

Department of Engineering Technology
Advisory Council Meeting Minutes
October 28, 2005

Introductions around the room. See individual session for attendance.

Updated web site: old – www.eas.muohio.edu/ent
 New – www.ent.muohio.edu

Right now either address will get you there.

Enrollment report, majors continue to be erratic, SCH are around 800 for Fall 2005 and students per section for Fall 2005 is below 10.5 with 11 being the critical number.

TAC/ABET visit went very well. Rob thanked all involved with the process, students, advisory council members, faculty, and staff, and a special thank you to those advisory council members attending the lunch with the accreditation team at the Finkelman Auditorium in Middletown campus. The chair of the visiting team remarked about the involvement of our advisory council.

Rob explained some of the mechanics regarding the TAC/ABET visit and how the accreditation works. The team looks over the entire program and addresses weaknesses, concerns, and observations. We had a few concerns and the team made some observations.

We have until July 6, 2006 to address the issues brought forward by the accreditation team.

There was one institutional weakness noted in the preliminary report regarding documentation of the department's continuous improvement process. This weakness will be addressed before July 2006. One step toward addressing this issue is for employers to corroborate or suggest changes to our Department and Program-specific Objectives. We began that review process at the general meeting. More will follow in program sessions. Note that departmental objectives are characteristics graduates will demonstrate about three years after graduation.

Gary Drigel mentioned how we do assessment and one of the big things about this is closing the loop. Last year, at this meeting 3 ENT seniors explained their project to the council. Gary reports back to the council that the project the 3 students worked on for senior design won the national competition in which they entered their BUV.

Submitted by:
D. Becker
October 31, 2005

SEAS Industry Advisory Council
Electrical and Computer Engineering Technology (AD)
October 28, 2005

Members Attended: Tom VonDerHarr, Don Becker, Rob Speckert, Shawnon Hudson, Jeff Lesse, Scott Coffey, Greg Goetz, Brandon Schul, Roger Seifried, and Tom Houtz

1. Roger reviewed the minutes from last meeting and provided update of action items. Specifically he discussed:
 - Updates to ENT 297 including feedback from students about keeping the project of building a computer.
 - We added a PLC course.
 - BS ECET was placed on hold for now.

Note: more details were presented during the following discussion.

2. Roger handed out ECET Program Review Plan and went over it in detail. The following are comments made about items in that plan:
 - Regarding not doing distance with ECET course, it was suggested that we consider using split screen.
 - Folks re-mentioned importance of PLC.
 - Numbering Systems show up in 3 courses: ENT 293, 295, MTH 231.
 - Check when numbering systems are covered in 293. Need complete coverage first week or two.
 - Consider keeping Motorola for 295 & 297.
 - Keep EASY 4 - Motorola 68HC11 is a popular embedded processor.
 - Intel offers protected memory.
3. The following are action items as a result of our detailed discussions of the ECET plan:
 - Investigate if use 2 processors (Motorola & Intel) or one.
 - CPLD is absolutely required (understand how applied)
 - ENT 291 VFD into different kinds & features. Include lab.
 - Consider teaching Restrictive use on HAZARDOUS substances RUOHs.
 - Elimination of all lead from all electrical circuits.
 - Get lead out of electronics.
 - Go to Allen Bradley for financial support and to other companies too.
 - Easy 4 - need to take home and use.
 - All simulations - good to be able to take home.
 - HS Recruiting
 - Use students to go to high schools.
 - Harrison
 - Ross
 - More visibility
 - Prepare a PowerPoint presentation and have our student go back to their high schools and present.
 - Take sample projects.
4. Open Discussion
 - Send Greg Goetz "green" form by e-mail.
 - Major issue is dealing with various personalities - How to Win Friends and Influence Enemies.
 - ECET students want an ECET BS.

Meeting adjourned around 3:20. Prepared by: Rob Speckert

Department of Engineering Technology
Advisory Council Meeting
Minutes, October 28, 2005

Introductions around the room, in attendance, Don Becker, Ken Ekegren, Chuck Faulkner, Dave Hergert, Jeff Miller, Mysore Narayanan, Greg Pollitt, and Ken Warfield

Dave spoke about needed changes in the electromechanical BS program as a result of the TAC/ABET visit. Some changes include dropping some and adding other courses to the curriculum. This change will facilitate a better transition of both mechanical and electrical students from with their associate degree. The change will allow for more equal footing for both mechanical and electrical students upon entering the electromechanical program at Miami University.

There will be a meeting on November 22, 2005 with all distance partner sites to discuss the changes to the electromechanical BS degree program currently offered by Miami University. We are in the process of making a custom brochure to aid in the advertising of our program at the distance sites. Each site will have a brochure with information tailored to that particular site regarding the BS completion program through ENT at Miami University.

Rob Speckert and Dave Hergert are refining the list of duties for the program coordinators at our distance partner sites. This will accompany the brochure with site specific information.

The TAC/ABET report listed lab equipment at far sites to be a problem. The TAC/ABET team wants each student to have the same experience in a lab. This does not mean the distance student views a dial or transducer over a video connection. Each site needs to have the same lab equipment available for all the students in the program.

We know what we need; now we need to make sure all our distance partner sites have the same equipment for our program.

There is a need to improve communications between program coordinators in the distance BS program. One particular problem is identifying students at far sites from the Miami class lists. Maybe Miami can add a modifier to the name of students on distant campuses.

Upcoming for ENT311 is a lab kit to be purchased by the student. The book will come with a USB DAQ card and a CD. There will be a new set of experiments and a kit with 12 transducers from Feedback for each partner site. Students will design their own interface card for the DAQ cards. Notebook computers will be required for all students in the electromechanical BS program starting in summer 2006. Loaner laptops will be available to students who need to borrow one.

TAC/ABET evaluators did not like the ENT401 class. Reviewer thought the class needed more digital signal processing and it was too much like ENT418.

Each partner site will need a conveyor and servo trainers. TAC/ABET says you can not do a servo lab without a servo trainer sitting in front of the student.

There will be a move to competency based labs so we know the graduate is able to work with the equipment and perform basic troubleshooting skills. The advisory council agrees with this.

This wraps up most of the changes for labs.

What about the distance program moving into the Cleveland area? We can expect to double our enrollments. We may be going to Sinclair and Cincinnati State campuses to teach our BS completion program. If these changes occur then we will need to hire additional part-time faculty to teach multiple sections of our classes.

If the program expands there will be a need to have a coordinator responsible for each section of the state. There may be up to 12 distance sites across the state if the Cleveland area comes on board.

Dave Hergert questioned the members of the advisory council wanting to know if there was agreement to move into the Cleveland area. There was lively discussion. Jeff Miller thought the program may become too diluted with the additional distance students. Narayanan would like to see us focus on completing the TAC/ABET accreditation before venturing off to Cleveland. Most others thought going to the Cleveland area could be a good thing for the program.

There is a new delivery schedule for classes in the BS completion program. The new schedule allows student to start the program in the summer and graduate in two years.

There was a review and discussion of Program Objectives. The group decided to reword the EMET Program-specific Objectives to read:

- Possess the ability to apply theoretical knowledge to solve engineering technology problems associated with electromechanical systems and controls.
- Possess the ability to apply modern electromechanical software and technology.

Note: It was recommended that the word "continually" be used in the second objective (i.e., ...ability to *continually* apply...). We decided to not use the word in this objective because we implicitly expect ALL of the objectives to be evident "continually".

Submitted by:

D. Becker

October 31, 2005

SEAS Industry Advisory Council
Mechanical Engineering Technology AD & BC
October 28, 2005

Members Attended: Jim Bachman, Vince Breidenbach, Ronald Clark, Matt Collins, Gary Drigel, Ronald Earley, Vipul Ranatunga, Mauro Losz, Sean Reed, Kim Valentine, Ken Williams.

1. Old Business:
 - The minutes of April 8th, 2005 were unanimously approved.
 - Gary started the discussion, informed the group about the publicity received for winning BUV competition. The project created opportunities to attract new students, will be a great recruiting tool. Sean, Vince and Jim had BUV displayed outside the Marcum Conference Center.
 - Matt Collins expressed that the group should do a presentation to current Senior Design class about their experience.
 - Vince brought-up the idea of combining the SD presentation with UC-College of Applied Sciences.
2. Campus Plan, Program Locations, and Relocation of Equipments:
 - Vipul explained the new developments with vibration-related experiments, newly introduced lab classes for ENT 416, and future possibilities of helping the industry.
 - Ron Earley clarified the heat-transfer related lab improvements.
 - Matt Collins and Ken Williams requested the faculty to make a list of things that they should like to have in their labs.
 - Matt and Jim Bachman expressed their willingness to come and conduct/help faculty with lab classes. ABET review on lack of lab classes with ENT 404 was brought into the discussion; many council members expressed their ideas on improving related lab activities.
3. ABET accreditation for AS and BS Programs:
 - Discuss in detail the “concerns”, and tried to find different solutions to improve the enrollment problem. Many member of the advisory council strongly encourage to conduct activities that improve the visibility of Miami Engineering degree. They advised the faculty to create closer relation with industry and Sinclair/Cincinnati-State community colleges to improve enrolment problem.
4. Five-Year plan and Beyond
 - Matt Collins expressed that Miami has to do many industry-related activities to improve the visibility among the area-industries
 - Ken Williams mentioned the Miller-Breweries, and other similar industries.
 - Jim Bachman questioned the Miami’s association with Chamber of Commerce; strongly advised to explore the opportunities with similar organizations to improve the visibility and increase the industry-related activities
 - Ron Early brought the attention to a new campus-wide proposal on creating a new division in Middletown and Hamilton. Vipul summarized the Middletown Senate meeting discussion related to this new division.
 - Ron Clerk presented the idea of creating partnership with banks to financially help the students; this type of an arrangement will help bringing more students into the program.
 - Jim Valentine expressed his willingness to conduct a survey among industry to find ways of improving enrolment.
 - Gary re-iterated the idea of publishing a news letter with the help of faculty secretary to advertise the department activities and improve the visibility, and keep the advisory council informed.

Meeting adjourned around 3:30. Vince, Jim, and Sean proceeded to start the BUV.