

**Miami University**  
**Department of Engineering Technology—Advisory Council Minutes**  
***Engineering Technology—Combined Meeting***  
**Friday, April 8, 2005**  
**Marcum Conference Center, Oxford, Ohio**

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## **Minutes**

Attendees: (see lists from breakout sessions)

1. Following introductions, Rob presented a brief update about the department. Some key items presented are:
  - Number of majors is flat or has dropped slightly
  - Number of SCH dropped significantly in spring 2005 when compared with fall 2004 or spring 2004.
  - Rob reviewed program objectives then shared a survey sent to all graduates.
  - We surveyed all past graduates and are beginning to learn some interesting things about salaries, position titles, and how well our programs prepare our graduates to succeed in the workforce. The group spent considerable time talking about some of the preliminary data. More information will follow at subsequent meetings.
2. We discussed issues being worked on within the department
  - TAC/ABET for EMET program and how advisors may be involved. Several advisory council members felt strongly that we should include MET for fall 2005. (Note: Since our meeting, we have decided to go for accreditation of both concentrations: EMET AND MET).
  - Senior Design Capstone course and how it is progressing this semester. Some advisors may be judges and have participated in the past. Also, some of your companies are sponsoring projects.
  - We then broke into 3 sessions: ECET-AD, MET-AD&BS, and EMET-BS.

Submitted by Rob Speckert

## **Minutes of the Spring 2005 ECET Advisory Committee Meeting**

### **Attendance:**

Don Becker, Brandon Kuhl, Roger Seifried, Suguna Bommaraju, Rob Speckert, Greg Goetz

**Opening:** The meeting was opened 4/8/05 at 1:30 p.m. by Suguna Bommaraju and the members were welcomed.

### **Minutes**

Minutes of the previous meeting were reviewed by Roger Seifried. Suggestions from that meeting that had been implemented were noted.

- Simulation: Labs using simulation for circuit analysis has been added to ENT 192 and 193 – Circuits I & II.
- Variable speed drives: Added this semester to ENT 291 - Industrial Electronics. More will be added when the PLC course is introduced and some PLC material is removed from ENT 291.
- PLC: About two weeks of PLC instruction has been added to the ENT 291 course. A separate PLC course is being developed.

### **Discussion:**

#### **1) New courses to replace ENT 297 (Micro II)**

A syllabus draft for a Digital Design With CPLDs course was presented by Suguna Bommaraju and one for a PLC course was presented by Roger Seifried.

- Would like to see building a computer retained. This is included in the current ENT 297. Maybe this should be part of the 4-year degree.
- Add instruction on connecting a PLC to a network to the PLC or the LAN course.

#### **2) The ECET Continuous Improvement Plan** was reviewed by Roger Seifried.

#### **3) Improving student enrollment**

- Need a recruiter. Maybe at the SEAS level
- Approach in a more systematic way
- Send an acceptance to the ENT program in place of a rejection letter to those not accepted into Oxford engineering.
- Do a parents night
- Send out ENT literature
- Have technology days and bring in high school students.
- Focus on math and science teachers.

#### **4) BS ECET** - Should this be offered and what should the focus be?

- The one student representative was in favor of offering.
- Do a market analysis and get some data on this.
- Get data on how many have expressed interest. – lost deals.

Submitted by Roger Seifried

4/11/05

**ENT Advisory Council  
Spring 2005  
EMET Breakout Session**

**Present:** Dave Hergert, Mysore Narayanan, Dave Hacker, Charles Faulkner, Mike Scott, Ray Scott, Ken Warfield

Dave Hergert said the department was considering a new lab courses for EMET. This is partly in response to the last advisory council meeting where it was noted that there is not enough PLC experience in the upper two years. When the new lab course is introduced, we would make ENT 311 Process Control Interface Design and ENT 401 Computerized Instrumentation lecture/demonstration only. This will allow us to cover more theory in these courses. There was a consensus to use Allen Bradley (preferably) or Modicon PLCs in the lab course. Ray Scott said he could donate a couple of Allen Bradley SLC 503 PLCs to the department. Dave Hergert will follow up on this.

Half of the new lab course would be data acquisition and the other half PLC control. Ray Scott noted that it would be important to include servo PLC control in the course. It was suggested that the department may want to get help from industry while developing this course. It was also noted that the distance students need to have the same lab experience as local students.

Dave Hergert then presented a new model for assessment, based on the Miami four tenants of liberal education. Since the department and university are already measuring these tenants, it would be useful to make them departmental objectives as well. The committee liked the idea, and there was a consensus to move the outcome "ability to pursue lifelong learning" from Understanding Contexts to Reflecting and Acting. There as also a suggestion to change the outcome "ability to communicate effectively through speech" to "communicate effectively through oral communication."

Dave Hergert noted that the quality of interactive video for distance education has vastly improved since we were put on a statewide fiber optic network in February 2005. The committee unanimously agreed that, based on this information, we should expand our distance offerings. Dave noted that we met with Edison Community College on 4/7/2005, and plan on meeting with Cleveland area community colleges. It was also suggested we look at using interactive video onsite at Cincinnati State. Dave will follow up on this.

The meeting adjourned at 3:30 pm.

**Miami University**  
**SEAS Industrial Advisory Council**  
Mechanical Engineering Technology – AD and BS  
April 8<sup>th</sup>, 2005

Members in attendance: Rich Albrecht, Jim Bachmann, Vince Breidenbach, Ronald Clark, Gary Drigel, Ron Earley, Julio Pulido, Vipul Ranatunga, Sean Reed, Carole Scott, Jim Valentine, Brandon Wagner, Ken Williams

1. Old Business –
  - The minutes of November 5<sup>th</sup>, 2004 meeting were unanimously approved. Julio Pulido will contact Rob Speckert regarding paper-work that is required by Ingersol-Rand to facilitate the \$50,000.00 MET laboratory equipment grant he proposed at the November 5<sup>th</sup>, 2004 meeting.
  - He will copy Gary Drigel, Ron Earley, and Vipul Ranatunga with respect to the progress of this grant.
  
2. Campus Plans, Program Locations, and Relocation of Equipment –
  - Gary Drigel led a brief discussion regarding some of the changes that have been made to the MET laboratories and the new and refurbished laboratory equipment that have been brought on-line within these laboratories.
  - Gary, Ron and Vipul presented a brief verbal outline of the new laboratory projects that have been introduced into several courses utilizing the refurbished facilities and new testing equipment.
  - Within the ENT completion programs it was noted that most of the MET laboratory facilities and equipment have been concentrated at the Middletown campus. There are no plans, at the present, to concentrate the MET program on one campus and the EMET program on another.
  
3. ABET Accreditation for AS and BS Programs –
  - A significant majority of the members present strongly support the recommendation of the MET faculty that TAC/ABET accreditation for the MET completion program be scheduled to coincide with the NGR (Next General Review) of the ENT associate degree programs. The general consensus was that this will not produce any problems for our students related to job searches and/or professional licensure within the state of Ohio.
  - Gary Drigel will follow-up with the state licensure board and schedule the executive director to speak at our next meeting.
  
4. Five Year Plan and Beyond –
  - The major goal within the next five years is to obtain a six year re-accreditation of the MET associate degree program and a six year accreditation of the new MET completion program.
  - MET Faculty will continue to meet during the coming year to facilitate the update of courses and associated laboratories and to gather assessment data for the planned TAC/ABET review.

- The MET faculty will continue to refine the connectivity among all courses so students will not view courses within the curriculum as “stand-alone” but rather as building blocks of a single integrated curriculum.
  - Ron Earley suggested that a master’s degree in engineering technology may be considered in the future. Several members expressed interest and excitement about this possibility but stressed that the current challenges that face the department must be addressed and resolved first.
5. Recruiting Update –
- The MET program needs to continue to improve efforts related to recruiting students from junior colleges and industry.
  - Gary Drigel will become more involved with helping to coordinate these efforts and exploring innovative ways of linking MET faculty with this potential student population.
  - Gary will also continue to encourage, through Lisa Abrams, expanded development of the program conceived and begun by him that is designed to provide students not accepted into Oxford based engineering programs easy access to ENT programs.
6. Interaction with Industry and Development of Industrial Partners –
- Julio Pulido and Ronald Clark expressed interest in giving guest lectures in MET courses.
  - Vipul Ranatunga will continue his efforts directed at providing free, short, work shops in CAD, FEM, and FEA to interested industrial advisors and their company employees. He will also continue to investigate ways that the ENT department and industry could share laboratory test equipment and computational analysis facilities.
  - Ingersol-Rand Company will provide an equipment grant for the MET laboratories.

Submitted 04/12/05  
Ron Earley