

# **Electronic Engineering Technology**

## **Program Review**

### **November 5<sup>th</sup>, 2010**

We thank you for your tireless dedication to your profession, students and the community as you've created, maintained and improved the outstanding quality of Electronic Engineering Technology. It has been both inspiring as well as a pleasure to have watched your program evolve from the brink of closing to the wide range of well connected, thoughtful, successful Options you offer today.

Also, we thank you for a thoughtful, well organized review and presentation.

This response contains 5 sections: 1.) Commendations, 2.) Areas for further consideration, 3.) Suggestions/observations, 4.) Response to recommendations/areas of SAC needs and 5.) Closing comments.

## **Commendations**

- Connections with industry partners which have resulted in significant program improvements
- Improved program viability through the development and implementation of Degree Options
- Connection with Oregon Institute of Technology enabling your students to transfer to their BSEET degree.
- Creating ways for Advisory Committee members to guide program development and improvements
- Commitment to sustainability through the development of the Renewable Energy Systems A.A.S. Degree
- Industry donations of both equipment and scholarships
- Expanded tutoring opportunities for students
- Extensive services provided to students by Perkins staff and Lab Tech
- Development and inclusion of Strategic Improvement Plan
- High percentage of graduates either pursuing or having completed a bachelors degree (50%)
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## **Areas for further consideration:**

We believe that your department actively solicits input from a variety of sources, both internal and external, regarding course and program outcomes making needed improvements as possible. However, we urge you develop a system to better document that process for inclusion in future Program Reviews.

Assessment was identified as an area of focus for PCC during our very recent accreditation visit, and the April 2010 Interim Accreditation Report notes that: PCC must document *“progress in demonstrating, through regular and systematic assessment, that students who complete their programs have achieved the intended learning outcomes of degrees and certificates. Further, the college must begin to demonstrate, in a regular and systematic fashion, how the assessment of student learning leads to the improvement of teaching and learning.”*

## Suggestions/Observations

The following are intended as reminders of comments/suggestions made by the Review Team during your presentation.

1. Explore on-line tutoring opportunities through John Sneed, Director Distance Education X-4398.
2. Work with Karen Jones, Coordinator PAVTEC Partnership X-7736 to obtain funds to facilitate faculty to faculty coordination in Dual Credit.
3. Consider exploring PCC's Degree Audit program in an effort to help track students' preparation for and success in EET.
4. When considering plans to offer first year courses at SE, explore opportunities of permitting those students to participate in Sylvania's second year offerings.

## Strategic Improvement Plan/Recommendations

### Class Schedule:

**"Explore possibility of a spring start for EET program and its options. Also, second year classes need to be offered more than once per year. This is contingent on increases in facilities and staff."**

We understand EET has outgrown existing facilities and also know the Bond plans to update existing lab facilities as well as converting an existing classroom to a lab. Unfortunately, this will not be happening soon. However, we urge that you work closely with your Division Dean to document these needs in preparation for the ST Building Bond meetings scheduled for November 15th and 30th.

A new permanent, full time instructor position assigned to the collection of engineering programs (Engineering, CMET and EET) has been approved. Please work with your Division Dean and fellow Department Chairs to hire a faculty member who has an appropriate breadth of training and teaching interests.

**"Classes shared with other departments need to ensure enrollment to our students"**

In as much as the prerequisites noted are housed within the Science and Engineering Division, we suggest you work closely with your Division Dean and other Chairs to determine ways to facilitate the enrollment of Biomedical Degree Option students in these courses.

### **Facilities:**

**"We request the ST 308 room for additional EET laboratory space. We request EET laboratory space at the SE Center as well."**

Again, we urge that you develop and provide detailed information regarding facility needs e.g., vacuum, three phase power, ventilation through your Building Committee to the Bond Architect during the ST Building meetings noted above. Additionally, please continue working with your Division Dean in the development of an interim plan to add three phase wiring to ST lab rooms, thus making it possible to fully utilize the FIPSE funded equipment before the Bond renovations happen in the building.

Regarding space at the SE Center, please work closely with Julie Kopet, interim Dean of Instruction. She may be reached at extension X-6182 or by email at [jkopet@pcc.edu](mailto:jkopet@pcc.edu).

### **Retention:**

**"We request physical space to accommodate tutoring for our EET students."**

Please see other comments regarding the Bond and the importance of working with your Building Committee and the Architects to address these needs. Specifically, please explore the possibility of sharing tutoring space with other departments (math, chemistry, physics) in the ST building. Also, as noted above in the Suggestion/Observation section, please explore on-line tutoring opportunities through Distance Learning.

### **Faculty:**

**"...with all the new added specialty options and the increase in enrollment and demand additional full-time faculty will greatly benefit the EET program."**

A new permanent, full time instructor position assigned to the collection of engineering programs (Engineering, CMET and EET) has been approved. Please work with your Division Dean and fellow Department Chairs to hire a faculty member who has an appropriate breadth of training and teaching interests.

### **Equipment:**

**"We request additional funds to bring the EET technology up to industry expectations."**

First, we commend you for successfully securing the \$350,000 through the FIPSE grant. Regarding additional funding for the purchase of needed equipment, we suggest you work with your Division Dean to develop a detailed listing of needs for possible funding through one-time margin dollars. You have engaged a strong Industry Advisory Committee; please explore linking your equipment requests to teaching outcomes (existing or forthcoming) and to feedback that has been received from the IAC regarding industry expectations.

### **Clerical Support:**

**"We request 25% FTE clerical support for the EET department to accommodate the increased enrollment from 12 students to approximately 150 since the last program review."**

Given the current budget climate along with the prospects of continued revenue short fall for the foreseeable future, we suggest that in addition to requesting additional clerical assistance, you review how the assistance is currently used and explore ways to further improve upon existing efficiencies. Also, please develop a plan and submit to your Division Dean who will work with the Campus Dean of Instruction to explore possible funding opportunities.

### **High School Connections:**

**"We request \$5,000 - \$10,000 per year to promote STEM disciplines to high school students."**

Sylvania Campus, through the use of one-time margin dollars, has developed and made available funds through the "Green Initiative Fund" designed to connect academic programming with Bond and E6 activities. Through creative programming, it might be possible to access these funds to engage high school students in your programs through Bond and E6 projects. The other option would be to develop a plan for regular margin dollars. However, in both instances, these are one time dollars.

### **Recruiting More Women in the Program:**

**"We request \$5,000 per year to develop a committee of professionals with expertise in recruiting underrepresented students in STEM programs and to recruit."**

As noted before, opportunities for permanent budget augmentations are, at best, slim. Please develop a plan and submit to your Division Dean who will work with the Campus Dean of Instruction to explore possible funding opportunities.

### **Closing remarks**

The dramatic turn around of the EET program over the past 5 years has been no less than amazing. We commend you for the creative thinking and determination needed to make this happen. Through your efforts you were able to take a valued, though lagging program, breathing life into it, making it a key player in the 21st Century's Green and Technology Economy. To paraphrase Dr. Chairsell's concluding comment; through your hard work and innovations you've set the standard for

Community Colleges regarding flexibility and accessibility while continuing to be attentive to industry needs.

Administrative Response submitted by Jeff S. Triplett on behalf of the Deans of Instruction.

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Admin Response Electronic Engineering Technology 2010 final