ETAS ADVISORY COMMITTEE MEETING

MEETING DATE –November 26, 2012 6:00 - 8:00 PM

MEETING LOCATION:

Northland Community and Technical College.
Room 545
1101 Hwy One East
Thief River Falls, MN 56701

ATTENDEES:

- Andrew Dahlen – ETAS Instructor
- Linda Brateng – DigiKey
- Jason Starren - DigiKey
- Michael Masseth - DigiKey
- Cody Knutson – DigiKey & ETAS Alumni
- Jim Retka – NCTC Dean of Workforce Development
- Bruce Holte – DigiKey & ETAS Alumni
- Cody Walseth – ETAS 1st Year Student
- Reid Lansrud – ETAS 2nd Year Student
- Roger Peterson – Retired Electronics / Computer Instructor.
- Ralph Cox – NCTC Math / DKU Instructor

Agenda items:

- Reviewed minutes from previous meeting.

- VEX Robotics Update –
  - See attached letter to the teams.
  - Teams need to do fundraising to purchase new equipment. Michael recommended working concessions at the TRF hockey games.
  - Industry Sponsors are needed – see the attached sponsor document.
  - 3 tournaments scheduled this year:
    - February 9th Albert Lea
    - February 16th – Bemidji
    - March 2nd – St. Cloud.
  - Bemidji and Thief River Falls will alternate hosting the Northern Tournament.
  - Jason and Michael will discuss DigiKey's level of support for the Bemidji Tournament.
  - Volunteers for the Bemidji Tournament are always welcome.
  - Discussion about the effectiveness of this marketing tool. Last year the ETAS program did not recruit any new students from the VRC. This year a few prospective students been identified from the high school VEX teams.
  - This is a long term strategy that targets 7-12 grade students. It will take a few years to determine its effectiveness.
  - NCTC has started a college VEX Robotics Team.

- Program sustainability

    - Program Block Schedule. Good feedback from everyone in attendance. This schedule allows students from EGF to ride the bus a few days a week. It is accommodating for working students and DigiKey Scolarship students also enjoy this schedule.
        - The Spring Semester schedule has been changed for first year students. The change schedules Digital Electronics to meet twice a week instead of just on Fridays. Last Spring the Digital only met on Friday. Having Digital two days a week allows students more time to soak up the content.
    - Enrollment:
        - Currently there are 6 first year students and 11 second year students.
        - Discussed strategies to increase enrollment.
            1. Jason discussed cooperative marketing. The ETAS program could partner with an industry partner to help market the program. Discussed Radio and TV Ads, publications, marketing regions. All of this requires funds which NCTC does not have a budget for.
            2. Reid suggested using YouTube for free marketing. Discussion followed that the ETAS program should develop a YouTube channel to feature student projects. The ETAS program could develop a video template with NCTC Electronics Logos and links following the video. Jim suggested using the New Media Students as a resource.
            3. Ralph discussed "rebound" students. Those students who drop out of 4 year schools and return to TRF or NCTC. How can the ETAS program attract these students?
            4. Michael talked about other Electronics Programs in the state being filled primarily with dislocated works. This population has families, houses, and ties to their region.
            5. Linda mentioned that Tony Harris, VP of Marketing at DigiKey may have ideas.
    - Review proposed changes to ETAS literature. –
        - Reviewed suggested changes to the ETAS program description. The latest draft follows:

This program introduces students to the vast world of electronics. In the classroom students participate in hands-on labs in which they connect circuits, use test equipment, and troubleshoot electronic circuits and systems. Basic electronic components such as resistors and capacitors and the laws that govern them will be analyzed. Students learn multiple computer software programs for the design, simulation, and programming of electronic devices including microcontrollers, robots and other automated equipment. Throughout the program student projects are assigned to encourage learners to practice previous concepts and acquire new knowledge and skills. This program provides a solid foundation for those entering the workforce as electronic, automation, and engineering technicians.

Select courses in this program may be offered online through Distance 360˚ as part of an Automation Technologies Certificate. This program has been developed in concert with business and industry partners. The program articulates

into a related Bachelor's degree at Bemidji State University, The University of Minnesota Crookston and Minnesota State University Moorhead.

- The above program description needs to be approved by NCTC's academic Affairs Committee. An E-mail from advisory committee members is needed documenting support for this change. Pending approval this change will be instituted for Fall of 2013.
- The expected growth numbers listed on NCTC website for the ETAS program show poor expected growth in the field. The committee feels these numbers are dead wrong. Jim suggested we talk to Mary Jo Bydal to determine if which CIP codes are being used and if they need to be changed. Linda to check with Rick Trontvet for expected growth numbers.

- Program resources
  - Adjunct Instructors
  - Andrew's Sabbatical Fall 2013. – Andrew has submitted an application for a sabbatical. If granted Andrew will enroll full time in the Computer Networking classes in EGF. The electronics and Computer Networking fields overlap one another. Acquiring more knowledge and skill in computer networking will enhance the ETAS program.
    - It is critical to find solid replacements to carry the ETAS program forward. Discussion was held on using industry experts as adjunct faculty for the Fall 2013 schedule. With the block schedule for 2013 an adjunct instructor with a full time job could maintain their work obligations while teaching a class or two. Ralph Cox may be able to teach a few classes. Jeff Dyrud was mentioned as a possible instructor. The Avionics instructors could also teach some of the ETAS classes. Also DigiKey engineers and technicians could teach some of the ETAS classes.
    - In summary, Andrew wants to leave the ETAS in good hands if a sabbatical is granted. A handful of adjunct could cover the Fall ETAS classes.

- Evaluation
  - Performance of graduates
  - Suggestions for program enhancements. –
    - Cody K. Suggested newer equipment for the ETAS program. The electronics bench equipment is 20+ years old.
    - Andrew mentioned a long term goal to move the ETAS program closer to the Avionics Program. There is potential to share their new equipment.
  - Performance test for graduates –
    - Committee expressed concern about a test for graduates. As with any standardized test there is a risk of teaching to the test. Further discussion is needed.

- Other Topics