

Robotics & Electronics Advisory Committee October 17, 2016

Those in attendance: Jim Hale, Mark Willie, Bill Gordon, Brad Gants, Rick Wagner, Bob Stitz, Bob Lawson, Brad Luhrs, Megan Patton, Jenny Foster

Program Updates

- New biomed certificate implemented
 - Removed internship class
 - Created pathway for students who already have electronics degree
- Creation of Electronics Fundamentals diploma
- Enrollment increases

Program Proposals

- History of changes to math in programs
- Would like to bring back ELT 108 in first semester
- MAT 129 or 130 in 2nd semester
- Program will still accept higher level math classes for the lower level classes (transfer students)
- Change allows us to add additional technical classes back into the programs
- Advise students differently on math classes depending on their goal (4 year transfer)
- **Motion made by Bill G. and seconded by Brad G. to approve adding ELT 108 and removing MAT 121**
 - **Motion passed**
- **Motion made by Brad G and seconded by Bill G. to approve adding MAT 129 or 130 2nd semester**
 - **Motion passed**
- **Motion made by Bill G. and seconded by Mark W. to add mechanism class and lab back to the curriculum and remove PHY 160**
 - Students need additional lab time and experience working with tools. The curriculum in physics is too broad for what our students need.
 - **Motion passed**
- **Motion made by Bill G and seconded by Brad G. to add one credit hour to ELT 393**
 - Students struggling in fabrication class, they need extra time, heavy emphasis on safety
 - **Motion passed**
- **Motion made by Bill G. and seconded by Brad G. to add ELT 722 to Robotics program**
 - Addition of 2nd robotics class
 - **Motion passed**

Volunteer Opportunities

- FLL on 11/13
 - Megan P. will email information to committee members
- SkillsUSA
 - Looking for judges so DMACC students can compete

- Megan P will email information to committee members
- Adjunct teaching
 - Rick encouraged committee members who are interested in adjunct teaching to reach out to him.

New technologies, etc. program should consider

- Input/output devices, sensing technologies
- Encoders (Bill G. & Brad G.)
 - Switches and elevators
 - Working with Schumacher to remove switches
 - Optical sensors
 - Know how sensors work, sensors hot item
- RFD (Jim)
 - Barcoding, vision applications (new hires lacking knowledge on topic), cameras, quality counting, color, sensing
- PR sensor
- Green technologies, wind, solar
- 3D printers, pens
- Spectrum analyzers
 - Recommend purchasing a network analyzer (analog) – Mark W.
- Temperature monitoring
- Leadership training, project management, how to put together a PPT, how to run a meeting
- ESD – students struggle with this concept