

**CEAS Curriculum Committee**

**Meeting Agenda**

**Date: Jan 7, 2022; Time: 2:00 PM**

Microsoft Teams, +1 414-253-8850 Conference ID: 148 704 687#

**1) Announcements**

**2) Approval of the agenda**

**3) Automatic Consent**

Approval of Nov 19, 2021 meeting minutes.

**4) New business**

1. CivEng 466, Mechanics of Composite Materials (UG), **Course Name, Description**

Proposed title change to: Design of Composite Structures

Description: ~~Basic concepts, materials, and characteristics of composites. Micromechanics and Macromechanics of Elastic Response.~~ Hands-on design, analysis, ~~Failure, design~~ and manufacturing ~~optimization~~ of composite fiber reinforced plastic beams, columns, and plates; failure analysis and damage tolerance design of composite structures; ~~bolted and bonded joints. structures.~~

Prerequisites: junior standing and CIV ENG 203(P) or CIV ENG 303(P).

2. CivEng 335, Soil Mechanics (U), **Prerequisite**

Description: Fundamentals of soil mechanics; soil classification; seepage analysis; principle of effective stress; stress distribution; 1-D consolidation theory; shear strength; laboratory experience.

Prerequisites: junior standing; admis to an Engineering Major; CIV ENG 203(P) ~~and~~ or CIV ENG 303(P) or graduate standing.

3. IndEng 572, Reliability Engineering (UG), **Cross-Listing**

Concepts and methods for the design, testing, and estimation of component and system reliabilities. Failures and failure rates; life tests; series-parallel, and standby systems; stress levels; redundancy and reliability apportionment; maintainability, availability, and safety; reliability design and implementation.

Prerequisite: jr st; ~~CompSci351(252)(P) & C~~ or better in ~~either~~ CompSci 317(217)(P) or both of Math 341 and MthStat 361 ~~317(217)(P); & CompSci351(252)(P).~~

MechEng 572 will be created as a cross-listing for this existing class.

Note: CIM form shows change in description.

4. CivEng 490, Transportation Engineering (UG), **Prerequisite**

Technological and common elements of all modes of transportation; their effect on performance, demand, and outputs of a transportation system. Development of new transportation systems.

Prerequisites: jr st & admis to an Eng major; Civ Eng 250(P); ~~280(P)~~; or grad st.

Note: CIM shows a title change to: (DISC)Transportation Engineering

5. Matleng 443, Transport Phenomena in Materials Processing (UG) **Prerequisite**  
A study of phenomena related to transport of mass, energy, and momentum with applications to materials processing.  
Prereq: jr st, MatlEng 316(P); ~~442(P)~~; & ElecEng 234(P) or Math 234(P); or grad st.
6. APC 380 Project Management Techniques (U) **Prerequisite**  
An introduction to project management techniques including project selection and life cycle, stakeholder/scopequality/procurement management, budget control, scheduling, risk identification.  
Prereq: admis to BS-APC prog; APC 300(P); 320(P); 330(P). ~~370(P)~~.
7. CompSci 422, Introduction to Artificial Intelligence (UG), **Prerequisite**  
Introduction to core techniques and broad survey of AI. Topics include: Lisp, heuristic search, knowledge representation, planning, vision, learning.  
Prerequisite: jr st; CompSci351(252)(P) & C or better in either CompSci 317(217)(P) or both of Math 341 and MthStat 361 ~~317(217)(P)~~; & ~~CompSci351(252)(P)~~.
8. Matleng 481 and ElecEng 481 (Cross-listed), Electronic Materials (UG), **Prerequisite**  
Electronic conduction in materials. Electronic phenomena in metals, semiconductors, and insulators. Materials production, characterization, and application to micro-electronic devices, with particular emphasis on thin film technology.  
Prerequisite: jr st; PHYSICS 210(P) ~~MatlEng 201(P)~~ or PHYSICS 220(P) or cons instr.
9. Admission to Major. Creation of Pre-Engineering program in collaboration with CGS (see attachment)

## 5) Old business

1. Renewed motion: Program Change – Biomedical Engineering  
See attachment. Program change motion was not approved at the CEAS faculty meeting and was sent back to the Curriculum Committee.

## 6) Adjournment