

**CES/EE Committee – MINUTES**

**November 18, 2021**

**12:30 – 1:30 p.m.**

**CP303 / Zoom**

**Attendance:**

**Faculty:** Orlando Baiocchi, Vahid Dargahi, Debasis Dawn, Max Laddomada, Michael McCourt, Jie “Jenny” Sheng, Nafiul Siddique, Matthew Tolentino

**Non-voting Faculty and Staff:** Raj Katti, Rachel Long, Zaide Chavez, Kira King, David Ross, Bob Landowski, Christopher Barrett, Don McLane, Victoria Olive, Beth Jeffrey

**Absent:** Thillainathan Logenthiran

**Items**

**1) Approve the minutes of our last meeting held on October 15, 2021**

**Moved: M. Tolentino**

**Seconded: V. Dargahi**

***Eligible to vote: 9***

**8 yes, 0 no, 0 abstain, 1 voting Faculty member absent**

**2) Discuss/Vote on changing the CES degree to a named degree**

This is an important change that could be beneficial to students – we have received some complaints from students/parents, because their diploma only lists “Bachelor of Science” instead of a degree in CES (CES is only mentioned on the student’s transcript).

**Motion: to change the CES degree to a named degree**

**Moved: D. Dawn**

**Seconded: J. Sheng**

***Eligible to vote: 9***

**8 yes, 0 no, 0 abstain, 1 Faculty member absent**

We will also need to select a new prefix for this named degree, starting with “T” to signify that we are working from the Tacoma campus. For reference, please visit:

[https://registrar.washington.edu/curriculum/forums/topic/tacoma-program-and-credential-name-change-for-the-computer-engineering-program-tset\\_20211020\\_nop/](https://registrar.washington.edu/curriculum/forums/topic/tacoma-program-and-credential-name-change-for-the-computer-engineering-program-tset_20211020_nop/)

We can keep our current prefix, TCES, but obviously with our pending name change voted on earlier this quarter (removing “Systems” from the name), the S would no longer apply. Some committee members suggested TCE, but the advisors informed them that this is the code being used by Civil Engineering. One committee member raised the question of how the Computer Science program uses the same prefix for both their undergraduate and graduate courses – if possible, this committee would like to do the same – keeping TECE for both the undergraduate and graduate degrees. The committee briefly spoke to the Academic Administrator, Zaide Chavez, for suggestions on which prefix to use and to ask if it was possible to keep TECE for both undergrad/grad programs. Zaide recommended that the committee provide 2 options for her to choose from, and to list their first and second preference. The committee decided:

1<sup>st</sup> choice: TECE

2<sup>nd</sup> choice: TCMPE

### 3) ECE Graduate Committee Meetings

This committee will meet on these dates in CP303 and on Zoom:

- **December 16, 2021**
- **January 6, 2022**
- **February 3, 2022**
- **March 3, 2022**
- **April 7, 2022**
- **May 5, 2022**

The Zoom link for these meetings is: <https://washington.zoom.us/meeting/97245494483>.

Rachel will send out Calendar invites via Outlook for these meetings in the next week or so. Victoria Olive is the new graduate advisor for MSECE. We will need to help her understand what courses students need to take before admission into the graduate program.

We also need to begin collecting assessments for the graduate program, since we will soon have our third year review for UW Seattle. For the undergraduate degree, we can use ABET materials. The Master’s degree is new, so it will be the first time gathering these materials.

#### 4) Direct Admission (need one ECE Faculty volunteer)

This volunteer would work on some of the preliminary planning for adding at least a few direct admission pathways into SET. In general, this will probably help with recruiting strong students to our programs, and it is considered a best practice for DEI work. The Dean is specifically looking for someone to help create the pathway for ECE. As a reminder, direct admission means a student applies as a freshman in high school, and is guaranteed admission into SET if they follow the pathway that we create (course plan) during their first 2 years at UWT. We will need to create a list of expectations, such as GPA. This will allow the advisors to begin working with students as freshman, and guide them during their first 2 years before declaring a SET major. When students are labeled as engineering students when they enroll as freshman, it makes their course planning a bit easier.

Ideally, the Dean would like to have one Faculty member from each unit to help form a core planning group. The Dean would also like for this volunteer to be someone who often teaches courses in the first/second year level. This group of volunteers will start meeting in January, and will make recommendations for next steps (each program will of course determine how they wish to proceed). Max will ask Thillainathan Logenthiran, since he teaches courses in the first year level.

#### 5) Discuss and approve PEO's for EE and CE programs

The ECE Advisory Board met on May 21, 2021 and proposed to update the following PEO's:

### Computer Engineering

#### PROGRAM EDUCATIONAL OBJECTIVES (PEO's)

These describe what graduates are expected to attain within few years after graduation.

##### **Educational Objectives** of the Computer Engineering Program

Within three to five years of graduation from the CES program, it is expected that many graduates will have:

- Developed a product or process by applying their knowledge of mathematics, computing, systems and development tools,
- ~~Participated effectively~~ Applied the principles of mutual respect, safety, quality, integrity and inclusion as a member of a multi-disciplinary development team and undertaken a leadership role when appropriate,
- Taken graduate courses or continuing education classes to improve their skills and abilities,

- Made positive contributions to their community and society by applying skills and abilities learned during their undergraduate program in computer engineering and systems,
- Made decisions related to their work that demonstrate an understanding of the importance of being an ethical engineering professional,
- Applied their **technical** communication skills to effectively promote their ideas, goals, or products.

Since the objectives are fairly broad, it is not expected that every graduate will achieve every objective.

These changes have more emphasis on inclusion. It is also important to add “technical” in regards to communication skills, since we expect students to communicate technical information clearly and efficiently.

**Motion: Approve proposed changes to Computer Engineering PEO**

**Moved: M. Tolentino**

**Seconded: M. McCourt**

***Eligible to vote: 9***

**8 yes, 0 no, 0 abstain, 1 Faculty member absent**

## **Electrical Engineering**

### **PROGRAM EDUCATIONAL OBJECTIVES (PEO's)**

These describe what graduates are expected to attain within few years after graduation.

#### **Educational Objectives** of the Electrical Engineering Program

Within three to five years of graduation from the EE program, it is expected that many graduates will have:

- Developed a complex product or process by applying their knowledge of engineering principles, science, mathematics, design and ~~implementation-product life-cycle management~~.
- ~~Participated effectively~~ As a member of a multi-disciplinary team effectively apply the principles of mutual respect, safety, quality, integrity and inclusion.
- Undertaken a leadership role applying **technical** communication skills to effectively promote their ideas, goals, or products.
- Made decisions related to their work that demonstrate an understanding of the importance of being an ethical engineering professional.
- Improved their skills and abilities by taking graduate courses, professional development training, or voluntary experiential learning opportunities.

- Made positive contributions to their community and society by applying skills and abilities learned during their undergraduate program in electrical engineering.

Since the objectives are fairly broad, it is not expected that every graduate will achieve every objective.

The committee discussed that for the first bullet point (starting with “Developed a complex product...”) should be edited to: “Developed a complex product or process by applying their knowledge of engineering principles, science, mathematics, design, implementation, and product life-cycle management.” (Keeping implantation instead of removing it, as proposed above).

**Motion: Approve proposed changes to Electrical Engineering PEO**

**Moved: V. Dargahi**

**Seconded: M. McCourt**

**Eligible to vote: 9**

**8 yes, 0 no, 0 abstain, 1 Faculty member absent**

## **6) Updates from the advisors**

Lots of students have had trouble with registration, and the advisors are trying to stay on top of that. As mentioned in our last meeting, this committee needs to start thinking about admissions for next year, mainly because the wording on our website needs to be changed. The advisors are already receiving questions about next year – we technically only have a few months to decide what admissions is going to look like for next year. Last year, it was confusing in regards to prerequisites. The advisors recommend switching some prerequisites to degree requirements ( if there is a prerequisite that isn’t important, we could make them a degree requirement, which could help students...the advisors mentioned that it might be a good idea to think about what courses are not necessary as a prerequisite). This committee could also make a decision to admit students if they have a prerequisite scheduled for a future quarter. There are a few other prerequisite course that this committee needs to change, because it’s hindering registration. We did this for the Computer Science degree and it was successful. The advisors closed this discussion by recommending this committee to reexamine all prerequisite courses, not just a few.