# MEMORANDUM TO: Ogden College of Science and Engineering Curriculum Committee

Dr. Linda Brown Dr. James Gary Dr. Mike Carini Dr. Martin Stone Dr. Huanjing Wang Dr. Doug Harper Dr. Greg Arbuckle Dr. Julie Ellis Dr. Kelly Madole Dr. Mark Revels Dr. Warren Campbell Dr. Steve Haggbloom Dr. Bruce Schulte Dr. David Keeling Dr. Les Pesterfield Dr. Phil Lienesch Dr. Xingang Fan

Dr. Stuart Burris Dr. Bruce Kessler

Dr. Darwin Dahl Dr. Richard Schugart

FROM: Kenneth Crawford, Chair

# SUBJECT: Agenda for Thursday, September 3, 4:00 p.m. in COHH 4123

### A. OLD BUSINESS:

Consideration of the minutes of the May 7, 2015 meeting.

### **B. NEW BUSINESS:**

### Consent Items

# Department of Agriculture

I. Proposal to Delete a Course

a. AGRI 473, Interactions in the Cave and Karst Environment, 3 hrs.

### Department of Engineering

I. Proposal to Revise Course Prerequisite/Corequisites a. EE 460, Continuous Control Systems, 3 hrs.

# **Action Items**

## Department of Engineering

I. Proposal to Revise a Program

a. Ref. 476, Systems Engineering, 21-21.5 hrs.

### C. OTHER BUSINESS

## Ogden College Dean's Office

I. Curriculum Committee, OCSE, Standing Rules

### Minutes - OCSE Curriculum Committee

May 7, 2015

### MEMBERS PRESENT:

Dr. Mark Revels
Dr. Huaning Wang
Dr. Bruce Kessler
Dr. Julie Ellis
Dr. Mike Carini
Dr. Warren Campbell
Dr. Kelly Madole

Dr. David Keeling by proxy

Dr. Steve Haggbloom by proxy

FROM: Ken Crawford, Chair

### **OLD BUSINESS:**

Ellis/Madole moved for approval of the minutes of the May 7, 2015 meeting. Motion approved.

### **NEW BUSINESS:**

# Consent Agenda

Ellis/Campbell moved to approved consent items. Motion approved.

# Action Agenda

### Department of Architectural & Manufacturing Sciences

Kessler/Campbell moved to approve proposal to revise a program, Ref. 555, Computer Information Technology. Motion approved.

# Department of Engineering

Ellis/Kessler moved to approve proposal to create a new course, EE 436, Electrical Machines and Drives. Motion approved.

### OTHER BUSINESS:

No other business.

Proposal Date: 5/5/2015

# College Name Department Name Proposal to Delete a Course (Consent Item)

Contact Person: Dr. Jack Rudolph, jack.rudolph@wku.edu, 745-6585

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1.	<ul> <li>Identification of course:</li> <li>1.1 Current course prefix (subject area) and number: AGRI 473</li> </ul>			
	1.2 Course title: Interactions in the Cave and Karst Environment			
	1.3	Cred hours: 3		
2.	Rationale for the course deletion: This course has not been offered in over 10 years.			
3.	Effect of course deletion on programs or other departments, if known: None			
4.	Proposed term for implementation: Spring 2016			
5.	Dates of prior committee approvals:			
	Depar	tment of Agriculture	5/8/2015	
	Ogder	n College Curriculum Committee		
	Under	graduate Curriculum Committee		
	Unive	rsity Senate		

Attachment: Course Inventory Form

Proposal Date: August 26, 2015

# Ogden College of Science and Engineering Department of Engineering Proposal to Revise Course Prerequisites/Corequisites (Consent Item)

Contact Person: Stacy Wilson, stacy.wilson@wku.edu, 5-5848

1.	Identification of course:				
	1.1 Course prefix (subject area) and number: EE 461				
	1.2 Course title: Discrete Control Systems				
2.	Current prerequisites: EE 460 Continuous Control Systems				
3.	Proposed prerequisites: EE 420 Signals and Linear Systems				
4.	Rationale for the revision of prerequisites: This course has only been taught one time with the current requirements because the pre-requisite of this course is taught in the fall semester of the senior year. Thus the audience for this course is limited. By changing the elective, students can take this course prior to their last semester. The integrity of the course will not be compromised by changing the pre-requisite requirements.				
5.	Effect on completion of major/minor sequence: This is an elective course. By changing the pre-requisite course, the students can take the course earlier in their academic career.				
6.	Proposed term for implementation: Spring 2016				
7.	Dates of prior committee approvals:				
	Department of Engineering	August 27, 2015			
	OSCE Curriculum Committee				
	Undergraduate Curriculum Committee				
	University Senate				

Proposal Date: August 24, 2015

# Ogden College of Science and Engineering Department of Engineering Proposal to Revise a Systems Engineering Minor Program (Action Item)

Contact Person: Robert Choate, robert.choate@wku.edu, 5-8852

# 1. Identification of program:

- 1.1 Current program reference number:476
- 1.2 Current program title: Systems Engineering
- 1.3 Credit hours: 21 (CE Majors), 21.5 (EE Majors) or 21 (ME Majors)

# 2. Identification of the proposed program changes: Addition of a course option to requirements

# 3. Detailed program description:

Table 1: Systems Engineering Minor Required Courses

Current Requir	ed Courses	Proposed Required Courses	
Course	Credit Hours	Course	Credit Hours
EE 210 or	3.5 (EE)	EE 210 or	3.5 (EE)
EM 221or EM 222	or 3 (CE or ME)	EM 221or EM 222	or 3 (CE or ME)
		STAT 301 or CE	
STAT 301	3	305	3
ENGR 400	3	ENGR 400	3
CE 498 or EE 401 or		CE 498 or EE 401	
ME 412	3	or ME 412	3
	12.5 (EE)		12.5 (EE)
TOTAL	or 12 (CE/ME)	TOTAL	or 12 (CE/ME)

<sup>\*</sup> A panel review of the student senior project proposal is required. The proposal must incorporate systems engineering principles outlined in ENGR 400.

Table 2 below contains the elective courses and is not changing.

Table 2: Systems Engineering Minor Elective Courses (Minimum Required: 9 Credit Hours)

Course	Description	Credit Hours
CE 303/304	Construction Management/Lab	3/1
CE 4xx**	CE Technical Electives	6
EE 460	Continuous Control Systems	4
EE 4xx**	EE Technical Electives	6
EM 313	Dynamics	3
ME 49x**	ME Technical Electives	6

- \*\* The technical elective must incorporate or expand on systems engineering principles as outlined in ENGR 400 Principles of Systems Engineering. Technical elective courses currently meeting this intent include but are not limited to: CE300 Floodplain Management, CE326 Engineering Law, CE360 Estimating Scheduling Bidding, CE361 Estimating Lab, CE366 Mechanical and Electrical Systems, CE378 Route Surveying, CE379 Route Surveying Lab, CE380 Boundary Surveying, CE381 Boundary Surveying Lab, CE383 Structural Steel Design, CE384 Reinforced Concrete Design, CE426 Advanced Structural Materials, CE436 Design/Construction Integration, CE440 Masonry Design and Construction, CE441, Masonry Construction Lab, CE451 Water and Wastewater Treatment, CE462 Hydraulic Engineering Systems, CE466 Contracts and Specifications, CE476 Highway Construction, CE486 Steel and Concrete Construction, EE410/411 Computer Design, EE443 Microfabrication and MEMS, EE 431 Introduction to Power Systems, EE432 Power Systems II, EE461 Discrete Control Systems, EE443 Communication Applications, ME49X Reliability Engineering, ME49X Advanced Strength of Materials, ME 49X, Energy Conversion and Sustainability, ME49X Failure Analysis and Prevention, ME 49X Finite Element Analysis and ME49X Kinematics and Dynamics.
- 4. Rationale for the proposed program change: The minor was intended to be a multidisciplinary program for all majors in the Department of Engineering. Many civil engineering students do not take STAT 301 but take CE 305 Risk Analysis instead. Risk analysis is a topic typically found in systems engineering programs.
- 5. Proposed term for implementation and special provisions (if applicable): Spring 2016
- 6. Dates of prior committee approvals:

Department of Engineering	August 27, 2015
OSCE Curriculum Committee	
Professional Education Council (if applicable)	•
Undergraduate Curriculum Committee	A
University Senate	(

# CURRICULUM COMMITTEE, OCSE, STANDING RULES

# I. Purpose and Functions

- A. To review recommendations concerning undergraduate college and university curricula which are relevant to the Ogden College of Science and Engineering and to the welfare and best interests of the University, its students, and its faculty.
- B. To render decisive action on matters of undergraduate curriculum and academic policy which affect only the College of Science and Engineering.
- C. To submit for consideration to the University Curriculum Committee all approved recommendations which do not qualify for final action under the conditions of Item B.
- D. To initiate, create or otherwise instigate thought, ideas, and action which will promote the best possible continuing improvement of all phases of science, mathematics, and technology at Western Kentucky University.

# II. Membership

- A. The Chairperson of the Committee shall be the Dean of the College or their designate. The Vice-Chair shall rotate annually among the Department Heads. The Vice-Chair will serve as Acting Chair in the absence of the Chairperson.
- B. The Committee membership shall consist of the Department Head and one elected faculty representative from each Department. Faculty representatives shall be elected for two years. The Departments of Biology, Computer Science, Architectural & Manufacturing Sciences, Mathematics, and Physics & Astronomy shall elect members in even-numbered years, and the Departments of Agriculture, Chemistry, Engineering, Geography & Geology, and Psychological Sciences, in odd-numbered years. The faculty representatives shall be elected in the spring semester to take office at the beginning of the following fall semester. Other faculty members may be invited by any member of the Committee to attend meetings as associate contributors without voting privileges.
- C. An absent member may designate a proxy to attend a meeting. A member of the Ogden Curriculum Committee cannot hold more than one proxy.

## III. Meetings

A. All meetings will be called by the Committee Chairperson. The Curriculum Committee shall meet once a month during the academic year unless changed by a vote of the Committee. The date, time, and place of the meetings are to be determined by the Committee Chairperson.

- B. A quorum will consist of a simple majority of all members.
- C. A legal vote will consist of a simple majority of the quorum.
- D. A member may designate a proxy by email to the Chairperson in advance of the meeting. The proxy will count toward the determination of a quorum.
- E. The meeting agenda will be posted electronically on the Ogden College Curriculum Committee web site at least three days in advance of the meeting.
- F. Requests for items to be included on the agenda will be submitted electronically to the Dean's Office no later than six days before the meeting.

# IV. Procedural Rules and Regulations

Guidelines for procedures in all Committee activities will be established and reviewed periodically to insure the maximum effectiveness and efficiency of the Curriculum Committee.

- A. The privilege of speaking to the Committee will be acknowledged by the Chair. Special circumstances which involve matters that may be expedited by open discussion without addressing the Chair will be recognized and declared by the Chair of the Committee.
- B. 1. All recommendations will be presented and outlined in the agenda.
  - 2. Any action originating in the OCSE Curriculum Committee shall be given a first and second reading before final action is taken on the proposal or recognition.
  - 3. Recommendations involving amendments to these Standing Rules shall be automatically tabled until the following meeting. Consideration for immediate action can be made only by unanimous consent. .
  - 4. All proposals will be considered for final action at the first reading, unless the Chair or a majority of the members present request a second reading.
- C. If any emergency arises which required immediate action of the Committee, the Chairperson (or Vice-Chair) will use the best possible means of obtaining a majority vote by the members.
- D. Subcommittees may be appointed for special investigations by the Chairperson. Subcommittees may include faculty members who are not members of the Curriculum Committee.

E. A uniform style of presentation will be adhered to concerning all proposals. The Ogden College Curriculum Committee will adopt the templates and format of proposals utilized by the University Curriculum Committee.

Approved April, 1972 OCSE Curriculum Committee

Revised October, 1981 OCSE Curriculum Committee

Revised October, 1984 OCSE Curriculum Committee

Revised October, 2015 OCSE Curriculum Committee