CEAS Curriculum Committee Meeting Agenda Date: February 11, 2022; Time: 10:30 AM

Microsoft Teams, +1 414-253-8850 Conference ID: 101 427 026#

1) Announcements

2) Approval of the agenda

3) Automatic Consent

Approval of January 7, 2022 meeting minutes.

4) New business

- 1. ART 405, Product Realization (UG), Cross-Listing with BME
- 2. MechEng 468, Introduction to Water Engineering (UG), New Course

Course Description: This course is designed to give undergraduate students and graduate students introduction to the engineering principles of water hydrology, hydraulics and environmental technologies. This course will start with the introduction on physical and chemical properties of water, fluid mechanics, and water microbiology. Then, environmental chemistry, water pollution, water treatments, and hydrology will be covered. Topics in environmental engineering include: water quality analysis, water pollution and control, hazardous substances and risk assessment, water and wastewater treatment systems, design of treatment facilities. Students are also required to review and present journal articles on classic and recent issues on water. Prerequisite: Calculus and statistics

3. 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.

 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.

 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.

 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)

Note: Syllabus provided by EE Dept is different than syllabus posted to CIM. Verify if 3 or 4 credit course.

- 7. 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, 141, 240, 440.)
- 8. 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)

5) Old business

6) Adjournment