

**College of Engineering and Applied Science
Minutes of CEAS Curriculum Committee Meeting**

Date: 11 Feb 2022
Place: Virtual – Microsoft Teams
Members Present: Habib Tabatabai, Roshan D’Souza, Rohit Kate, Priyatha Premnath, Robert Cuzner, Ben Church (Chair), Ethan Munson (Ex Officio), Todd Johnson (Ex Officio)
Members Absent: Hamid Seifoddini
Guest: Brian Armstrong

The meeting was called to order at 10:32 AM.

Announcements

- Reminder that CIM forms, syllabi, and other items related to agenda items are posted in the shared Teams folder.
- Reminder that agendas, minutes, committee roster, and other items are posted to the CEAS Curriculum Committee website: <https://sites.uwm.edu/ceas-cc/>

Approval of the Agenda

Agenda approved without changes.

Approval of Minutes: Minutes from the January 07, 2022 meeting were approved by automatic consent.

New Business

1. ART 405, Product Realization (UG), Cross-Listing with BME (creates BME 405).
Motion to approve (Premnath, Kate). Motion approved.

Items 2, 3, 4, and 5 were discussed together.

2. ElecEng 140, Intro to Embedded Computing I: Digital Logic and Microprocessors (U) **New Course**
Course Description: Embedded computing is the engineering of systems and software for computers embedded in products and devices. Embedded computers interface to electronic devices and physical systems, including consumer products, industrial systems, medical devices and vehicles of all types. Embedded Computing I: Digital Logic and Microprocessors will lay the foundation for modern computing and for understanding higher-level programming, such as in the C programming language, in terms of the bits and gates that carry out the computation. A module on Matlab use and programming is also included.
Prerequisite: Math 116 (P) or Math 231 (C)
Note: Course description in CIM is different from the course description in the syllabus.
3. ElecEng 240, Intro to Embedded Computing II: C Programming for Embedded Applications (U), **New Course**

Course Description: Building on the foundation laid in EE 140, Embedded Computing II: C Programming for Embedded Applications introduces C programming concentrating on tools and methods suitable for firmware and embedded software development and with a focus on how programming constructs used are realized on a model computer. Student programming is done on an industrial development board. A module on JAVA programming is also included.

Prerequisite: EE 140 (P)

Note: Course description in CIM is different from the course description in the syllabus.

4. ElecEng 340 Embedded Systems I: C and C++ Programming for Embedded Applications (U), **New Course**

Course Description: Realizing embedded applications with specific hardware requirements, including digital I/O, analog I/O, precision timing, serial and wireless communications; Project design and execution; C and C++ Programming.

Prerequisite: EE 240 (P)

Note: Course description in CIM is different from the course description in the syllabus; Syllabus provided by EE Dept is different than syllabus posted to CIM.

5. ElecEng 440 Embedded Systems II: Advanced Embedded Systems (U), **New Course**

Course Description: Real time operating systems for embedded microcontroller systems; implementation of multitasking, synchronization and protection; major project.

Prerequisite: EE 340 (P)

Motion to approve new courses ElecEng 140, 240, 340, and 440 (D'Souza, Cuzner). Motion approved.

6. ElecEng, BS Program Change

- Add honors in the major
- Update Embedded Computing curriculum (CS 240 and 241, and EE 354 and EE 367 are being replaced by EE 140, 240, 340 and 440[elective])
- The number of "Free Electives" is increased to 9 from 6, to keep the total degree credits 120.

Motion to approve (Cuzner, Kate). Motion approved.

7. CompSci, BA Program Change

- Allow students who have who have earned an Associate of Applied Science in Information Technology degree (and other related areas) to count the AAS as meeting the second major requirement.
- Allow INFOST 695 Ethical Hacking I as a technical elective. (not in CIP system)

Motion to approve (Kate, Premnath). Motion approved

Old business

None

Adjournment

Meeting adjourned at 11:15 AM

Submitted by,
Ben Church, 11 February 2022