of industrial partners
 - Training classes (software, other topics)
 - Senior Design
 - Identify faculty focus areas, local industrial needs, and promote Industry sponsored research and senior design projects
 - Equipment acquisition
 - Collaboration with class material.
 - Guest speakers to enhance traditional teaching methods
8. New Business
9. Adjourn

Mechanical Engineering Technology – AD and BS Minutes from the Advisory Council Meeting, October 31, 2008

Attendees: Gary Drigel, Ron Earley, Cindy Braden, Mauro Losz, Mike Flaherty, Doug Young, Randy Myers, Chris Daughetee, Andy Schumacher, Bill Willet, Doug Cheek, Ken Williams

1. Old Business

- No old business from last meeting.

2. ABET Accreditation/Program Review for AS and BS Programs

- The Mechanical Engineering Technology programs (AS and BS) received full accreditation for 6 years. No major issues encountered by the ABET accreditation team. The accredited programs will allow students to take FE and PE exams. Some comments by the ABET team:
 - The objectives of AS and BS programs are very similar. Need to establish a clear distinction between the two.
 - Be more specific on how diversity is measured, e.g., tests, papers, presentation, etc.
 - Laboratory equipments are adequate but old. Needs upgrading.
- Miami University will continue to monitor the programs and follow the guidelines and recommendations proposed by the ABET accreditation team.

3. Update on AS Mechanical Program

- No major issues.

4. Update on BS Mechanical Program

- New Math courses MTH 245/347 covering Differential Equations for Engineers were discussed.
- New design courses – short courses (6 weeks or summer courses).
- Continue to work with Sinclair Community College to attract students with an AS degree who wish to enroll in the BS Mechanical program.
- Our distance learning system has received mixed reviews from the students consulted. MUM and MUH equipments are old and obsolete. Need equipment upgrade.
- Need better clarification on Online learning programs. Course delivery formats: Live vs. Synchronous vs. Asynchronous vs. Self-Study. Program implementation would require significant capital investment.

5. Recruiting Update

- Continue to focus on local industries, high schools, and colleges such as Sinclair and Cincinnati State. The enrollment for the BS Mechanical program increased significantly compared to the last year enrollment.

6. Five years plan

- Online courses.
- Workshops at Hamilton and Middletown campuses.
- New MSc. on Computational Methods – interdepartmental discipline to attract Engineering graduates.

7. Interaction with local industry and development of industrial partners

- Training courses at industry site.
- Identify local industry needs and promote Industrial sponsored research and senior design projects.

8. New Business

- No new business.

9. Adjourn

- Next meeting – April 2009 at Middletown Campus.