



Minutes of the Campus Curricula Committee Meeting
December 1, 2015
12:30 p.m., Room 106B Parker Hall

Attendees: Kaylon Buckner, Barry Flachsbart, Petra DeWitt, Kristy Giacomelli, Gearoid MacSithigh, Ilene Morgan, Stephen Raper, and Thomas Schuman.

Guest: Keng Siau

Discussion of whether to count Business, Finance, and Marketing courses for Social Science credit: to be continued at January CCC meeting.

The following curriculum forms were discussed and approved:

Course Change Forms:

File #4265	File #1234.1
File #1911.1	File #1903.4
File #2009.1	File #1738.1

Degree Change Forms:

File #147.10

Experimental Course Forms:

File #4266	File #4251
File #4267	

The meeting adjourned at 1:15 p.m.

Ilene H. Morgan, Chair
Missouri S&T Campus Curricula Committee

Course Inventory Change Request

New Course Proposal

Date Submitted: 10/08/15 1:04 pm

Viewing: **EXP ENG 6050 : Continuous Registration**

File: 4265

Last edit: 10/08/15 1:04 pm

Changes proposed by: pworsey

Requested	Spring 2016
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Explosives Engineering (EXP ENG)
Course Number	6050
Title	Continuous Registration
Abbreviated Course Title	Continuous Registration

Catalog

Description

Doctoral candidates who have completed all requirements for the degree except the dissertation and are away from the campus must continue to enroll for at least one hour of credit each registration period until the degree is completed. Failure to do so may invalidate the candidacy. Billing will be automatic as will registration upon payment.

Prerequisites

Field Trip

Statement

Credit Hours	LEC: 0	LAB: 0	IND: 1.0	RSD: 0
--------------	--------	--------	----------	--------

Total: 1.0

Required for

Majors

Elective for

Majors

In Workflow

1. **RMINNUCL Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **FS Meeting Agenda**
8. Faculty Senate Chair
9. Registrar
10. Ishelton
11. Peoplesoft

Approval Path

1. 10/08/15 3:29 pm
reflori: Approved for RMINNUCL Chair
2. 10/09/15 7:38 am
Kaylon Buckner (kleb6b):
Approved for CCC Secretary
3. 11/02/15 9:43 am
srafer: Approved for Engineering DSCC Chair
4. 11/11/15 3:39 pm
Kaylon Buckner (kleb6b):
Approved for Pending CCC

Justification for
new course:

Course is not available for Explosives Engineering doctoral candidates to enroll in
once they have completed all requirements for the degree except the dissertation.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Agenda post

5. 12/01/15 1:33 pm

Kaylon Buckner
(kleb6b):

Approved for CCC
Meeting Agenda

6. 12/01/15 1:57 pm

imorgan:
Approved for

Campus Curricula
Committee Chair

Key: 4265

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 10/07/15 2:41 pm

Viewing: **EXP ENG 6070 6002: Graduate Cooperative**

Experience

File: 1234.1

Last edit: 10/09/15 7:39 am

Changes proposed by: pworsey

Requested	Spring 2016 Fall 2014
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Explosives Engineering (EXP ENG)
Course Number	6070 6002
Title	Graduate Cooperative Experience
Abbreviated Course Title	Graduate Coop Experience

Catalog

Description

Students on an approved internship will complete a project designed by the advisor and employer. The project selected must require that student apply critical thinking skills and discipline specific knowledge in the work setting. A major report and a formal presentation are required.

Prerequisites

12 hours Exp Eng coursework.

Field Trip

Statement

Credit Hours	LEC: 0	LAB: 3	IND: 0	RSD: 0
--------------	--------	--------	--------	--------

Total: 3

Required for Majors	No
---------------------	----

Elective for Majors	No
---------------------	----

Justification for

In Workflow

1. **RMINNUCL Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **FS Meeting Agenda**
8. Faculty Senate Chair
9. Registrar
10. Ishelton
11. Peoplesoft

Approval Path

1. 10/08/15 3:29 pm
reflori: Approved for RMINNUCL Chair
2. 10/09/15 7:39 am
Kaylon Buckner (kleb6b):
Approved for CCC Secretary
3. 11/02/15 9:44 am
srafer: Approved for Engineering DSCC Chair
4. 11/11/15 3:39 pm
Kaylon Buckner (kleb6b):
Approved for Pending CCC

change:

Registrar's office has requested a change in number because the course apparently does not fit the 6002 designation.

Semesters

previously
offered as an
experimental
course

Co-Listed

Courses:

Course Reviewer

Comments

Agenda post

5. 12/01/15 1:33 pm

Kaylon Buckner
(kleb6b):

Approved for CCC
Meeting Agenda

6. 12/01/15 1:57 pm

imorgan:

Approved for
Campus Curricula
Committee Chair

Key: 1234

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 10/28/15 1:58 pm

Viewing: **MECH ENG 5449 : Robotic Manipulators and And Mechanisms**

File: 1911.1

Last edit: 11/11/15 3:37 pm

Changes proposed by: nisbett

Programs referencing this course
[AUTOENG-MI: Minor in Automation Engineering](#)
[MC ENG-BS: Mechanical Engineering BS](#)

Other Courses referencing this course
In The Catalog Description:
[AERO ENG 5449 : Robotic Manipulators & Mechanisms](#)
In The Prerequisites:
[COMP ENG 6880 : Advanced Topics in Robotics](#)
[COMP SCI 6403 : Advanced Topics in Robotics](#)
[ELEC ENG 6880 : Advanced Topics in Robotics](#)

Requested Effective Change Date: **Summer 2016** ~~Fall 2014~~
 Department: Mechanical & Aerospace Engineering
 Discipline: Mechanical Engineering (MECH ENG)
 Course Number: 5449
 Title: Robotic Manipulators **and And** Mechanisms
 Abbreviated Course Title: Robotic Manipulat & Mech

Catalog Description
 Overview of industrial applications, manipulator systems and geometry. Manipulator kinematics; hand location, velocity and acceleration. Basic formulation of manipulator dynamics and control. Introduction to machine vision. Projects include robot programming, vision-aided inspection and guidance, and system integration.

Prerequisites
Mech Eng 3313; Comp Sci 1970 or Comp Sci 1971 or Comp Sci 1972 or Comp Sci 1570. ~~1970, Mech Eng 3313.~~

In Workflow

1. **RMECHENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **FS Meeting Agenda**
8. Faculty Senate Chair
9. Registrar
10. Ishelton
11. Peoplesoft

Approval Path

1. 10/28/15 2:04 pm
drallmei:
Approved for RMECHENG Chair
2. 10/28/15 2:15 pm
Kaylon Buckner (kleb6b):
Approved for CCC Secretary
3. 11/02/15 11:04 am
srafer: Approved for Engineering DSCC Chair
4. 11/11/15 3:39 pm
Kaylon Buckner (kleb6b):
Approved for

Field Trip
Statement

Credit Hours LEC: 2 LAB: 1 IND: 0 RSD: 0
Total: 3

Required for
Majors No

Elective for
Majors **Yes**~~No~~

Justification for
change:

Adding option for other programming languages to satisfy the prerequisite.

Semesters
previously
offered as an
experimental
course

Co-Listed AERO ENG 5449 - Robotic Manipulators & Mechanisms
Courses:

Course Reviewer
Comments

Pending CCC

Agenda post

5. 12/01/15 1:33 pm

Kaylon Buckner
(kleb6b):

Approved for CCC
Meeting Agenda

6. 12/01/15 1:57 pm

imorgan:

Approved for
Campus Curricula
Committee Chair

Key: 1911

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 11/05/15 12:32 pm

Viewing: **MET ENG 3220 : Introduction To Extractive Metallurgy**

File: 1903.4

Last approved: 11/03/14 3:53 am

Last edit: 11/05/15 1:16 pm

Changes proposed by: smiller

Programs referencing this course	MT ENG-BS: Metallurgical Engineering BS
Other Courses referencing this course	In The Prerequisites: MET ENG 3225 : Extractive Metallurgy Laboratory

Requested Effective Change Date **Summer 2016** ~~Spring 2015~~

Department	Materials Science & Engineering
Discipline	Metallurgical Engineering (MET ENG)
Course Number	3220
Title	Introduction To Extractive Metallurgy
Abbreviated Course Title	Intro Extractive Met

Catalog Description

Production and refining of metals by pyrometallurgy, hydrometallurgy, and electrometallurgy. Emphasis on heat and mass balance calculations for the unit processes of metals extraction. Introduction to the principles of combustion, heat utilization and recovery.

Prerequisites

"C" or better grade in Met Eng 1210. Preceded or accompanied by Met Eng 3330 or Cer Eng **3230** ~~3240~~ or Chem Eng 2210.

Field Trip

In Workflow

1. **RMATSENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **FS Meeting Agenda**
8. Faculty Senate Chair
9. Registrar
10. Ishelton
11. Peoplesoft

Approval Path

1. 11/05/15 1:11 pm
Richard Brow (brow): Approved for RMATSENG Chair
2. 11/05/15 1:16 pm
Kaylon Buckner (kleb6b): Approved for CCC Secretary
3. 11/12/15 1:43 pm
srafer: Approved for Engineering DSCC Chair
4. 11/12/15 1:52 pm
Kaylon Buckner (kleb6b): Approved for

Statement

Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0

Total: 3

Required for
Majors YesElective for
Majors NoJustification for
change:

Prerequisites had a typo (Cer 3240 instead of Cer 3230) and now none of our students can enroll.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer

Comments

Pending CCC

Agenda post

5. 12/01/15 1:33 pm

Kaylon Buckner

(kleb6b):

Approved for CCC

Meeting Agenda

6. 12/01/15 1:57 pm

imorgan:

Approved for

Campus Curricula

Committee Chair

History

1. Nov 3, 2014 by

smiller (1903.1)

Key: 1903

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 10/15/15 10:54 am

Viewing: **PHYSICS 1119 : General Physics Laboratory**

File: 2009.1

Last edit: 12/01/15 1:34 pm

Changes proposed by: waddill

Programs referencing this course

- [AP MATH-BS: Applied Mathematics BS](#)
- [BIO SC-BA: Biological Sciences BA](#)
- [BIO SC-BS: Biological Sciences BS](#)
- [CHEM-BA: Chemistry BA](#)
- [CHEM-BS: Chemistry BS](#)
- [CMP SC-BS: Computer Science BS](#)
- [CP ENG-BS: Computer Engineering BS](#)
- [EL ENG-BS: Electrical Engineering BS](#)
- [GL&GPH-BS: Geology and Geophysics BS](#)
- [PHYSIC-BS: Physics BS](#)
- [PRE-MED-MI: Pre-Medicine Minor](#)

Requested Effective Change Date **Spring 2016** ~~Fall 2014~~

Department: Physics
 Discipline: Physics (PHYSICS)
 Course Number: 1119
 Title: General Physics Laboratory
 Abbreviated Course Title: General Physics Lab

Catalog Description: Experiments related to topics studied in Physics **1111 and Physics 1145.** ~~1111.~~

Prerequisites: Preceded or accompanied by **either** Physics **1111 or Physics 1145.** ~~1111.~~

Field Trip Statement

Credit Hours: LEC: 0 LAB: 1 IND: 0 RSD: 0

In Workflow

1. **RPHYSICS Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **FS Meeting Agenda**
8. Faculty Senate Chair
9. Registrar
10. Ishelton
11. Peoplesoft

Approval Path

1. 10/15/15 10:57 am
waddill: Approved for RPHYSICS Chair
2. 10/15/15 11:13 am
Kaylon Buckner (kleb6b): Approved for CCC Secretary
3. 11/05/15 3:28 pm
imorgan: Approved for Sciences DSCC Chair
4. 11/11/15 3:39 pm
Kaylon Buckner

Total: 1

Required for
Majors No

Elective for
Majors No

Justification for
change:

Physics 1119 has always been the lab course for both Physics 1111 and Physics 1145.

Physics 1145 was inadvertently omitted in the original prerequisites.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **imorgan (10/30/15 10:16 am)**: Edited slightly based on DSCC discussion.
Comments

(kleb6b):
Approved for
Pending CCC
Agenda post
5. 12/01/15 1:34 pm
Kaylon Buckner
(kleb6b):
Approved for CCC
Meeting Agenda
6. 12/01/15 1:58 pm
imorgan:
Approved for
Campus Curricula
Committee Chair

Key: 2009

[Preview Bridge](#)

Course Inventory Change Request

Date Submitted: 10/15/15 10:56 am

Viewing: **PHYSICS 2119 : General Physics Laboratory**

File: 1738.1

Last edit: 12/04/15 11:26 am

Changes proposed by: waddill

Programs referencing this course

- [AP MATH-BS: Applied Mathematics BS](#)
- [BIO SC-BA: Biological Sciences BA](#)
- [BIO SC-BS: Biological Sciences BS](#)
- [CHEM-BA: Chemistry BA](#)
- [CHEM-BS: Chemistry BS](#)
- [CMP SC-BS: Computer Science BS](#)
- [CP ENG-BS: Computer Engineering BS](#)
- [EL ENG-BS: Electrical Engineering BS](#)
- [GL&GPH-BS: Geology and Geophysics BS](#)
- [PHYSIC-BS: Physics BS](#)
- [PRE-MED-MI: Pre-Medicine Minor](#)

Requested Effective Change Date
Summer 2016 ~~Fall 2014~~

Department: Physics
 Discipline: Physics (PHYSICS)
 Course Number: 2119
 Title: General Physics Laboratory
 Abbreviated Course Title: General Physics Lab

Catalog Description
 Experiments related to topics studied in Physics **2111 and Physics 2145.** ~~2111.~~

Prerequisites
 Preceded or accompanied by **either Physics 2111 or Physics 2145.** ~~2111.~~

Field Trip Statement

Credit Hours LEC: 0 LAB: 1 IND: 0 RSD: 0

In Workflow

1. **RPHYSICS Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **FS Meeting Agenda**
8. Faculty Senate Chair
9. Registrar
10. Ishelton
11. Peoplesoft

Approval Path

1. 10/15/15 10:57 am
waddill: Approved for RPHYSICS Chair
2. 10/15/15 11:13 am
Kaylon Buckner (kleb6b): Approved for CCC Secretary
3. 11/05/15 3:29 pm
imorgan: Approved for Sciences DSCC Chair
4. 11/11/15 3:39 pm
Kaylon Buckner

Total: 1

Required for
Majors No

Elective for
Majors No

Justification for
change:

Physics 2119 has always been the lab associated with Physics 2111 and Physics 2145.

Physics 2145 was originally omitted from the prerequisite list by mistake. This is to add it where it belongs.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **imorgan (10/30/15 10:17 am):** Edited slightly based on DSCC comments.
Comments

(kleb6b):
Approved for
Pending CCC
Agenda post
5. 12/01/15 1:33 pm
Kaylon Buckner
(kleb6b):
Approved for CCC
Meeting Agenda
6. 12/01/15 1:58 pm
imorgan:
Approved for
Campus Curricula
Committee Chair

Key: 1738

[Preview Bridge](#)

Program Change Request

Date Submitted: 10/30/15 10:23 am

Viewing: **BIO SC-BS : Biological Sciences BS**

File: 147.10

Last approved: 08/01/14 3:02 pm

Last edit: 10/30/15 11:20 am

Changes proposed by: imorgan

Catalog Pages Using this Program	Biological Sciences
Start Term	Fall 2016 8/1/2014
Program Code	BIO SC-BS
Department	Biological Sciences
Title	Biological Sciences BS

Program Requirements and Description

Bachelor of Science Biological Sciences Degree Requirements

A minimum of 130 credit hours is required for a Bachelor of Science degree in Biological Science.

A minimum grade of "C" is required for each Biological Science course used to fulfill the B.S. degree requirements.

These requirements for the B.S. degree are in addition to credit that is received for basic ROTC.

The Biological Science B.S. degree must include **49** ~~46~~ semester hours of biological sciences course work, to include:

BIO SCI 1201	Introduction To Biological Science	1
BIO SCI 1113	General Biology	3
or BIO SCI 1213	Principles of Biology	
BIO SCI 1219	General Biology Lab	2
BIO SCI 1223	Biodiversity	3

In Workflow

1. **RBIOLSCI Chair**
2. **CCC Secretary**
3. **Sciences DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **FS Meeting Agenda**
8. Faculty Senate Chair
9. Registrar
10. kristyg

Approval Path

1. 10/30/15 11:07 am huangy: Approved for RBIOLSCI Chair
2. 10/30/15 11:20 am Kaylon Buckner (kleb6b): Approved for CCC Secretary
3. 11/05/15 3:28 pm imorgan: Approved for Sciences DSCC Chair
4. 11/11/15 3:39 pm Kaylon Buckner (kleb6b): Approved for Pending CCC Agenda post
5. 12/01/15 1:33 pm Kaylon Buckner (kleb6b): Approved for CCC Meeting Agenda
6. 12/01/15 1:55 pm imorgan: Approved for Campus Curricula Committee Chair

History

1. Aug 1, 2014 by shannonk

BIO SCI 1229	Biodiversity Lab	1
BIO SCI 2213	Cell Biology	3
BIO SCI 2219	Cell Biology Laboratory	1
BIO SCI 2223	General Genetics	3
BIO SCI 2233	Evolution	3
BIO SCI 2263	Ecology	3
BIO SCI 4010	Seminar	1
Advanced biological sciences or approved course work in other departments for a total of 46 credit hours of biology-related classes to include at least one laboratory course from the following:		22
Advanced biological sciences or approved course work in other departments for a total of 49 credit hours of biology-related classes to include at least one laboratory course from the following:		25
BIO SCI 3319	Microbiology Lab	
or BIO SCI 3339	Human Anatomy Physiology I Lab	
or BIO SCI 3349	Human Anatomy and Physiology II Laboratory	
or BIO SCI 4329	Molecular Genetics Laboratory	
22 semester hours of chemistry to include general chemistry		22
19 semester hours of chemistry to include general chemistry		19
CHEM 1310 & CHEM 1319 & CHEM 1320 & CHEM 1100	General Chemistry I and General Chemistry Laboratory and General Chemistry II and Introduction To Laboratory Safety & Hazardous Materials	
CHEM 2210 & CHEM 2219 & CHEM 2220 & CHEM 2229	Organic Chemistry I and Organic Chemistry I Lab and Organic Chemistry II and Organic Chemistry II Lab	
CHEM 4610	General Biochemistry	
2 semesters of College (General) Physics and labs		8-10
2 semesters of College (Engineering) Physics and labs		8
PHYSICS 1145 & PHYSICS 1119	College Physics I and General Physics Laboratory	
or PHYSICS 1135	Engineering Physics I	
PHYSICS 2145 & PHYSICS 2119	College Physics II and General Physics Laboratory	
or PHYSICS 2135	Engineering Physics II	
Math and Statistics		8-9
MATH 1208	Calculus With Analytic Geometry I	
or MATH 1214	Calculus For Engineers I	
or MATH 1212	Business Calculus	
STAT 5425	Introduction to Biostatistics	
12 semester hours of humanities, excluding foreign language, and to include:		12
ENGLISH 1120 & ENGLISH 1160	Exposition And Argumentation and Writing And Research (entering students will normally take ENGLISH 1120 either semester of the first year)	
9 hours of social sciences, to include		9
HISTORY 1200	Modern Western Civilization (or equivalent)	
or HISTORY 1300	American History To 1877	
or HISTORY 1310	American History Since 1877	
or POL SCI 1200	American Government	
Total Credits		105-106

Elective credits: In consultation with his or her advisor, each student will elect sufficient additional courses to complete a minimum of 130 credit hours.

Justification for
request

(Original change needed to be shredded. This version matches Bio Sci's intentions. I've included their justification below.)

We are removing Biochemistry, CHEM 4610 as a requirement, although it can still count as an upper level Biology elective. The number of required Chemistry hours will decrease to 19 from 22, while number of elective Biology hours will increase from 22 to 25.

We removed Physics 1111 and 2111, General Physics, since they are no longer offered, and provided the option of Engineering Physics I and II instead. Total Physics hours will be 8.

Supporting
Documents

Course Reviewer
Comments

kleb6b (10/30/15 11:20 am): Update effective term

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 10/27/15 9:47 am

Viewing: **CIV ENG 6001.004 : Physicochemical Effects in Soils**

File: 4266

Last edit: 10/27/15 10:19 am

Changes proposed by: brackenl

Requested Spring 2016

Effective Change

Date

Department Civil, Architectural, and Environmental Engineering

Discipline Civil Engineering (CIV ENG)

Course Number 6001

Topic ID 004

Experimental Title Physicochemical Effects in Soils

Experimental Abbreviated Course Title Physicochem Soils

Instructors Dr. Bate Bate

Experimental

Catalog

Description

Soils are multi-phase particulate materials. The unique and inherent aspects of macro-scale soil behavior and associated phenomena are explored at the micro-scale.

Prerequisites

Civ Eng 3715.

Field Trip

Statement

None

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

In Workflow

1. RCIVILEN Chair
2. CCC Secretary
3. Engineering DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. Registrar

Approval Path

1. 10/27/15 10:01 am
Douglas Carroll (doug):
Approved for RCIVILEN Chair
2. 10/27/15 10:19 am
Kaylon Buckner (kleb6b):
Approved for CCC Secretary
3. 11/02/15 11:04 am
srafer: Approved for Engineering DSCC Chair
4. 11/11/15 3:39 pm
Kaylon Buckner (kleb6b):
Approved for Pending CCC Agenda post
5. 12/01/15 1:33 pm

new course:

There is lack of a course, which integrates the microscopic properties into the macroscopic behaviors of geomaterials in geotechnical engineering. However, multi-disciplinary research is the future of geotechnical engineering. This course fills in the gap and fosters the next generation geotechnical engineers with knowledge in geochemistry, physico-chemistry, and in-depth understanding of the emerging geotechnical areas, such as soil stabilization of polymers and biomediation.

All the geotechnical colleagues in Geotechnical Program feel the needs of this course.

Wants this to be a distance course.

Semester(s) N/A

previously taught

Co-Listed

Courses:

Course Reviewer

Comments

Kaylon Buckner

(kleb6b):

Approved for CCC

Meeting Agenda

6. 12/01/15 1:56 pm

imorgan:

Approved for

Campus Curricula

Committee Chair

Key: 4266

[Preview Bridge](#)

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 09/25/15 2:47 pm

Viewing: **ENG MGT 6001.002 : Financial Data Analysis**

File: 4251

Last edit: 12/01/15 1:36 pm

Changes proposed by: qinr

Requested Spring 2016

Effective Change

Date

Department Engineering Management and Systems Engineering

Discipline Engineering Management (ENG MGT)

Course Number 6001

Topic ID 002

Experimental Title
Financial Data Analysis

Experimental Abbreviated
Course Title
Financial Data Analysis

Instructors Ruwen Qin

Experimental
Catalog
Description

Statistical analysis of financial markets data (e.g., equity prices, exchange rates, and interest rates). The application of exploratory data analysis as well as more formal statistical methods such as regression, time series, principal component analysis (PCA), factor models, and Bayesian data analysis in modeling financial data will be covered.

Prerequisites

An undergraduate calculus based statistics course and one of Eng Mgt 6212, Sys Eng 6612, Eng Mgt 6213, or Sys Eng 6613.

Field Trip
Statement

Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0

In Workflow

1. **RENGMNGT Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Sciences DSCC Chair**
5. **Pending CCC Agenda post**
6. **CCC Meeting Agenda**
7. **Campus Curricula Committee Chair**
8. **Registrar**

Approval Path

1. 09/25/15 2:57 pm
Suzanna Long
(longsuz):
Approved for
RENGMNGT Chair
2. 09/28/15 8:12 am
Kaylon Buckner
(kleb6b):
Approved for CCC
Secretary
3. 10/09/15 2:07 pm
sraper: Approved
for Engineering
DSCC Chair
4. 10/09/15 2:35 pm
Kaylon Buckner
(kleb6b):
Approved for
Pending CCC
Agenda post
5. 11/06/15 9:34 am

Total: 3

Justification for
new course:

Students show great interest in hands-on experiences with statistical modeling and data analysis for financial markets using R (an open source software commonly used in various industries). With these experiences, students better prepare themselves for pursuing a career in financial engineering. The EMSE offers a Financial Engineering (FE) Certificate that is composed of four courses. This experimental course supplements the existing courses of FE certificate.

Semester(s)
previously taught

Co-Listed
Courses:

Stat 6001.002 - **Course Not Found**

Course Reviewer
Comments

sraper (10/06/15 10:06 am): Changed wording of course description in consultation with Dr. Qin.

kristyg (11/06/15 9:34 am): Rollback: Rollback for modification.

kleb6b (11/09/15 8:53 am): Edits per Dr. Raper and create Stat Co-list

sraper (11/12/15 1:42 pm): corrected prereq per email from Dr. Qin.

imorgan (11/12/15 2:07 pm): Corrected the prerequisites to match Dr. Qin's e-mail.

imorgan (11/12/15 2:11 pm): Fixed one thing, broke something else. I think it's fixed now.

Key: 4251

Kristy Giacomelli
(kristyg): Rollback
to Engineering
DSCC Chair for
CCC Meeting
Agenda

6. 11/12/15 1:42 pm
sraper: Approved
for Engineering
DSCC Chair

7. 11/12/15 2:12 pm
imorgan:
Approved for
Sciences DSCC
Chair

8. 11/12/15 2:14 pm
Kaylon Buckner
(kleb6b):
Approved for
Pending CCC
Agenda post

9. 12/01/15 1:37 pm
Kaylon Buckner
(kleb6b):
Approved for CCC
Meeting Agenda

10. 12/01/15 1:57 pm
imorgan:
Approved for
Campus Curricula
Committee Chair

[Preview Bridge](#)

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 10/29/15 9:41 am

Viewing: **MS&E 5001.001 : Chemistry of Construction**

Materials

File: 4267

Last edit: 12/01/15 3:01 pm

Changes proposed by: kumarad

Requested	Spring 2016
Effective Change Date	
Department	Materials Science & Engineering
Discipline	Materials Science & Eng (MS&E)
Course Number	5001
Topic ID	001
Experimental Title	Chemistry of Construction Materials
Experimental Abbreviated Course Title	Constr. Mat. Chem.
Instructors	Aditya Kumar

Experimental Catalog Description

The objective of the course is to utilize fundamental material science concepts to understand, analyze, and describe the chemistry of construction materials. Special attention will be paid to discuss mechanisms that describe composition-structure-property relations in cementitious materials.

Prerequisites

Senior or Graduate Standing.

Field Trip Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0
--------------	--------	--------	--------	--------

In Workflow

1. **RMATSENG Chair**
2. **CCC Secretary**
3. **Engineering DSCC Chair**
4. **Pending CCC Agenda post**
5. **CCC Meeting Agenda**
6. **Campus Curricula Committee Chair**
7. **Registrar**

Approval Path

1. 11/05/15 1:12 pm
Richard Brow (brow): Approved for RMATSENG Chair
2. 11/05/15 1:18 pm
Kaylon Buckner (kleb6b): Approved for CCC Secretary
3. 11/12/15 1:43 pm
srafer: Approved for Engineering DSCC Chair
4. 11/12/15 1:53 pm
Kaylon Buckner (kleb6b): Approved for Pending CCC Agenda post
5. 12/01/15 3:02 pm
Kaylon Buckner (kleb6b): Approved for CCC

Total: 3

Justification for
new course:

This is a necessary course for graduate students working in the area of construction materials. It is a basic course for other disciplines that are part of the Best-in-the-Class initiative on Advanced Materials for Sustainable Infrastructure.

Semester(s) None
previously taught

Co-Listed
Courses:

Course Reviewer
Comments

Meeting Agenda
6. 12/01/15 3:10 pm
imorgan:
Approved for
Campus Curricula
Committee Chair

Key: 4267

[Preview Bridge](#)