ETAS ADVISORY COMMITTEE MEETING

MEETING DATE - 5/3/12 6:00 - 8:00 PM

Attendees:
- Andrew Dahlen – ETAS Instructor
- Andrew Zbacnik – ETAS Student
- Kevin Walseth – ETAS Student
- Jason Starren - Digikey
- Cody Knutson – Digikey
- Kim Ditz – ETAS Student
- Norma Konchak – NCTC Dean
- Bruce Holte – Digikey
- Roger Peterson – Retired Electronics / Computer Instructor.

MEETING LOCATION –

Black Cat Sports Bar & Grill
1080 State Highway 32 S
Thief River Falls, MN 56701
(218) 681-8910

Note: The ETAS Program is paying for dinner. Participants will order off the menu.

AGENDA

1. VEX Robotics as a recruitment strategy.
   - Great long term strategy to recruit students. Very positive feedback from all parties involved.
   - Find a way to Use NCTC's systems to track students in the VEX program and see if they end up in the ETAS program or other engineering or technical areas. Discussed making each Junior and Senior fill out a prospect card.

2. Program sustainability

   - Program Block Schedule. –
     - Students and employers like the block schedule
     - Andrew – find a better slot for the Digital Class – preferably meet 2 days a week instead of one.
     - Andrew – Look at rearranging semester order : Swap the Microcontrollers 2 with the Sensor Technology class.
   - Enrollment
     - Low enrollment in the program. Need to recruit more students.
     - Also need to develop more relationships with other employers.
     - Discussed the idea of adding an internship elective which would help to develop relationships with other industries.

- Image of the ETAS Program

  - Review Fact Sheet – Descriptions
    Committee decided to revise the program fact sheet. The description
    needs to focus on the hands on activities and what technology or "toys"
    the students will use during their time in the program. Andrew will
    revise the description.

  - Rename the program?
    Drop the Automated Systems from the program name in marketing
    materials. - emphasize the Electronics Technology title.
    To rename the program required approval from the state.

3. Program resources

   - Adjunct Instructors
     Asked DigiKey about using Engineers as Adjunct Instructors.
     Also discussed using Avionics instructors as adjunct instructors for the program.

   - Arduino Microcontrollers
     Committee agreed to replace the Basic Stamp Microcontroller platform with
     Arduinos. C programming will be taught exclusively for both microcontroller
     classes.   Research from the ESC conference shows the C programming language
     dominates the industry.
   - PCB Fabrication equipment – CNC mill –
     360° may fund this next year.
   - Avionics Lab
     Andrew will be working with the Avionics program to investigate opportunities
     to share lab space and get these two like programs in close proximity. This
     would also help the DKU evening classes.

4. Staff Development:
   - Opportunities for faculty professional development activities.
     Attended the ESC this year.
     Look at attending the Microchip Masters Conference in the future.
   - Open industry based training to instructors.
     Jason will investigate if Andrew can attend product training sessions.
   - Training, internships, seminars, etc…

5. Student opportunities
   - Scholarships
   - Internships
     See notes above …..
   - Jobs

6. Evaluation

- Performance of graduates
- Suggestions for program enhancements.
  Discussed the idea of having a computer or tablet requirement for the program. This may be cost prohibitive, but there are many advantages to increase student learning. Further discussion and research is needed.

  Discussed providing students with badges to work in the labs whenever the college doors are open.

  Bench equipment needs to be updated. Andrew develop a plan to newer equipment – O scopes, function generators, DMMs, Power Supplies.