

Department of Engineering Technology

Advisory Council Meeting
November 3, 2006
ENT Chair: Dr. Ayo Abatan

Miami University Campuses in Oxford, Hamilton, and Middletown



OUTLINE

- Status of ENT and Program Update
- TAC/ABET Results
- Recent Achievements
- Challenges
- Opportunities
- Questions and Discussions



Status of Engineering Technology (ENT) at Miami

- ENT is part of the School of Engineering and Applied Science (SEAS)
- Bachelors Degree Programs (TAC/ABET):
 - EMET > Electro-Mechanical Engineering Technology
 - MET > Mechanical Engineering Technology



Status of Engineering Technology (ENT) at Miami

- Associate Degree Programs (TAC/ABET)
 - ECET > Electrical and Computer Engineering Technology
 - MET > Mechanical Engineering Technology
- Certificate Programs
 - CAD/CAM
 - Computer Maintenance



ENT Infrastructure

- Housed on the regional campuses in Hamilton and Middletown (commuter campuses)
- Lab Facilities
 - Computers (CAD, engineering analysis, simulations, etc.)
 - Electrical/electronic/microprocessors/PLC's
 - Networking
 - Manufacturing/CNC/Robots
 - Materials (analysis and testing)
 - Process control
 - Fluids—including a wind tunnel
 - Thermodynamics/Heat transfer
 - Vibrations



Program Update

TAC/ABET Results

- All Associate and Bachelors Degree Programs are TAC/ABET Accredited
- New Accreditation Review in 2007-08
- Personnel
 - Faculty > 9
 - Technical Staff > 2
 - Administrative Staff > 2



Faculty

- Professors

- Rob Speckert
- Dave Hergert
- Ayo Abatan

- Associate Professors

- Ron Earley
- Mysore Narayanan


- Assistant Professors

- Gary Drigel
- Roger Seifried
- Vipul Ranatunga
- Suguna Bommaraju

- *We usually employ two to three adjunct faculty per semester.*



Faculty Areas and Campus

| Hamilton | Middletown |
|--|---|
| <p>Ayo Abatan, Professor and Chair Rob Speckert, Professor</p> | |
| <p>Gary Drigel, Assistant Professor, Mechanical</p> | <p>Suguna Bommaraju, Assistant Professor, Electrical and Computer</p> |
| <p>Dave Hergert, Professor, Electro- Mechanical</p> | <p>Ron Earley, Associate Professor, Mechanical</p> |
| <p>Mysore Narayan, Associate Professor, Electro-Mechanical</p> | <p>Vipul Ranatunga, Assistant Professor, Mechanical</p> |
| <p>Roger Seifried, Visiting Assistant Professor, Electrical and Computer</p> |  |

Staff

- Technical
 - Frank Tonner (Hamilton Campus)
 - Don Becker (Middletown Campus)
- Administrative
 - Pam Webb (Hamilton Campus)
 - Debbie Smith (Middletown Campus)



ENT Students

- Most of our students are part time.
- Approximately 150+ majors in four programs.
- More and more students are choosing co-op.
- We deliver our BS Completion degree by distance learning (IVDL, web, DVD, etc.) to five college partners—and growing—across Ohio. New articulation agreements ongoing.



Job Titles for ENT Graduates

In order of frequency

- Engineer
- Manager/Supervisor
- Technician
- Engineering Assistant
- Technical sales

Then other...

- Owner
- High school assistant principal
- Quality assurance
- GIS specialist
- Project engineer
- Instructor



TAC/ABET Results Update

- Assessment and Continuous Improvement Plans for ENT are in place. They will be reviewed and updated
- Performance Criteria for all Outcomes are in place and also undergoing progress review
- All laboratory facilities are being upgraded
- Due diligence is being given to labs for Distance to compliment IVDL and other electronic lecture delivery modes; New courses exist or proposed.



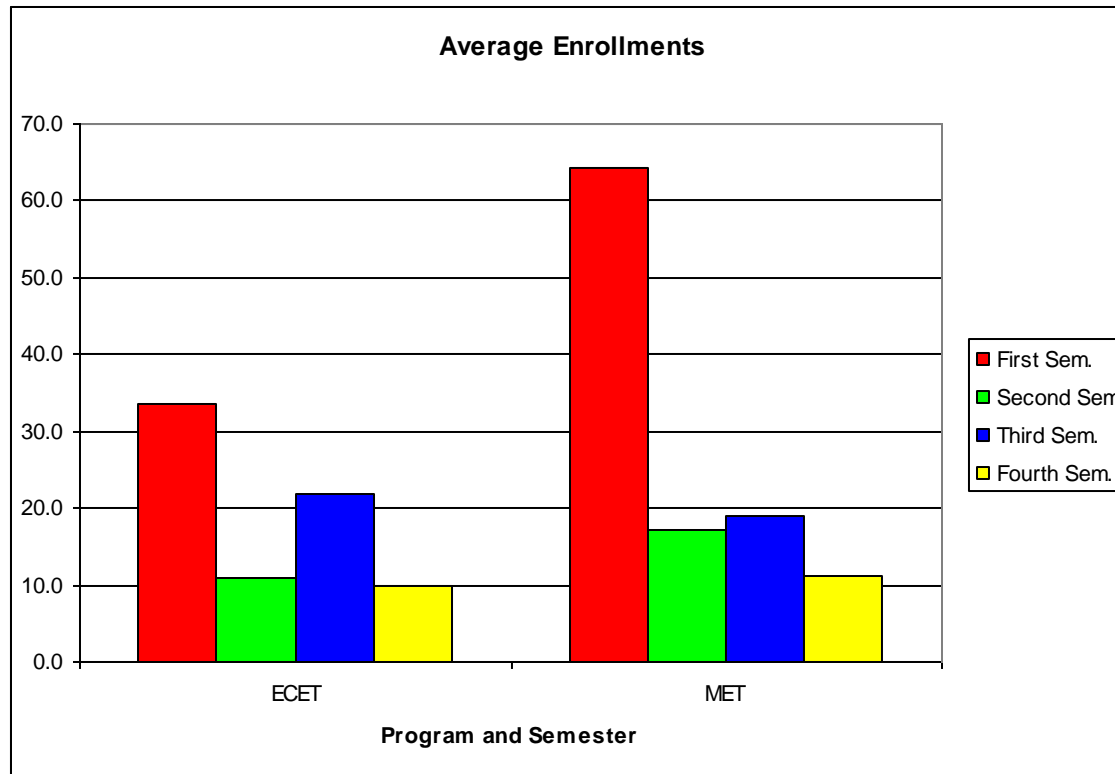
Enrollment Report

| | Credit Hours | Majors |
|-------------|--------------|--------|
| Fall 2003 | 946 | 181 |
| Spring 2004 | 1266 | 191 |
| Fall 2004 | 819 | 178 |
| Spring 2005 | 724 | 185 |
| Fall 2005 | 804 | 170 |
| Spring 2006 | 619 | 177 |
| Fall 2006 | 661 | 147 |



Rob's Enrollment Report

Attrition Analysis – AD Programs



Recent Achievements

- ABET Accreditation
- Expansion of Articulation Agreements
- Students take FE and PE Exams
- Restructuring of Several Labs
- MET Students won National Design Competition in 2005



Recent Achievements

- Improved Quality of Instruction
- Improved Quality of Senior Design
- Epsilon Pi Tau Chapter Reactivated
- Increased Publications
- Increased Scholarship
- Initiating Collaborative Projects



Recent Achievements

- Continuous Improvement and Assessment Plans for ECET completed
- Initiating new Recruitment Plans
- Initiating the process for offering a BS in ECET as an extension of our AD program



Challenges

- Re-Accreditation by ABET
- Improved Assessment Plans
- Enrollment (Recruiting in Local Industry)
- Additional Lab Equipment
- Additional Resources for Distance
- Implementing all Articulation Agreements



Opportunities

- Highly dedicated faculty and Staff
- Support of Leadership at Miami (SEAS and Regional Campuses)
- Collaboration with Industry Partners
- Highly Motivated Students
- New Education Grants and Contracts



Questions and Discussions

THANK YOU