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

Date: 19 Nov 2021

Place: Virtual – Microsoft Teams

Members Present: Hamid Seifoddini, Rohit Kate, Priyatha Premnath, Robert Cuzner, Roshan

D'Souza, Ben Church (Chair), Habib Tabatabai, Ethan Munson (Ex Officio), Todd

Johnson (Ex Officio)

Members Absent:

Guest: Rani El-Hajjar

The meeting was called to order at 9:03 AM.

Announcements

Church: UWM is considering micro-credentials as another offering to students. These would be transcript-listed items that have lower requirements than minors. This is still a work in progress. Details of the proposal can be found here: https://uwm.edu/secu/wp-content/uploads/sites/122/2021/11/Microcredential-Report-and-Recommendations.pdf

Approval of the Agenda

Agenda approved without changes.

Approval of Minutes: Minutes from the Sept 17, 2021 meeting were approved by automatic consent.

New Business

EAS 121, Automation: Controls and Sensors (U), Discontinue course
 Industrial automation principles; controller technology and programming; controller applications and troubleshooting; network infrastructure technology; basic instrumentation technology.

 Prerequisites: none
 Considered along with item #2 below.

2. EAS 122, Motion Control and Safety (U), Discontinue course

AC drive and motor technology; visualization and information software; machine safety technology; motion control technology.

Prerequisites: none

Motion to approve discontinuation of EAS 121 and 122 (Kate, Cuzner). Motion approved unanimously.

3. EAS 110 Fundamentals of Smart Systems Engineering I (U) **New Course**Course Description: 2 Cr. U, Electrical sources, resistance, Kirchhoff's laws, Resistive sensors, application, introduction to robotics, laboratory experiments and projects. Prereq: Math-115 (C). Motion to approve (Seifoddini, Kate). Motion approved (5-2-0).

4. EAS 210 Fundamentals of Smart Systems Engineering II (U) New Course

Course Description: 2 Cr. U., Electrical capacitance, inductance, simple circuit application, diodes, opamps, digital logic, microcontroller basics, laboratory experiments and projects. Prereq: EAS 110 (P).

Motion to approve (Seifoddini, Kate). Motion approved with five in favor and two opposed.

5. BME 101, Fundamentals of Biomedical Engineering (U), Prerequisite Change

A system approach to physiology, cell physiology and transport, major organ systems, cardiovascular system, biomedical signal processing, biomechanics, biomedical engineering design.

Prerequisite: Math 115(C). 221(C) or Math 231(C).

Motion to approve (Seifoddini, Kate). Motion approved unanimously.

6. BME 296: Fundamentals of Biomaterials (U) New Course

Course Description: 4 Cr. U., Fundamentals of biomaterials including ceramics, metals, polymers, and natural biomaterials; Biological responses to implants; clinical perspectives; designing new biomaterials; tissue engineering. Laboratory experiments.

Prerequisite: Bio Sci 203 (P)

Motion to approve (Premnath, Seifoddini). Motion approved with five in favor and one opposed.

7. BME 306: Introduction to Engineering Biomechanics (U) **New Course**

Course Description: 4 Cr. U., Introduction to engineering biomechanics principles applied to the musculoskeletal system and human body for analysis of human movement, Laboratory experiments. Preregs: BioSci 203 (P), BME 302 (P).

Motion to approve (Premnath, Seifoddini). Motion approved unanimously.

8. **Program Change** – Biomedical Engineering

See attachment.

Motion to approve (Premnath, Church). Motion approved with three in favor and one opposed.

Old Business

1. Civ Eng 573, Design of Masonry Structures (U/G), title and description change

Title Change: Design of Masonry and Wood Structures

Properties Topics in design of masonry structures; materials, loads, design codes, reinforced & unreinforced axial & flexural members, composite & cavity walls, shear walls. walls, seismic requirements. Properties of wood, design of wood structural members by LRFD including beams, columns and connections. Motion to approve (Seifoddini, Premnath). Motion approved unanimously.

Meeting adjourned at 10:20 AM

Submitted by, Ben Church, 22 Nov 2021