



Minutes of the Campus Curricula Committee Meeting

August 12, 2020

8:15am, Virtual Zoom

(For Faculty Senate Meeting of September 10, 2020)

Attendees: Steve Raper, Petra Dewitt, Katie Shannon, Matt Insall, Cecil Eng Huang Chua, Michael Davis, Kyle Perry, Michael Gosnell, Kristy Giacomelli-Feys and Marita Tibbetts

After discussion and amendments, the following curriculum changes were approved:

Course Change Forms:

File: 4720	BUS 1414 : The Inclusive Workplace
File: 4406.8	BUS 5230 : Financial Statement Analysis
File: 507.10	BUS 5360 : Business Operations
File: 2417.1	CER ENG 5230 : Glass Science And Engineering
File: 4279.22	CHEM ENG 3111 : Numerical Computing in Chemical and Biochemical Engineering
File: 4501.6	CHEM ENG 6180 : Advanced Applications of Computational Fluid Dynamics
File: 938.1	COMP SCI 4010 : Seminar
File: 1668.1	ERP 4610 : Customer Relationship Management in ERP Environment
File: 2527.3	ERP 6610 : Advanced Customer Relationship Management in ERP Environment
File: 2566.8	FINANCE 5160 : Corporate Finance II
File: 2190.10	FINANCE 5260 : Investments I
File: 4499.6	FINANCE 5310 : Financial Technology and Analytics
File: 920.10	IS&T 4654 : Introduction to Web Design and Digital Media Studies
File: 2390.2	IS&T 5680 : Digital Media Development and Interactive Design
File: 445.4	IS&T 6654 : Advanced Web Design and Digital Media Studies
File: 1614.6	IS&T 6680 : Advanced Digital Web and New Media Development and Interactive Design
File: 4724	MECH ENG 5539 : Modeling Across Scales in Computational Mechanics
File: 2466.1	MUSIC 2111 : Individual Music Instruction III
File: 1983.1	PET ENG 4631 : Applied Reservoir Simulation
File: 79.3	PET ENG 6621 : Advanced Applied Reservoir Simulation

Degree Change Forms:

File: 145.11	BIOINFO-MI : Bioinformatics Minor
File: 11.6	BUS&MS-MI : Business Minor
File: 28.65	CMP SC-BS : Computer Science BS
File: 40.6	E&S COM-MI : Elect & Social Commerce Minor
File: 155.55	EL ENG-BS : Electrical Engineering BS



File: 50.7 ENTPRNS-MI : Entrepreneurship Minor
File: 138.12 MGMT-MI : Management Minor
File: 190.1 MUSIC-MI : Music Minor
File: 359 PROPOSED : Aggregates Management CT
File: 335.6 SFTYENG-CT : Safety Engineering

Experimental Course forms:

File: 4722 CIV ENG 6001.007 : Characterization and Modeling of Cement-Based Materials
File: 4721 COMP ENG 6001.006 : Adaptive Resonance Theory and Applications
File: 4723 MECH ENG 5001.005 : Neuromechanics of Human Movement
File: 4734 MUSIC 2001.004 : The Heart of Rock n' Roll
File: 4715 STAT 5001.003 : Computational Bayesian Methods using Python
File: 4719 STAT 5001.004 : Design and Analysis of Clinical Trials
File: 4717 STAT 5001.005 : Foundations of Statistical Learning
File: 4718 STAT 5001.006 : Design and Analysis of Epidemiologic Studies
File: 4716 STAT 5001.007 : Statistical Shape Analysis
File: 4711 STAT 5001.008 : Topological Data Analysis

Forms referred back to committee for additional input:

File: 4709 COMP SCI 5001.008 : Computer Science BootCamp Part 1
File: 4710 COMP SCI 5001.009 : Computer Science BootCamp Part 2
File: 4712 ENG MGT 4281 : Probabilistic Risk Analysis
File: 4713 ENG MGT 5281 : Probabilistic Risk Assessment I
File: 4714 SYS ENG 5281 : Probabilistic Risk Analysis I

New Business:

2020-2021 CCC Calendar was approved

The meeting adjourned at 9:30am.

A handwritten signature in black ink that reads "Stephen A. Raper".

Stephen A. Raper, Chair
Missouri S&T Campus Curricula Committee

Course Change Request

New Course Proposal

Date Submitted: 06/08/20 5:48 pm

Viewing: **BUS 1414 : The Inclusive**

Workplace

File: 4720

Last edit: 08/19/20 9:01 am

Changes proposed by: cecq8z

Programs
referencing this
course

[MOBLB&T-MI: Mobile Bus & Digital Transformation](#)

[MGMT-MI: Management Minor](#)

[E&S COM-MI: Elect & Social Commerce Minor](#)

[ENTPRNS-MI: Entrepreneurship Minor](#)

Requested Spring 2021

Effective Change

Date

Department

Business and Information Technology

Discipline

Business (BUS)

Course Number 1414

Title

In Workflow

1. **RBUSADMN
Chair**

2. **CCC Secretary**

3. **Social 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. CAT entry

11. Peoplesoft

Approval Path

1. 06/08/20 4:19 pm
siauk: Rollback to
Initiator

2. 06/09/20 11:55
am
siauk: Approved

for RBUSADMN

Chair

3. 06/09/20 3:08 pm

Kristy Giacomelli-

Feys (kristyg):

Approved for CCC

Secretary

4. 06/17/20 12:29

pm

Cecil Eng Huang

Chua (cchua):

Approved for

Social Sciences

DSCC Chair

5. 08/03/20 9:08 am

Kristy Giacomelli-

Feys (kristyg):

Approved for

Pending CCC

Agenda post

6. 08/19/20 9:02 am

Marita Tibbetts

(tibbettsmg):

Approved for CCC

Meeting Agenda

7. 08/19/20 10:27

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

The Inclusive Workplace

Abbreviated Course Title The Inclusive Workplace

Catalog

Description

This course will cover topics such as corporate social responsibility, ethics, diversity and inclusion (i.e. national culture, race, religion, age, gender, sexual orientation, and ability). Students will learn to recognize their own biases, understand the benefits of inclusion, and be exposed to a few strategies utilized to achieve an inclusive workplace.

Prerequisites

Field Trip

Statement

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

Required for Majors	Yes
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Elective for Majors	No
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Justification for new course:

Required for new AACSB accreditation rules

Semesters previously offered as an experimental course

Co-Listed

Courses:

Course Reviewer

Comments

siauk (06/08/20 4:19 pm): Rollback: Can we add this as an elective for Mobile Commerce & Digital Transformation minor also?

Key: 4720

[Preview Bridge](#)

Course Change Request

Date Submitted: 06/01/20 11:12 am

Viewing: **BUS 5230 : Financial Statement**

Analysis

File: 4406.8

Last approved: 06/17/19 3:36 am

Last edit: 06/01/20 11:12 am

Changes proposed by: cecq8z

Programs
referencing this
course

[BUS&MS-BS: Business and Mgmt Systems BS](#)

[FIN TCH-MI: Minor in Financial Technology, Analytics and Transformation](#)

[FINANCE-CT: Finance CT](#)

[FIN TCH-CT: Financial Technology, Analytics and Transformation CT](#)

[FINANCE-MI: Finance Minor](#)

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. CAT entry
11. Peoplesoft

Requested **Spring 2021** ~~Fall 2019~~

Effective Change

Date

Department

Business and Information Technology

Discipline

Business (BUS)

Approval Path

1. 06/08/20 4:20 pm
siauk: Approved for RBUSADMN Chair
2. 06/09/20 3:09 pm
Kristy Giacomelli-Feys (kristyg):

Course Number	5230	Approved for CCC Secretary
Title		3. 06/17/20 12:29 pm
Abbreviated Course Title	Financial Stmt Analysis	Cecil Eng Huang
Catalog Description		Chua (cchua): Approved for Social Sciences DSCC Chair
Prerequisites		4. 08/03/20 9:08 am
Field Trip Statement		Kristy Giacomelli-Feys (kristygf): Approved for Pending CCC Agenda post
Credit Hours	LEC: 3 RSD: 0 Total: 3	5. 08/19/20 9:02 am
LAB: 0		Marita Tibbetts (tibbettsmg): Approved for CCC Meeting Agenda
IND: 0		6. 08/19/20 10:27 am
Required for Majors	No	Stephen Raper (sraper): Approved for Campus Curricula Committee Chair
Elective for Majors	Yes	
Justification for change:		
Semesters previously offered as an experimental course		
Co-Listed Courses:		
Course Reviewer Comments		History 1. May 1, 2017 by Barry Flachsbart (barryf)

Financial Statement Analysis

Analysis and interpretation of financial statements for profitability analysis, credit analysis, and other business analyses that rely on financial data. Introduces emerging roles of accounting analytics. Illustrates data analytics concepts and techniques to detect earning management, predict fraud, and to provide insights into other business strategies.

BUS 1210 or graduate standing and financial accounting knowledge. Finance-2150 or equivalent basic corporate finance knowledge.

Experience of the instructor is that accounting knowledge is more critical than financial knowledge for the course.

Course Change Request

Date Submitted: 06/01/20 11:12 am

Viewing: **BUS 5360 : Business Operations**

File: 507.10

Last approved: 05/04/15 3:20 am

Last edit: 06/01/20 11:12 am

Changes proposed by: cecq8z

Programs
referencing this
course

- [MGMT-MI: Management Minor](#)
- [BUS&MS-BS: Business and Mgmt Systems BS](#)
- [DSCMGMT-CT: Digital Supply Chain Mgmt CT](#)
- [DSCMGMT-MI: Digital Supply Chain Mgt Minor](#)

Requested **Spring 2021** ~~01/12/2016~~

Effective Change

Date

Department

Business and Information Technology

Discipline

Business (BUS)

Course Number 5360

Title

Abbreviated Business Operations

Course Title

In Workflow

- 1. RBUSADMN
Chair**
- 2. CCC Secretary**
- 3. Social 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. CAT entry
11. Peoplesoft

Approval Path

- 06/08/20 4:20 pm
siauk: Approved
for RBUSADMN
Chair
- 06/09/20 3:09 pm
Kristy Giacomelli-
Feys (kristyg):

<p>Catalog Description</p> <p>Prerequisites</p> <p>Field Trip Statement</p> <p>Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0 Total: 3</p> <p>Required for Majors No</p> <p>Elective for Majors Yes</p>	<p>Approved for CCC Secretary</p> <p>3. 06/17/20 12:29 pm Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair</p> <p>4. 08/03/20 9:08 am Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC</p>
<p>Justification for change:</p> <p>Semesters previously offered as an experimental course</p> <p>Co-Listed Courses:</p>	<p>Agenda post</p> <p>5. 08/19/20 9:02 am Marita Tibbetts (tibbettsmg): Approved for CCC Meeting Agenda</p> <p>6. 08/19/20 10:27 am Stephen Raper (sraper): Approved for</p>
<p>Course Reviewer Comments</p>	<p>Campus Curricula Committee Chair</p>

Key: 507

History

1. Jul 7, 2014 by barryf (507.1)
2. May 4, 2015 by barryf (507.4)

Business Operations

This course examines the concepts, processes, and institutions that are fundamental to an understanding of business operations within organizations. Emphasis is on the management and organization of manufacturing and service operations and the application of quantitative methods to the solution of strategic, tactical and operational problems.

BUS 1210 or ENG MGT 2211; at least Junior standing; and one of the following: STAT 1111, STAT 1115, STAT ~~1116~~, ~~STAT~~ 3111, STAT 3113, STAT 3115, or STAT 3117.

STAT 1116 has been delisted.

Course Change Request

Date Submitted: 06/03/20 3:24 pm

Viewing: **CER ENG 5230 : Glass Science And Engineering**

File: 2417.1

Last edit: 08/19/20 9:02 am

Changes proposed by: smiller

Programs
referencing this
course

[ADV MAT-CT: Advanced Engineering Materials Certificate](#)

Requested **Spring 2021 08/14/2018**

Effective Change

Date

Department

Materials Science & Engineering

Discipline

Ceramic Engineering (CER ENG)

Course Number 5230

Title

Abbreviated Glass Science And Engr

Course Title

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. CAT entry
11. Peoplesoft

Approval Path

1. 06/03/20 3:38 pm
Greg Hilmas
(ghilmas):
Approved for
RMATSENG Chair
2. 06/09/20 3:09 pm
Kristy Giacomelli-
Feys (kristyg):

Approved for CCC
Secretary

3. 07/23/20 9:15 am

Stephen Raper

(sraper):

Approved for

Engineering DSCC

Chair

4. 08/03/20 9:08 am

Kristy Giacomelli-

Feys (kristyg):

Approved for

Pending CCC

Agenda post

5. 08/19/20 9:03 am

Marita Tibbetts

(tibbettsmg):

Approved for CCC

Meeting Agenda

6. 08/19/20 10:27

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

Glass Science And Engineering

Catalog

Description

The development, manufacturing methods, applications, and properties of flat, fiber, container, chemical, and special purpose glasses. Composition/property

relationships for glasses and nucleation-crystallization processes for glass-ceramics are also covered.

Prerequisites

Consent of Instructor required. ~~"C" or better grade in Cer Eng 2120.~~

Field Trip

Statement

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

Total: 3

Required for No

Majors

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

Majors

Justification for
change:

remove prerequisite to allow graduate students from other programs and external customers seeking the Advanced Engineering Materials graduate certificate to enroll.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer

Comments

sraper (07/21/20 9:50 am): Added prereq state per Scott Miller and checked elective for majors.

Key: 2417

[Preview Bridge](#)

Course Change Request

Date Submitted: 05/27/20 11:05 am

Viewing: **CHEM ENG 3111 : Numerical Computing in Chemical and Biochemical Engineering**

File: 4279.22

Last approved: 11/04/19 6:00 am

Last edit: 06/09/20 3:10 pm

Changes proposed by: luksc

Programs

referencing this course

[CH ENG-BS: Chemical Engineering BS](#)

Other Courses

referencing this course

In The Prerequisites:

[CHEM ENG 3131 : Separations in Chemical and Biochemical Engineering](#)

[CHEM ENG 3150 : Chemical Engineering Reactor Design](#)

Requested Spring **2021** ~~2020~~

Effective Change

Date

Department

In Workflow

1. **RCHEMENG 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. CAT entry
11. Peoplesoft

Approval Path

1. 05/27/20 10:42 am
Kristy Giacomelli-Feys (kristyg):
Rollback to Initiator
2. 05/27/20 11:06 am

Chemical and Biochemical Engineering

Discipline

Chemical Engineering (CHEM ENG)

Course Number 3111

Title

Abbreviated Numerical Computing

Course Title

Christi Luks

(luksc): Approved for RCHEMENG Chair

3. 06/09/20 3:10 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary

Catalog Description

Prerequisites

Field Trip

Statement

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

Required for Majors Yes

Elective for Majors No

4. 07/23/20 9:15 am
Stephen Raper (sraper): Approved for Engineering DSCC Chair

5. 08/03/20 9:08 am
Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post

6. 08/19/20 9:03 am
Marita Tibbetts

(tibbettsmg): Approved for CCC Meeting Agenda

7. 08/19/20 10:27 am

Stephen Raper (sraper): Approved for Campus Curricula Committee Chair

Justification for change:

Semesters previously offered as an experimental course

Co-Listed Courses:

History

1. Jan 24, 2017 by Daniel Forciniti (forcinit)
2. Mar 6, 2017 by kristyg (4279.14)
3. Feb 18, 2019 by jcwang (4279.17)
4. Nov 4, 2019 by jcwang (4279.21)

Numerical Computing in Chemical and Biochemical Engineering

Students will add to their programming skills by exploring numerical computational techniques for solving and analyzing algebraic and calculus-based equations and systems of equations that describe chemical engineering processes.

Math 3304 and either ~~both~~ Comp Sci **1500, 1570 and Comp Sci 1580**, or both Comp Sci **1570 and Comp Sci 1580, 1971 and Comp Sci 1981**, or both Comp Sci **1971 and Comp Sci 1981, 1972 and Comp Sci 1982; preceded** or **both Comp Sci 1972 and Comp Sci 1982; preceded** or accompanied by Chem Eng 2100.

New computer science prerequisites structure

Course Reviewer

Comments

kristyg (05/27/20 10:42 am): Rollback: Rolling back to re-submit with the addition of you as chair.

kristyg (06/09/20 3:10 pm): This was submitted too late for Fall 2020 deadline.

Key: 4279

[Preview Bridge](#)

Course Change Request

Date Submitted: 06/09/20 9:35 am

Viewing: **CHEM ENG 6180 : Advanced Applications of Computational Fluid Dynamics**

File: 4501.6

Last approved: 02/05/18 3:29 am

Last edit: 06/09/20 3:11 pm

Changes proposed by: luksc

Requested **Spring 2021** ~~08/14/2018~~

Effective Change

Date

Department

Chemical and Biochemical Engineering

Discipline

Chemical Engineering (CHEM ENG)

Course Number 6180

Title

Abbreviated Advanced CFD Application

Course Title

Catalog

Description

Prerequisites

In Workflow

1. **RCHEMENG 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. CAT entry
11. Peoplesoft

Approval Path

1. 06/09/20 12:13 pm
Christi Luks (luksc): Approved for RCHEMENG Chair
2. 06/09/20 3:11 pm
Kristy Giacomelli-

Feys (kristyg):
Approved for CCC
Secretary

3. 07/23/20 9:15 am

Stephen Raper

(sraper):

Approved for
Engineering DSCC
Chair

4. 08/03/20 9:08 am

Kristy Giacomelli-

Feys (kristyg):

Approved for
Pending CCC

Agenda post

5. 08/19/20 9:03 am

Marita Tibbetts

(tibbettsmg):

Approved for CCC
Meeting Agenda

6. 08/19/20 10:27

am

Stephen Raper

(sraper):

Approved for
Campus Curricula
Committee Chair

History

1. Feb 5, 2018 by

Joseph Smith

(smithjose)

Advanced Applications of Computational Fluid Dynamics

Advanced applications of CFD analyses is presented to investigate mass, momentum and heat transport in complex geometries with general initial and boundary conditions. Students will gain practical experience using commercial CFD codes and learn and apply a general algorithm for solving challenging industrial problems using tutorials.

Chem Eng **5100** ~~4150~~ and **either** Chem Eng **3111 or Chem Eng 5150.** ~~5100.~~

Field Trip

Statement

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

Required for Majors	No
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Elective for Majors	Yes
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Justification for
change:

Chem Eng 5150 has been co-listed with Chem Eng 4150, but in the future we will not be offering the 4xxx version. ChemEng 3111 has been added since this course was initially designed and has appropriate content to serve as a prerequisite for students who did their undergraduate work here.

Semesters
previously
offered as an
experimental
course

Enrollment: Spring 2015- 14, Spring 2016- 16, Spring 2017- 6

Co-Listed
Courses:

Course Reviewer

Comments

kristyg (06/09/20 3:11 pm): Submitted too late for Fall 2020 deadline.

Key: 4501

[Preview Bridge](#)

Course Change Request

Date Submitted: 05/01/20 10:57 pm

Viewing: **COMP SCI 4010 : Seminar**

File: 938.1

Last edit: 06/09/20 3:12 pm

Changes proposed by: zhupe

Requested **Spring 2021** ~~08/14/2018~~

Effective Change

Date

Department

Computer Science

Discipline

Computer Science (COMP SCI)

Course Number 4010

Title

Abbreviated Seminar

Course Title

In Workflow

1. RCOMPSCI 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. CAT entry
11. Peoplesoft

Catalog

Description

Prerequisites

Field Trip

Statement

Credit Hours

LEC: 0

LAB: 0

IND: 0

RSD: **1 0**

Total: **1 0-6**

No

Approval Path

1. 05/04/20 8:03 am
Bruce McMillin
(ff): Approved for
RCOMPSCI Chair
2. 06/09/20 3:12 pm
Kristy Giacomelli-
Feys (kristygf):

Approved for CCC
Secretary

3. 07/23/20 9:15 am

Stephen Raper

(sraper):

Approved for

Engineering DSCC

Chair

4. 08/03/20 9:26 am

Kristy Giacomelli-

Feys (kristyg):

Approved for

Pending CCC

Agenda post

5. 08/19/20 9:53 am

Marita Tibbetts

(tibbettsmg):

Approved for CCC

Meeting Agenda

6. 08/19/20 10:27

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

Seminar

Discussion of current topics.

Junior ~~Senior~~ standing.

Required for

Majors

Elective for
Majors

Yes ~~No~~

Justification for
change:

Open it up to the undergraduates as a 1-credit elective course. This would allow more professionals for industry to come in and communicate with the students and, thus strengthen our industry ties.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

kristyg (06/09/20 3:12 pm): This was submitted too late for Fall 2020 deadline.

Key: 938

[Preview Bridge](#)

Course Change Request

Date Submitted: 06/01/20 11:12 am

Viewing: **ERP 4610 : Customer Relationship Management in ERP Environment**

File: 1668.1

Last edit: 08/19/20 9:56 am

Changes proposed by: cecq8z

Programs
referencing this
course

[MOBLB&T-MI: Mobile Bus & Digital Transformation](#)

[BUS&MS-BS: Business and Mgmt Systems BS](#)

[DSCMGMT-MI: Digital Supply Chain Mgt Minor](#)

Requested **Spring 2021 ~~08/14/2018~~**

Effective Change

Date

Department

Business and Information Technology

Discipline

Enterprise Resource Planning (ERP)

Course Number 4610

Title

Abbreviated Customer Relationship Mgt

Course Title ERP

In Workflow

1. **RBUSADMN
Chair**
2. **CCC Secretary**
3. **Social 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. CAT entry
11. Peoplesoft

Approval Path

1. 06/08/20 4:22 pm
siauk: Approved
for RBUSADMN
Chair
2. 06/09/20 3:16 pm
Kristy Giacomelli-
Feys (kristyg):

- Approved for CCC Secretary
- 3. 06/17/20 12:29 pm
Cecil Eng Huang Chua (cchua):
Approved for Social Sciences DSCC Chair
- 4. 08/03/20 9:28 am
Kristy Giacomelli-Feys (kristyg):
Approved for Pending CCC Agenda post
- 5. 08/19/20 9:56 am
Marita Tibbetts (tibbettsmg):
Approved for CCC Meeting Agenda
- 6. 08/19/20 10:27 am
Stephen Raper (sraper):
Approved for Campus Curricula Committee Chair

Customer Relationship Management in ERP Environment

Catalog

Description

The course emphasizes identification (targeting), acquisition, retention, and development (expansion) of (profitable) customers, as well as effective and efficient

management of customers, using information technology. SAP CRM, SAS BI tools, and ~~Sybase~~ mobile application development are **used to illustrate concepts in the class.** ~~used.~~

Prerequisites

ERP 2110 or preceded or accompanied by ERP 5110.

Field Trip

Statement

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

Required for	No
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Majors

Elective for	Yes No
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Majors

Justification for
change:

Description made consistent with ERP 6610

Semesters
previously
offered as an
experimental
course

Co-Listed

Courses:

Course Reviewer

Comments

Course Change Request

Date Submitted: 06/01/20 11:13 am

Viewing: **ERP 6610 : Advanced Customer Relationship Management in ERP Environment**

File: 2527.3

Last approved: 09/24/14 3:46 am

Last edit: 06/01/20 11:13 am

Changes proposed by: cecq8z

Programs
referencing this
course

[ANA&DTA-CT: Bus Analytics & Data Sci CT](#)

[DATA WR-CT: Business Intelligence CT](#)

[DSCMGMT-CT: Digital Supply Chain Mgmt CT](#)

[ERP-CT: Enterprise Resource Plan CT](#)

[MOBLB&T-CT: Mobile Business and Digital Transformation CT](#)

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. CAT entry
11. Peoplesoft

Requested **Spring 2021 ~~08/01/2014~~**

Effective Change

Date

Department

Business and Information Technology

Discipline

Enterprise Resource Planning (ERP)

Approval Path

1. 06/08/20 4:23 pm
siauk: Approved for RBUSADMN Chair
2. 06/09/20 3:16 pm
Kristy Giacomelli-Feys (kristyg):

Course Number 6610

Title

Approved for CCC
Secretary

3. 06/17/20 12:29
pm

Cecil Eng Huang
Chua (cchua):
Approved for
Social Sciences
DSCC Chair

4. 08/03/20 9:28 am

Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post

5. 08/19/20 9:56 am

Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda

6. 08/19/20 10:28
am

Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

History

1. Sep 24, 2014 by
lahne (2527.1)

Abbreviated
Course Title

Adv CRM

Catalog

Description

The course emphasizes identification ~~identification~~ (targeting), acquisition, retention, and development (expansion) of (profitable) **customers, as well as effective and efficient management of customers, using IT.** ~~customers. Effective and efficient mgmt of customers, using IT.~~ SAP CRM, SAS BI tools, and ~~Sybase~~ mobile application development are **used to illustrate concepts in the class.** ~~used.~~ Research paper and presentation required.

Prerequisites

ERP 2110 or preceded or accompanied by ERP 5110.

Field Trip

Statement

Credit Hours
Total: 3

LEC: 3

LAB: 0

IND: 0

RSD: 0

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

Description to be made consistent with ERP 4610. Short forms of words removed.

Semesters
previously
offered as an
experimental
course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 2527

[Preview Bridge](#)

Course Change Request

Date Submitted: 06/01/20 11:13 am

Viewing: **FINANCE 5160 : Corporate Finance**

II

File: 2566.8

Last approved: 06/17/19 3:36 am

Last edit: 06/01/20 11:13 am

Changes proposed by: cecq8z

Programs
referencing this
course

[BUS&MS-BS: Business and Mgmt Systems BS](#)

[FIN TCH-MI: Minor in Financial Technology, Analytics and Transformation](#)

[FINANCE-CT: Finance CT](#)

[FIN TCH-CT: Financial Technology, Analytics and Transformation CT](#)

[FINANCE-MI: Finance Minor](#)

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. CAT entry
11. Peoplesoft

Requested **Spring 2021** ~~Fall 2019~~

Effective Change

Date

Department

Business and Information Technology

Discipline

Finance (FINANCE)

Approval Path

1. 06/08/20 4:23 pm
siauk: Approved for RBUSADMN Chair
2. 06/09/20 3:16 pm
Kristy Giacomelli-Feys (kristyg):

Course Number	5160	Approved for CCC Secretary
Title		3. 06/17/20 12:29 pm
Abbreviated Course Title	Corporate Finance II	Cecil Eng Huang
Catalog Description		Chua (cchua): Approved for Social Sciences DSCC Chair
Prerequisites		4. 08/03/20 9:28 am
Field Trip Statement		Kristy Giacomelli-Feys (kristygf): Approved for Pending CCC Agenda post
Credit Hours	LEC: 3 RSD: 0	5. 08/19/20 9:56 am
	LAB: 0	Marita Tibbetts (tibbettsmg): Approved for CCC Meeting Agenda
	IND: 0	6. 08/19/20 10:28 am
Required for Majors	No	Stephen Raper (sraper): Approved for Campus Curricula Committee Chair
Elective for Majors	Yes	
Justification for change:		
Semesters previously offered as an experimental course		
Co-Listed Courses:		
Course Reviewer Comments		History 1. Apr 25, 2014 by lahne (2566.1) 2. Jun 29, 2015 by barryf (2566.3)

Corporate Finance II

This course provides a rigorous and consistent presentation of the theory of financial decisions. Capital markets are analyzed under assumptions of risk aversion and uncertainty. Models of modern portfolio theory are discussed including the CAPM and the Modigliani-Miller analysis.

Finance 2150 or **graduate standing and equivalent** basic corporate finance knowledge.

Clarify wording on prerequisites

Course Change Request

Date Submitted: 06/01/20 11:13 am

Viewing: **FINANCE 5260 : Investments I**

File: 2190.10

Last approved: 06/17/19 3:36 am

Last edit: 06/01/20 11:13 am

Changes proposed by: cecq8z

Programs
referencing this
course

[BUS&MS-BS: Business and Mgmt Systems BS](#)

[FIN TCH-MI: Minor in Financial Technology, Analytics and Transformation](#)

[FINANCE-CT: Finance CT](#)

[FIN TCH-CT: Financial Technology, Analytics and Transformation CT](#)

[FINANCE-MI: Finance Minor](#)

Requested **Spring 2021** ~~Fall 2019~~

Effective Change

Date

Department

Business and Information Technology

Discipline

Finance (FINANCE)

Course Number 5260

In Workflow

1. **RBUSADMN
Chair**

2. **CCC Secretary**

3. **Social 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. CAT entry

11. Peoplesoft

Approval Path

1. 06/08/20 4:24 pm
siauk: Approved
for RBUSADMN
Chair

2. 06/09/20 3:16 pm
Kristy Giacomelli-
Feys (kristyg):

Title					Approved for CCC Secretary
Abbreviated	Investments I				3. 06/17/20 12:29 pm
Course Title					Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
Catalog					4. 08/03/20 9:28 am
Description					Kristy Giacomelli-Feys (kristygf):
Prerequisites					Approved for Pending CCC Agenda post
Field Trip					5. 08/19/20 9:57 am
Statement					Marita Tibbetts (tibbettsmg):
Credit Hours	LEC: 3	LAB: 0	IND: 0		
RSD: 0	Total: 3				
Required for	No				Approved for CCC Meeting Agenda
Majors					6. 08/19/20 10:28 am
Elective for	Yes				Stephen Raper (sraper):
Majors					Approved for Campus Curricula Committee Chair
Justification for					
change:					
Semesters					
previously					
offered as an					
experimental					
course					
Co-Listed					
Courses:					
Course Reviewer					History
Comments					1. May 1, 2014 by barryf (2190.1)
					2. Jun 29, 2015 by barryf (2190.5)

Key: 2190

3. Jun 17, 2019 by
barryf (2190.8)

Investments I

Introduction to fundamental elements of investment analysis. Students learn financial tools and gain necessary knowledge to select among alternative financial assets. Real world experience includes stock analysis, portfolio simulations and interactions with professionals in the securities industry.

Finance 2150 or **graduate standing and equivalent** basic corporate finance knowledge.

Clarify wording on prerequisites.

[Preview Bridge](#)

Course Change Request

Date Submitted: 06/01/20 11:14 am

Viewing: **FINANCE 5310 : Financial Technology and Analytics**

File: 4499.6

Last approved: 12/03/18 5:58 am

Last edit: 06/01/20 11:14 am

Changes proposed by: cecq8z

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. CAT entry
11. Peoplesoft

Programs referencing this course

[BUS&MS-BS: Business and Mgmt Systems BS](#)

[FIN TCH-MI: Minor in Financial Technology, Analytics and Transformation](#)

[FINANCE-CT: Finance CT](#)

[FIN TCH-CT: Financial Technology, Analytics and Transformation CT](#)

[FINANCE-MI: Finance Minor](#)

Requested Spring **2021** ~~2019~~
Effective Change
Date
Department
 Business and Information Technology
Discipline
 Finance (FINANCE)

Approval Path

1. 06/08/20 4:24 pm
 siauk: Approved for RBUSADMN Chair
2. 06/09/20 3:16 pm
 Kristy Giacomelli-Feys (kristy):

Course Number	5310	Approved for CCC Secretary
Title		3. 06/17/20 12:29 pm
Abbreviated Course Title	Tech and Analytics	Cecil Eng Huang
Catalog Description		Chua (cchua): Approved for Social Sciences DSCC Chair
Prerequisites		4. 08/03/20 9:28 am
Field Trip Statement		Kristy Giacomelli-Feys (kristygf): Approved for Pending CCC Agenda post
Credit Hours	LEC: 3 RSD: 0	5. 08/19/20 9:57 am
	Total: 3	Marita Tibbetts (tibbettsmg): Approved for CCC Meeting Agenda
Required for Majors	No	6. 08/19/20 10:28 am
Elective for Majors	Yes	Stephen Raper (sraper): Approved for Campus Curricula Committee Chair
Justification for change:		
Semesters previously offered as an experimental course		
Co-Listed Courses:		
Course Reviewer Comments		History 1. Feb 5, 2018 by Barry Flachsbart (barryf)

Financial Technology and Analytics

This course is built on finance theory, financial analysis, and quantitative methods from prerequisite courses. Students will design and construct integrated financial models. The objective is to offer students opportunities to experience hands-on numerical analyses, company valuation, and dynamic projections.

Finance 2150 or Graduate **Standing and basic corporate finance knowledge.**

~~Standing:~~

Clarify wording on prerequisites.

Course Change Request

Date Submitted: 05/17/20 5:02 pm

Viewing: **IS&T 4654 : Introduction to Web Design and Digital Media Studies Development**

File: 920.10

Last approved: 05/04/15 3:20 am

Last edit: 05/17/20 5:02 pm

Changes proposed by: cecq8z

Programs

referencing this course

[MOBLB&T-MI: Mobile Bus & Digital Transformation](#)

[BUS&MS-BS: Business and Mgmt Systems BS](#)

[HCI-MI: Human-Computer Interaction and User Experience Minor](#)

[ENTPRNS-MI: Entrepreneurship Minor](#)

Other Courses

referencing this course

In The Prerequisites:

[IS&T 5652 : Advanced Web Development](#)

In Workflow

1. RINFSCTE Chair
2. CCC Secretary
3. Social 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. CAT entry
11. Peoplesoft

Approval Path

1. 04/24/20 10:46 am
siauk: Rollback to Initiator
2. 05/17/20 4:57 pm
siauk: Rollback to Initiator

Spring 2021 08/17/2015

Requested
Effective Change
Date

Department
Business and Information Technology

Discipline
Info Science & Technology (IS&T)

Course Number 4654

Title

Abbreviated Course Title
Web and Digital Media Dev

Catalog
Description

Prerequisites

Field Trip
Statement

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

Required for
Majors Yes

Elective for
Majors No

Justification for
change:

Semesters
previously
offered as an

3. 05/17/20 5:26 pm
siauk: Approved
for RINFSCTE
Chair

4. 06/09/20 3:16 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary

5. 06/17/20 12:29
pm
Cecil Eng Huang
Chua (cchua):

Approved for
Social Sciences
DSCC Chair

6. 08/03/20 9:28 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post

7. 08/19/20 9:57 am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda

8. 08/19/20 10:28
am
Stephen Raper
(sraper):
Approved for

Campus Curricula
Committee Chair

History

1. May 2, 2014 by
barryf (920.1)
2. Jul 3, 2014 by
lahne (920.5)
3. May 4, 2015 by
barryf (920.6)

Introduction to Web Design and Digital Media Studies Development

The This course covers **web techniques and tools for** design and **digital development of web-based** media, including **topics such as social media, cyberculture, service design thinking, citizen journalism, crowd intelligence, brain-computer interfaces, privacy, and copyright. text, graphics, animation, audio, and video.**

More in line with the idea of this as a communications course.

experimental
course

Co-Listed

Courses:

Course Reviewer

Comments

siauk (04/24/20 10:46 am): Rollback: As discussed.

siauk (05/17/20 4:57 pm): Rollback: Please see if the new title is appropriate. Thanks.

Key: 920

[Preview Bridge](#)

Course Change Request

Date Submitted: 05/17/20 7:09 pm

Viewing: **IS&T 5680 4680 : Digital**
~~Introduction to Web and New Media~~
Development and Interactive Design
Studies

File: 2390.2

Last approved: 10/19/15 3:33 am

Last edit: 08/19/20 9:58 am

Changes proposed by: cecq8z

Requested **Spring 2021 01/12/2016**

Effective Change

Date

Department

Business and Information Technology

Discipline

Info Science & Technology (IS&T)

Course Number **5680 4680**

Title

Abbreviated Intro to Web Studies

Course Title

Catalog

Description

Prerequisites

In Workflow

1. RINFSCTE Chair
2. CCC Secretary
3. Social 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. CAT entry
11. Peoplesoft

Approval Path

1. 05/17/20 4:57 pm
siauk: Rollback to
Initiator
2. 05/17/20 5:24 pm
siauk: Rollback to
Initiator

<p>Field Trip Statement</p> <p>Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0 Total: 3</p> <p>Required for Majors No</p> <p>Elective for Majors Yes No</p>	<p>3. 05/17/20 7:06 pm siauk: Rollback to Initiator</p> <p>4. 05/17/20 7:19 pm siauk: Approved for RINFSCTE Chair</p> <p>5. 06/09/20 3:17 pm Kristy Giacomelli-Feys (kristyg):</p>
<p>Justification for change:</p> <p>Semesters previously offered as an experimental course</p> <p>Co-Listed Courses:</p>	<p>Approved for CCC Secretary</p> <p>6. 06/17/20 12:29 pm Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair</p> <p>7. 08/03/20 9:28 am Kristy Giacomelli-Feys (kristyg):</p>
<p>Course Reviewer Comments</p>	<p>Approved for Pending CCC Agenda post</p> <p>8. 08/19/20 9:58 am Marita Tibbetts (tibbettsmg): Approved for CCC Meeting Agenda</p> <p>9. 08/19/20 10:28 am Stephen Raper</p>

Key: 2390

(srafer):

Approved for
Campus Curricula
Committee Chair

History

1. Oct 19, 2015 by
barryf (2390.1)

Digital ~~Introduction to Web and New~~ Media **Development and Interactive Design Studies**

This ~~The~~ course covers **techniques ~~web culture, including topics such as social media, citizen journalism, crowd intelligence, privacy,~~ and tools for design and development of digital and interactive media, including text, graphics, animation, audio, and video. ~~copyright.~~**

A grade of "C" or better in IS&T 1551, IS&T 1561 or Comp Sci 1570 ~~Junior or Senior standing.~~

Switching material for 4654 and 4680

MT changed per Dr. Chua

siauk (05/17/20 4:57 pm): Rollback: Please see if the new title is appropriate. Thanks.

siauk (05/17/20 5:24 pm): Rollback: Change "A grade of "C" or better in IS&T 1551, IS&T 1561 1552 or Comp Sci 1570" to "A grade of "C" or better in either IS&T 1551, IS&T 1561 or Comp Sci 1570" I think you forgot to remove 1552.

siauk (05/17/20 7:06 pm): Rollback: Still the same. Probably need to remove 1552.

Course Change Request

Date Submitted: 05/17/20 7:10 pm

Viewing: **IS&T 6654 : Advanced Web Design and Digital Media Studies Development**

File: 445.4

Last approved: 07/07/14 3:48 am

Last edit: 05/17/20 7:10 pm

Changes proposed by: cecq8z

Programs
referencing this
course

[ENT&TEC-CT: Entrepreneur & Tech Innovat CT](#)

[DIGITMD-CT: Digital Media & Web Design CT](#)

[MOBLB&T-CT: Mobile Business and Digital Transformation CT](#)

Requested **Spring 2021 08/01/2014**

Effective Change

Date

Department

Business and Information Technology

Discipline

Info Science & Technology (IS&T)

Course Number 6654

Title

Advanced Digital Media

In Workflow

1. RINFSCTE Chair
2. CCC Secretary
3. Social 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. CAT entry
11. Peoplesoft

Approval Path

1. 04/24/20 10:58 am
siauk: Rollback to Initiator
2. 05/17/20 4:57 pm
siauk: Rollback to Initiator

<p>Abbreviated Course Title</p>	<p>3. 05/17/20 5:30 pm siauk: Rollback to Initiator</p>
<p>Catalog Description</p> <p>Prerequisites</p> <p>Field Trip Statement</p> <p>Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0 Total: 3</p> <p>Required for Majors No</p> <p>Elective for Majors No</p>	<p>4. 05/17/20 7:06 pm siauk: Rollback to Initiator</p> <p>5. 05/17/20 7:20 pm siauk: Approved for RINFSCTE Chair</p> <p>6. 06/09/20 3:17 pm Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary</p> <p>7. 06/17/20 12:29 pm</p>
<p>Justification for change:</p> <p>Semesters previously offered as an experimental course</p> <p>Co-Listed Courses:</p>	<p>Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair</p> <p>8. 08/03/20 9:28 am Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC</p>
<p>Course Reviewer Comments</p>	<p>Agenda post</p> <p>9. 08/19/20 10:10 am Marita Tibbetts (tibbettsmg):</p>

Approved for CCC

Meeting Agenda

10. 08/19/20 10:28

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

History

1. Jul 7, 2014 by

lahne (445.1)

Advanced Web **Design** and Digital Media **Studies Development**

The ~~This~~ course covers **web advanced techniques and tools for the** design and **digital development of web-based** media, including **topics such as social media, cyberculture, service design thinking, citizen journalism, crowd intelligence, brain-computer interfaces, privacy, and copyright.** ~~text, graphics, animation, audio, and video.~~ This course is an advanced version of Web **Design** and Digital Media **Studies.** ~~Development, with additional assignments.~~

Switching 6654 and 6680. More in line with the idea of this as a communications course.

siauk (04/24/20 10:58 am): Rollback: As discussed.

siauk (05/17/20 4:57 pm): Rollback: Please see if the new title is appropriate. Thanks.

siauk (05/17/20 5:30 pm): Rollback: Catalog Description: change "This course is an advanced version of Intro to Cyberculture Web and Digital Design" to "This course is an advanced version of Web Design and Digital Media Studies"

siauk (05/17/20 7:06 pm): Rollback: Latest one not changed.

Course Change Request

Date Submitted: 05/17/20 5:04 pm

Viewing: **IS&T 6680 : Advanced Digital Web and New Media Development and Interactive Design Studies**

File: 1614.6

Last approved: 06/30/14 3:55 am

Last edit: 05/17/20 5:04 pm

Changes proposed by: cecq8z

Programs

referencing this

course

[DIGITMD-CT: Digital Media & Web Design CT](#)

[E&S COM-CT: Elec & Social Commerce CT](#)

[HCI-CT: Human Computer Interaction CT](#)

[MOBLB&T-CT: Mobile Business and Digital Transformation CT](#)

In Workflow

1. RINFSCTE Chair
2. CCC Secretary
3. Social 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. CAT entry
11. Peoplesoft

Requested **Spring 2021 08/01/2014**

Effective Change

Date

Department

Business and Information Technology

Discipline

Info Science & Technology (IS&T)

Course Number 6680

Approval Path

1. 05/17/20 4:56 pm
siauk: Rollback to Initiator
2. 05/17/20 5:25 pm
siauk: Approved for RINFSCTE Chair

<p>Title</p> <p>Abbreviated Course Title</p> <p>Advanced Web Studies</p>	<p>3. 06/09/20 3:17 pm Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary</p>
<p>Catalog Description</p> <p>Prerequisites</p> <p>Field Trip Statement</p> <p>Credit Hours LEC: 3 LAB: 0 IND: 0 RSD: 0 Total: 3</p> <p>Required for Majors No</p> <p>Elective for Majors No</p>	<p>4. 06/17/20 12:29 pm Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair</p> <p>5. 08/03/20 9:28 am Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post</p>
<p>Justification for change:</p> <p>Semesters previously offered as an experimental course</p> <p>Co-Listed Courses:</p>	<p>6. 08/19/20 10:10 am Marita Tibbetts (tibbettsmg): Approved for CCC Meeting Agenda</p> <p>7. 08/19/20 10:28 am Stephen Raper (sraper):</p>
<p>Course Reviewer Comments</p>	<p>Approved for Campus Curricula Committee Chair</p>

History

1. Apr 25, 2014 by lahne (1614.1)
2. Jun 30, 2014 by lahne (1614.4)

Advanced **Digital ~~Web and New~~ Media Development and Interactive Design Studies**

This ~~The~~ course covers **advanced techniques** ~~web culture, including topics such as social media; citizen journalism, crowd intelligence, privacy,~~ and **tools for the design and development of digital and interactive media, including text, graphics, animation, audio, and video.** ~~copyright.~~ This course is an advanced version of **IST 4680, ~~Intro to Web Studies,~~** with additional assignments.

Some knowledge of programming

Same as 4680

siauk (05/17/20 4:56 pm): Rollback: Please see if the new title is appropriate. Thanks.

Course Change Request

New Course Proposal

Date Submitted: 06/11/20 6:21 pm

Viewing: **MECH ENG 5539 : Modeling
Across Scales in Computational
Mechanics**

File: 4724

Last edit: 06/11/20 6:21 pm

Changes proposed by: nisbett

Requested Spring 2021

Effective Change

Date

Department

Mechanical & Aerospace Engineering

Discipline

Mechanical Engineering (MECH ENG)

Course Number 5539

Title

Abbreviated Model Computational Mech

Course Title

Catalog

Description

Prerequisites

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. CAT entry
11. Peoplesoft

Approval Path

1. 06/11/20 6:22 pm
J. Keith Nisbett
(nisbett):
Approved for
RMECHENG Chair
2. 07/21/20 9:00 am
Kristy Giacomelli-
Feys (kristyg):

- Approved for CCC
Secretary
3. 07/23/20 9:16 am
Stephen Raper
(sraper):
Approved for
Engineering DSCC
Chair
4. 08/03/20 9:29 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:11
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:28
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

Modeling Across Scales in Computational Mechanics

Basic principles of computational mechanics, focusing on modeling and simulation on various length scales. The goal is to mathematically represent mechanical and material behavior, and to effectively solve those equations. Fundamental principles

of continuum and sub-continuum (atomic) models will be learned through lectures and hands-on Matlab coding.

Civ Eng 2210, Mech Eng 2519, or consent of instructor for majors that do not require either of these courses; or graduate standing.

Field Trip

Statement

Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0
Total: 3				
Required for Majors	No			
Elective for Majors	Yes			

Justification for
new course:

This course serves a useful function in an important research area. It has been offered 3 times experimentally under the title Modeling of Energy Materials. The title and course description have been adjusted to focus more on the modeling techniques and less on the specifics of the energy materials. This allows a broader applicability to a range of other mechanics areas. The prerequisites are accordingly loosened a little to allow a broader range of majors.

Semesters
previously
offered as an
experimental
course

Sp2017 - 10

Sp2018 - 6

Sp2019 - 16

Co-Listed
Courses:

aero eng 5539 - **Course Not Found**

Course Reviewer
Comments

Key: 4724

[Preview Bridge](#)

Course Change Request

Date Submitted: 07/30/20 2:41 pm

Viewing: **MUSIC 2111 : Individual Music**

Instruction III

File: 2466.1

Last edit: 08/19/20 12:09 pm

Changes proposed by: gamezpz

Requested **Spring 2021** ~~08/01/2014~~

Effective Change

Date

Department

Arts, Languages, & Philosophy

Discipline

Music (MUSIC)

Course Number 2111

Title

Abbreviated Individual Mus Instr III

Course Title

In Workflow

1. RPHILOSO Chair
2. CCC Secretary
3. Arts & Humanities 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. CAT entry
11. Peoplesoft

Catalog

Description

Prerequisites

Field Trip

Statement

Credit Hours

LEC: 0

LAB: 0

IND: **1-2** ~~0~~

RSD: 0

Total: 1-2

Approval Path

1. 07/30/20 5:57 pm
Audra Merfeld-Langston
(audram):
Approved for
RPHILOSO Chair

2. 08/03/20 9:07 am
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
3. 08/03/20 9:11 am
Petra Dewitt
(dewittp):
Approved for Arts
& Humanities
DSCC Chair
4. 08/03/20 9:35 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 12:09
pm
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 1:34 pm
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

Individual Music Instruction III

Individual music instruction in student's concentration area. **Can be repeated for credit.**

None ~~Consent of instructor.~~

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

Allowing this course to be repeated for credit simplifies the process of continuing an individual's training in their concentration area. The prerequisites have been removed as this should be something individuals can sign up for immediately. Both of these changes will remove needless impediments to enrolment that prevent this and similar sections from making, and will prove valuable for students.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 2466

[Preview Bridge](#)

Course Change Request

Date Submitted: 06/30/20 2:48 pm

Viewing: **PET ENG 4631 : Applied Reservoir Simulation**

File: 1983.1

Last edit: 07/29/20 9:11 am

Changes proposed by: weim

Requested **Spring 2021 08/14/2018**
Effective Change
Date

Department
Geosciences and Geological and Petroleum
Engineering

Discipline
Petroleum Engineering (PET ENG)

Course Number 4631

Title

Abbreviated Applied Reservoir Simul
Course Title

Catalog
Description
Prerequisites
Field Trip
Statement

Credit Hours LEC: **2 3** LAB: **1 0** IND: 0

In Workflow

1. **RGEOENG 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. CAT entry
11. Peoplesoft

Approval Path

1. 06/30/20 2:53 pm
David Borrok (borrokd):
Approved for RGEOENG Chair
2. 07/21/20 9:00 am
Kristy Giacomelli-Feys (kristyg):

<p>RSD: 0 Total: 3</p> <p>Required for No Majors</p> <p>Elective for Yes No Majors</p>	<p>Approved for CCC Secretary</p> <p>3. 07/21/20 12:16 pm</p> <p>Stephen Raper (sraper): Rollback</p>
<p>Justification for change:</p> <p>Semesters previously offered as an experimental course</p> <p>Co-Listed Courses:</p>	<p>to RGEOENG Chair for Engineering DSCC Chair</p> <p>4. 07/29/20 9:12 am David Borrok (borrokd): Approved for RGEOENG Chair</p> <p>5. 07/30/20 1:53 pm Kristy Giacomelli-</p>
<p>Course Reviewer Comments</p>	<p>Feys (kristyg): Approved for CCC Secretary</p> <p>6. 07/30/20 1:58 pm Stephen Raper (sraper): Approved for Engineering DSCC Chair</p> <p>7. 08/03/20 9:29 am Kristy Giacomelli- Feys (kristyg): Approved for Pending CCC Agenda post</p>

Key: 1983

8. 08/19/20 10:12 am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
9. 08/19/20 10:28 am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

Applied Reservoir Simulation

Simulation of **actual** reservoir problems using **both** field and individual well models to determine well spacing, production effects of secondary and enhanced recovery processes, future rate predictions and recovery, coning effects, ~~relative permeability adjustments~~ and **more. other history matching techniques. The lab focuses on learning computer simulation models, including practice using the software and data analyses techniques.**

Pet Eng 3520.

This is Reservoir Simulation class, and students need to interact with reservoir simulation software: a very complicated process, and hands-on and very easy to make mistakes. Lab activities involving the modeling software were a focus in the original course format, but were not characterized properly in the distribution of credit hours. This change more accurately reflects what is going on within this course.

sraper (07/21/20 10:12 am): Changed effective date to Spring 2021.

sraper (07/21/20 12:16 pm): Rollback: modify course description.

Course Change Request

Date Submitted: 06/30/20 2:49 pm

Viewing: **PET ENG 6621 : Advanced Applied Reservoir Simulation**

File: 79.3

Last approved: 06/20/19 3:39 am

Last edit: 07/29/20 9:16 am

Changes proposed by: weim

Requested **Spring 2021** ~~Fall 2019~~

Effective Change

Date

Department

Geosciences and Geological and Petroleum Engineering

Discipline

Petroleum Engineering (PET ENG)

Course Number 6621

Title

Abbreviated Adv Appld Reservoir

Course Title Simulation

Catalog

Description

Prerequisites

Field Trip

Statement

In Workflow

1. **RGEOENG 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. CAT entry
11. Peoplesoft

Approval Path

1. 06/30/20 2:53 pm David Borrok (borrokd): Approved for RGEOENG Chair
2. 07/21/20 9:00 am Kristy Giacomelli-Feys (kristyg):

<p>Credit Hours LEC: 2 3 LAB: 1 0 IND: 0 RSD: 0 Total: 3</p> <p>Required for No Majors</p> <p>Elective for Yes No Majors</p>	<p>Approved for CCC Secretary</p> <p>3. 07/21/20 12:16 pm Stephen Raper (sraper): Rollback to RGEOENG Chair for</p>
<p>Justification for change:</p> <p>Semesters previously offered as an experimental course</p> <p>Co-Listed Courses:</p>	<p>Engineering DSCC Chair</p> <p>4. 07/29/20 9:17 am David Borrok (borrokd): Approved for RGEOENG Chair</p> <p>5. 07/30/20 1:53 pm Kristy Giacomelli-Feys (kristygf):</p>
<p>Course Reviewer Comments</p>	<p>Approved for CCC Secretary</p> <p>6. 07/30/20 1:58 pm Stephen Raper (sraper): Approved for Engineering DSCC Chair</p> <p>7. 08/03/20 9:29 am Kristy Giacomelli-Feys (kristygf): Approved for Pending CCC Agenda post</p>

Key: 79

8. 08/19/20 10:12 am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
9. 08/19/20 10:28 am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair

History

1. Jun 20, 2019 by
reflori (79.1)

Advanced Applied Reservoir Simulation

Advanced simulation of ~~actual~~ reservoir problems using ~~both~~ field and individual well models to determine well spacing, production effects of secondary and enhanced recovery processes, future rate predictions and recovery, coning effects, ~~relative permeability adjustments~~ and ~~more. other history matching techniques.~~ **The lab focuses on learning advanced computer simulations and pre- and post-processing techniques for big datasets.**

Pet Eng 4621 or equivalent.

This is Advanced Reservoir Simulation class, and students need to interact with reservoir simulation software: a very complicated process, and hands-on and very easy to make mistakes. Lab activities have been a consistent part of the course, but the distribution of credit hours did not accurately reflect this. This change will more accurately reflect how the course is run.

sraper (07/21/20 10:11 am): Changed effective date to Spr 2021.

sraper (07/21/20 12:16 pm): Rollback: Modify course description.

[Preview Bridge](#)

Program Change Request

Date Submitted: 06/01/20 4:29 pm

Viewing: **BUS&MS-MI : Business Minor**

File: 11.6

Last approved: 07/14/15 3:35 pm

Last edit: 06/09/20 3:09 pm

Changes proposed by: cecq8z

Catalog Pages Using this Program
[Business and Management Systems](#)
[Information Science and Technology](#)

Start Term

Spring 2021 ~~08/17/2015~~

Program Code

BUS&MS-MI

Department

Business and Information Technology

Title

Business Minor

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. Kristy Giacomelli-Feys

Approval Path

1. 06/08/20 4:20 pm
siauk: Approved for RBUSADMN Chair
2. 06/09/20 3:09 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
3. 06/17/20 12:29 pm
Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
4. 08/03/20 9:08 am
Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post
5. 08/19/20 10:13 am
Marita Tibbetts (tibbettsmg):

Program Requirements and Description

Approved for CCC
Meeting Agenda
6. 08/19/20 10:27 am
Stephen Raper
(sraper): Approved
for Campus
Curricula
Committee Chair

History

1. Aug 5, 2014 by
pantaleoa
2. Jul 14, 2015 by
pantaleoa

Minor in Business

The minor in business and management systems requires the following 15 hours of coursework:

FINANCE 2150	Corporate Finance I	3
ECON 1100	Principles Of Microeconomics	3
or ECON 1200 or BUS 1414	Course ECON 1200 or BUS 1414 Not Found	
BUS 1110	Introduction to Management and Entrepreneurship	3
BUS 1210	Financial Accounting	3
MKT 3110	Marketing	3

Justification for request

Ethics/diversity required for new AACSB accreditation

Supporting Documents

Course Reviewer Comments

kristyg (06/09/20 3:09 pm): This was submitted too late for Fall 2020 submission.

Program Change Request

Date Submitted: 05/02/20 12:15 am

Viewing: **CMP SC-BS : Computer Science
BS**

File: 28.65

Last approved: 03/03/20 11:52 am

Last edit: 06/09/20 3:11 pm

Changes proposed by: zhupe

Catalog Pages Using this Program
[Computer Science](#)

Start Term

Spring 2021 ~~Fall 2020~~

Program Code

CMP SC-BS

Department

Computer Science

Title

Computer Science BS

In Workflow

1. RCOMPSCI 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. Kristy Giacomelli-Feys

Approval Path

1. 05/01/20 10:35 am
Bruce McMillin (ff):
Rollback to Initiator
2. 05/04/20 8:07 am
Bruce McMillin (ff):
Approved for
RCOMPSCI Chair
3. 06/09/20 3:11 pm
Kristy Giacomelli-Feys (kristyg):
Approved for CCC Secretary
4. 07/23/20 9:15 am
Stephen Raper (sraper):
Approved for Engineering DSCC Chair
5. 08/03/20 9:09 am
Kristy Giacomelli-Feys (kristyg):
Approved for Pending CCC Agenda post

Program Requirements and Description

6. 08/19/20 10:13 am
Marita Tibbetts
(tibbetmsg):
Approved for CCC
Meeting Agenda
7. 08/19/20 10:27 am
Stephen Raper
(sraper): Approved
for Campus
Curricula
Committee Chair

History

1. Aug 5, 2014 by
Daniel Tauritz
(tauritzd)
2. Aug 13, 2014 by
pantaleoa
3. Jun 19, 2015 by
Daniel Tauritz
(tauritzd)
4. Jul 15, 2015 by
pantaleoa
5. Jun 28, 2017 by
Daniel Tauritz
(tauritzd)
6. Jun 14, 2019 by
Daniel Tauritz
(tauritzd)
7. Mar 3, 2020 by
Brittany Parnell
(ershenb)

Bachelor of Science Computer Science

Entering first year students desiring to study computer science will be admitted to the Foundational Engineering and Computing Program. They will, however, be permitted, if they wish, to state a computer science preference, which will be used as a consideration for available first year departmental scholarships. The focus of the Foundational Engineering and Computing Program is on enhanced advising and career counseling, with the goal of providing to the student the information necessary to make an informed decision regarding the choice of a major.

For the Bachelor of Science degree in Computer Science, a minimum of 128 credit hours is required. This requirement is in addition to credit received for algebra, trigonometry, and basic ROTC courses. An average of at least two grade points per credit

hour must be attained. A "C" or better grade must be earned in each computer science course used to fulfill B.S. in computer science degree requirements as well as in [COMP ENG 2210](#), [COMP ENG 3150](#), and the required ethics elective.

The computer science curriculum requires twelve semester hours in humanities, exclusive of foreign language, and must include [ENGLISH 1160](#) or [ENGLISH 3560](#). A minimum of nine semester hours is required in social sciences, including either [HISTORY 1300](#), [HISTORY 1310](#), [HISTORY 1200](#), or [POL SCI 1200](#). Specific requirements for the bachelor degree are outlined in the sample program listed below.

Sample Course of Study

Freshman Year			
First Semester	Credits	Second Semester	Credits
FR ENG 1100	1	COMP SCI 1200	3
COMP SCI 1500 ¹	3	COMP SCI 1570	3
Laboratory Science Elective ²	5	COMP SCI 1580	1
MATH 1214 ³	4	MATH 1215 ⁴	4
ENGLISH 1120	3	ENGLISH 1160 or 3560	3
		Humanities / Social Science Elective ⁵	3
	16		17
Sophomore Year			
First Semester	Credits	Second Semester	Credits
COMP SCI 1575	3	COMP SCI 2200	3
COMP SCI 1585	1	COMP SCI 2500	3
COMP ENG 2210 ⁶	3	PHYSICS 2135 ⁹	4
PHYSICS 1135 ⁷	4	COMP ENG 3150 ⁶	3
Statistics Elective ⁸	3	Literature Elective ¹⁰	3
Humanities / Social Science Elective ⁵	3		
	17		16
Junior Year			
First Semester	Credits	Second Semester	Credits
COMP SCI 2300	3	COMP SCI 3500	3
COMP SCI 3800	3	COMP SCI 3610	3
MATH 3108	3	Cmp Sc Elective ^{12,16}	3
Humanities / Social Science Elective ⁵	3	Sci/Eng Elective ¹³	3
Ethics Elective ¹¹	3	SP&M S 1185 ¹⁴	3
	15		15
Senior Year			
First Semester	Credits	Second Semester	Credits

COMP SCI 4090	3	COMP SCI 4091	3
COMP SCI 4610	3	Cmp Sc Electives ^{12,16}	3
Cmp Sc Electives ^{12,16}	6	Humanities / Social Science Elective ⁵	3
Sci/Eng Elective ¹³	3	Free Elective ^{15,16}	8
	15		17
Total Credits: 128			

- 1 Or [COMP SCI 1971](#) and [COMP SCI 1981](#). May be waived in lieu of a score of 4 or 5 on the AP Computer Science A exam.
- 2 An approved science lecture-laboratory course pair totaling at least four credit hours. The laboratory is mandatory in all cases. The approved course pairs are: [CHEM 1310](#) and [CHEM 1319](#); [PHYSICS 1505](#) and [PHYSICS 1509](#); [PHYSICS 1605](#) and [PHYSICS 1609](#); [GEOLOGY 1120](#) and [GEOLOGY 1129](#); [BIO SCI 1113](#) and [BIO SCI 1219](#); [BIO SCI 1223](#) and [BIO SCI 1229](#); [BIO SCI 2213](#) and [BIO SCI 2219](#); [BIO SCI 2353](#) and [BIO SCI 2359](#); [BIO SCI 2383](#) and [BIO SCI 2389](#).
- 3 Or [MATH 1208](#).
- 4 Or [MATH 1221](#).
- 5 Any nine credit hours of social science courses and three credit hours of humanities courses on the approved lists maintained on the computer science website. One course must satisfy the Missouri and U.S. Constitution requirement. [COMP SCI 4700](#) may be counted as a Social Science elective.
- 6 Laboratory not required.
- 7 Or both [PHYSICS 1111](#) and [PHYSICS 1119](#).
- 8 One of [STAT 3113](#), [STAT 3115](#), [STAT 3117](#), or [STAT 5643](#).
- 9 Or both [PHYSICS 2111](#) and [PHYSICS 2119](#).
- 10 One literature course on the approved list maintained on the computer science website.
- 11 One of [PHILOS 3225](#), [PHILOS 3235](#), [PHILOS 4340](#), or [PHILOS 4368](#).
- 12 Twelve hours of elective COMP SCI courses excluding [COMP SCI 2002](#), [COMP SCI 4700](#), COMP SCI 2001 - Domain Exploration and Innovation Methods, COMP SCI 3001 - Skill Development for Entrepreneurs and Innovators, COMP SCI 4001 - Advanced Domain Exploration and Innovation Methods, COMP SCI 4001 - Interpersonal Dynamics for Entrepreneurs and Innovators, and all COMP SCI x9xx courses. At least nine hours must be 5000-level or higher. At least nine hours must be lecture courses.
- 13 Any six hours chosen from departments that offer a degree associated with either the Discipline Specific Curricula Committee for Sciences or the Discipline Specific Curricula Committee for Engineering, excluding Computer Science. The following courses are also excluded: all 1000-level MATH courses, all STAT courses below 4000-level, all 1000-level Physics courses, [PHYSICS 2111](#), [PHYSICS 2119](#), [PHYSICS 2135](#), and [PHYSICS 2145](#).
- 14 [SP&M S 1185](#) or [SP&M S 3245](#) or [THEATRE 3245](#) or one of the two complete four-course sequences in Advanced ROTC ([MIL ARMY 3250](#), [MIL ARMY 3500](#), [MIL ARMY 4250](#), and [MIL ARMY 4500](#); or [MIL AIR 3110](#), [MIL AIR 3120](#), [MIL AIR 4110](#) and [MIL AIR 4120](#)).
- 15

Courses chosen from any discipline so that 128 hours are completed. These and only these courses may be taken pass/fail and only one course may be taken pass/fail each semester. The following courses are excluded: all 1000-level MATH courses, all STAT courses below 4000-level, all 1000-level Physics courses, [PHYSICS 2111](#), [PHYSICS 2119](#), [PHYSICS 2135](#), [PHYSICS 2145](#), any COMP SCI x9xx courses, and the first two years of ROTC.

16 [COMP SCI 4010](#) can be counted as Computer Science Elective or Free Elective, limited to three times.

Justification for request

There are three changes as follows:

1. Remove Geo 1110/1119, since Geo 1119 no longer exists.
2. To be consistent with CC form of Comp Sci 1570, we update the BS to make either Comp Sci 1500 or Comp Sci 1971 and Comp Sci 1981 to fulfill the first course requirement for the CS degree.
3. To be consistent with CC form of Comp Sci 4010, open Comp Sci 4010 up to the undergraduates as a 1-credit elective course. This would allow more professionals for industry to come in and communicate with the students and, thus strengthen our industry ties.

The changes were approved by the faculty of the CS department at their faculty meeting on April 30th, 2020.

Supporting Documents

Course Reviewer Comments

ff (05/01/20 10:35 am): Rollback: We're not doing the accelerated program as originally envisioned.

kristyg (06/09/20 3:11 pm): This was submitted too late for Fall 2020 deadline.

Program Change Request

Date Submitted: 06/01/20 4:29 pm

Viewing: **E&S COM-MI : Elect & Social
Commerce Minor**

File: 40.6

Last approved: 07/14/15 3:37 pm

Last edit: 06/09/20 3:14 pm

Changes proposed by: cecq8z

Catalog Pages Using this Program
[Business and Management Systems](#)
[Information Science and Technology](#)

Start Term

Spring 2021 ~~08/17/2015~~

Program Code

E&S COM-MI

Department

Business and Information Technology

Title

Elect & Social Commerce Minor

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. **Kristy Giacomelli-
Feys**

Approval Path

1. 06/08/20 4:21 pm
siauk: Approved for
RBUSADMN Chair
2. 06/09/20 3:14 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
3. 06/17/20 12:29 pm
Cecil Eng Huang
Chua (cchua):
Approved for Social
Sciences DSCC
Chair
4. 08/03/20 9:28 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:13 am
Marita Tibbetts
(tibbettsmg):

Program Requirements and Description

Approved for CCC
Meeting Agenda
6. 08/19/20 10:27 am
Stephen Raper
(sraper): Approved
for Campus
Curricula
Committee Chair

History

1. Aug 5, 2014 by
pantaleoa
2. Jun 17, 2015 by
pantaleoa
3. Jul 14, 2015 by
pantaleoa

Minor in Electronic and Social Commerce

The minor in electronic and social commerce requires the following 15 hours of coursework:

IS&T 4641	Digital Commerce and the Internet of Things	3
BUS 1414	Course BUS 1414 Not Found	
Three courses from the following list:		12
IS&T 4335	Fundamentals of Mobile Technology for Business	
IS&T 5251	Technological Innovation Management and Leadership	
IS&T 5652	Advanced Web Development	
IS&T 5168	Law and Ethics in E-Commerce	
IS&T 5885	Human-Computer Interaction	
IS&T 5886	Prototyping Human-Computer Interactions	
MKT 5310	Digital Marketing and Promotions	
MKT 4580	Marketing Strategy	

Justification for request

Ethics/diversity important for understanding business

Supporting Documents

Course Reviewer Comments

kristy (06/09/20 3:14 pm): This was submitted too late for Fall 2020 deadline.

Program Change Request

Date Submitted: 04/30/20 6:14 pm

Viewing: **EL ENG-BS : Electrical Engineering BS**

File: 155.55

Last approved: 03/03/20 1:41 pm

Last edit: 06/09/20 3:14 pm

Changes proposed by: ferdowsi

Catalog Pages Using this Program
[Electrical Engineering](#)

Start Term

Spring 2021 ~~Fall 2020~~

Program Code

EL ENG-BS

Department

Electrical and Computer Engineering

Title

Electrical Engineering BS

In Workflow

1. RELECENG 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. Kristy Giacomelli-Feys

Approval Path

1. 04/30/20 6:20 pm
Daryl Beetner
(daryl): Approved for RELECENG Chair
2. 06/09/20 3:15 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
3. 07/23/20 9:16 am
Stephen Raper
(sraper): Approved for Engineering DSCC Chair
4. 08/03/20 9:28 am
Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post
5. 08/19/20 10:14 am
Marita Tibbetts

Program Requirements and Description

(tibbettsmg):

Approved for CCC
Meeting Agenda

- 08/19/20 10:27 am
Stephen Raper
(sraper): Approved
for Campus
Curricula
Committee Chair

History

- Aug 6, 2014 by
Watkins (watkins)
- Aug 13, 2014 by
pantaleoa
- Apr 25, 2016 by
Watkins (watkins)
- Jun 18, 2018 by
Watkins (watkins)
- May 15, 2019 by
Mehdi Ferdowsi
(ferdowsi)
- Mar 3, 2020 by
Brittany Parnell
(ershenb)

Bachelor of Science Electrical Engineering¹

Entering freshmen desiring to study Electrical Engineering will be admitted to the Foundational Engineering and Computing Program. They will be permitted to state a Electrical Engineering preference, which will be used as a consideration for available freshman departmental scholarships. The focus of the Foundational Engineering and Computing Program is on enhanced advising and career counseling, with the goal of providing to the student the information necessary to make an informed decision regarding the choice of a major.

For the Bachelor of Science degree in Electrical Engineering a minimum of 128 credit hours is required. These requirements are in addition to credit received for algebra, trigonometry, and basic ROTC courses. An average of at least two grade points per credit hour must be attained. At least two grade points per credit hour must also be attained in all courses taken in Electrical Engineering.

Electrical and Computer Engineering degree programs will require a minimum of 21 credit hours of humanities/social-sciences as specified below:

- [ENGLISH 1120](#)
- [HISTORY 1200](#) or [HISTORY 1300](#) or [HISTORY 1310](#) or [POL SCI 1200](#)

- [ECON 1100](#) or [ECON 1200](#)
- Technical Communication Elective: [ENGLISH 1160](#) or [ENGLISH 3560](#)
- [SP&M S 1185](#)
- The remaining minimum of 6 additional credit hours must be three-credit hour lecture courses offered in disciplines in the humanities and social sciences. Humanities courses are defined as those in: Art, English and Technical Communication, Etymology, Foreign Languages, Music, Philosophy, Speech and Media Studies, and Theatre. Social Sciences courses are defined as those in: Economics, History, Political Science, and Psychology. Study abroad courses may count as H/SS courses. H/SS courses numbered 2001, 3001, and 4001 (experimental courses) may also be used to complete these elective requirements.

Courses in business, education, information science and technology, or any other discipline not listed above will **not** satisfy the humanities/social sciences elective requirement, although such courses may count toward general education requirements. Transfer credits from other universities in sociology and general humanities may count as humanities or social science electives.

The Electrical Engineering program at Missouri S&T is characterized by its focus on the scientific basics of engineering and its innovative application; indeed, the underlying theme of this educational program is the application of the scientific basics to engineering practice through attention to problems and needs of the public. The necessary interrelations among the various topics, the engineering disciplines, and the other professions as they naturally come together in the solution of real world problems are emphasized as research, analysis, synthesis, and design are presented and discussed through classroom and laboratory instruction.

Free Electives Footnote:

Students are required to take five hours of free electives in consultation with their academic advisor. Credits which do not count towards this requirement are deficiency courses (such as algebra and trigonometry), and extra credits in required courses. Any courses outside of engineering and science must be at least three credit hours.

Freshman Year			
First Semester	Credits	Second Semester	Credits
FR ENG 1100 ²	1	MECH ENG 1720	3
CHEM 1310	4	MATH 1215 ³	4
CHEM 1319	1	PHYSICS 1135 ^{3,4}	4
MATH 1214 ³	4	ECON 1100 or 1200	3
HISTORY 1200 , or 1300 , or 1310 , or POL SCI 1200	3	Elective-Hum or Soc Sci (any level) ⁵	3
ENGLISH 1120	3		
	16		17
Sophomore Year			
First Semester	Credits	Second Semester	Credits
ELEC ENG 2100 ^{3,6,7}	3	ELEC ENG 2200 ^{3,6,7,10}	3
ELEC ENG 2101 ^{3,6}	1	ELEC ENG 2201 ^{3,6,7}	1
MATH 2222 ³	4	ELEC ENG 2120 ^{3,7,9}	3
COMP ENG 2210 ^{3,6,8}	3	MATH 3304 ³	3

COMP ENG 2211 ^{3,6}	1	Engineering Science Elective ¹¹	3
PHYSICS 2135 ^{3,4}	4	COMP SCI 1570	3
		COMP SCI 1580 ¹²	4
		COMP SCI 1500	3
	16		16
Junior Year			
First Semester	Credits	Second Semester	Credits
ELEC ENG 3100 ^{3,6,9,10}	3	ELEC ENG 3600 ^{3,9}	4
ELEC ENG 3101 ^{3,6,9,10}	1	El Eng Elective A ^{10,14,19}	3
ELEC ENG 3320	3	ELEC ENG 3430	3
ELEC ENG 3321	1	ELEC ENG 3431	1
SP&M S 1185 ¹³	3	STAT 3117 ¹²	3
MATH 3108	3	Communication Elective ¹³	3
	14		17
Senior Year			
First Semester	Credits	Second Semester	Credits
El Eng Power Elective ^{3,6,9,15}	3	El Eng Elective C ^{10,14}	3
El Eng Power Elective Lab ^{3,6,9,15}	1	El Eng Elective E ^{17,19}	3
El Eng Elective B ^{10,14}	3	ELEC ENG 4097	3
El Eng Elective D ^{10,16,19}	3	Professional Development Elective ²⁰	3
ELEC ENG 4096 ³	1	Free Elective ¹⁸	3
Free Elective ¹⁸	3		
Elective-Hum or Soc Sci (any level) ⁵	3		
	17		15
Total Credits: 128			

Note: Student must satisfy the common freshman year academic requirements and be admitted into the department. See Foundational Engineering and Computing Program.

1	The minimum number of hours required for a degree in Electrical Engineering is 128.
2	Students that transfer after their freshman year are not required to enroll in FR ENG 1100 .
3	A minimum grade of "C" must be attained in MATH 1214 , MATH 1215 , MATH 2222 , and MATH 3304 , PHYSICS 1135 and PHYSICS 2135 (or their equivalents), ELEC ENG 2100 , ELEC ENG 2101 , ELEC ENG 2120 , ELEC ENG 2200 , ELEC ENG 2201 , ELEC ENG 3320 , ELEC ENG 3321 , ELEC ENG 3430 , ELEC ENG 3431 , ELEC ENG 3100 , ELEC ENG 3101 , and ELEC ENG 3600 , the ELEC ENG power elective (ELEC ENG 3500 and ELEC ENG 3501 or ELEC ENG 3540 and ELEC ENG 3541), ELEC ENG 4096 and COMP ENG 2210 and COMP ENG 2211 . Also,

students may not enroll in other courses that use these courses as prerequisites until the minimum grade of "C" is attained.

- 4 Students may take [PHYSICS 1111](#) and [PHYSICS 1119](#) in place of [PHYSICS 1135](#). Students may take [PHYSICS 2111](#) and [PHYSICS 2119](#) in place of [PHYSICS 2135](#).
- 5 All electives must be approved by the student's advisor. Students must comply with the general education requirements with respect to selection and depth of study. These requirements are specified in the current catalog.
- 6 Students who drop a lecture course prior to the last week to drop a class must also drop the corequisite lab.
- 7 Students must earn a passing grade on the ELEC ENG Advancement Exam I (associated with [ELEC ENG 2100](#)) before they enroll in [ELEC ENG 2120](#) or [ELEC ENG 2200](#) and [ELEC ENG 2201](#).
- 8 Students must earn a passing grade on the COMP ENG Advancement Exam (associated with [COMP ENG 2210](#)) before they enroll in any course with [COMP ENG 2210](#) and/or [COMP ENG 2211](#) as prerequisites.
- 9 Students must earn a passing grade on the ELEC ENG Advancement Exam II (associated with [ELEC ENG 2120](#)) before they enroll in [ELEC ENG 3500](#), [ELEC ENG 3540](#), [ELEC ENG 3501](#), [ELEC ENG 3541](#), [ELEC ENG 3320](#), [ELEC ENG 3321](#), [ELEC ENG 3430](#), [ELEC ENG 3431](#), [ELEC ENG 3100](#), [ELEC ENG 3101](#), or [ELEC ENG 3600](#), or other courses with [ELEC ENG 2120](#) as a prerequisite.
- 10 Students must earn a passing grade on the ELEC ENG Advancement Exam III (associated with [ELEC ENG 2200](#)) before they enroll in [ELEC ENG 3100](#) and [ELEC ENG 3101](#) or other courses with [ELEC ENG 2200](#) as a prerequisite.
- 11 Students must take [MECH ENG 2340](#), [MECH ENG 2519](#), [MECH ENG 2527](#), [PHYSICS 2305](#), [PHYSICS 2311](#), [PHYSICS 2401](#), [NUC ENG 3103](#), [CHEM 2210](#), [BIO SCI 2213](#), or [BIO SCI 2223](#). The following pairs of course are substitutions: [CIV ENG 2200](#) and [MECH ENG 2350](#) or [ENG MGT 2110](#) and [ENG MGT 3310](#).
- 12 Students may replace [STAT 3117](#) with [STAT 3115](#) or [STAT 5643](#).
- 13 Students must take [ENGLISH 3560](#) or [ENGLISH 1160](#). Students may replace [SP&M S 1185](#) with the ROTC sequence of [MIL ARMY 4250](#) and [MIL ARMY 4500](#) or [MIL AIR 4110](#) and [MIL AIR 4120](#).
- 14 ELEC ENG Electives A, B, and C must be chosen from ELEC ENG 56XX, [ELEC ENG 3500](#), [ELEC ENG 3540](#), [ELEC ENG 3410](#), [ELEC ENG 3250](#), [ELEC ENG 3340](#), [ELEC ENG 3440](#), [ELEC ENG 3120](#), and [COMP ENG 3150](#). Only one ELEC ENG 56XX course may be used.
- 15 The ELEC ENG Power Elective may be satisfied with [ELEC ENG 3500](#) and [ELEC ENG 3501](#) or [ELEC ENG 3540](#) and [ELEC ENG 3541](#).
- 16 ELEC ENG Elective D must be a 4XXX-level or above ELEC ENG or COMP ENG course with at least a 3-hour lecture component. [ELEC ENG 4000](#), [ELEC ENG 5000](#), [COMP ENG 4000](#), [COMP ENG 5000](#), [ELEC ENG 4099](#), [COMP ENG 4099](#), [ELEC ENG 4096](#), [COMP ENG 4096](#), [ELEC ENG 4097](#), [COMP ENG 4097](#), [ELEC ENG 5070](#), [COMP ENG 5070](#), ELEC ENG 58XX, and COMP ENG 58XX may not be used for Elective D.
- 17 ELEC ENG Elective E may be any 3XXX-level or above ELEC ENG or COMP ENG course except [ELEC ENG 3002](#), ELEC ENG 38XX, [ELEC ENG 4096](#), [ELEC ENG 4097](#), and ELEC ENG 5070 and [COMP ENG 3002](#), COMP ENG 38XX, [COMP ENG 4000](#), [COMP ENG 4096](#), [COMP ENG 4097](#), and COMP ENG 5070.
- 18 Students are required to take six hours of free elective in consultation with their academic advisors. Credits that do not count toward this requirement are deficiency courses (such as algebra and trigonometry) and extra credits from courses meeting other requirements. Any courses outside of engineering and science must be at least three credit hours. ELEC ENG 28XX, ELEC ENG 38XX, [ELEC ENG 4096](#), [ELEC ENG 4097](#), COMP ENG 28XX, COMP ENG

38XX, [COMP ENG 4096](#) and [COMP ENG 4097](#) may not be used for free electives. No more than one credit hour of [ELEC ENG 3002](#) or [COMP ENG 3002](#) may be applied to the BS degree for free electives.

19 Students that pursue an optional degree emphasis area have restricted options for EI Eng Electives A, D, and E. Students admitted to the accelerated BS/MS program must satisfy EI Eng Electives D and E with 5xxx or 6xxx-level courses and a minimum grade of B.

20 Students must take one of the following courses: [BUS 5980](#), [ECON 4430](#), [ECON 5337](#), [ENG MGT 2310](#), [ENG MGT 3320](#), [ENG MGT 4110](#), [ENG MGT 5514](#), or [PHILOS 3225](#).

All Electrical Engineering students are encouraged to take the fundamentals of Engineering Examination prior to graduation. It is the first step toward becoming a registered professional engineer.

An accelerated BS/MS program and a formal emphasis in circuits and electronics, optics and devices, controls and systems, communications and signal processing, power and energy, electromagnetics, or computer engineering are optional.

Emphasis Areas for Electrical Engineering

Circuits and Electronics, Communications and Signal Processing, Computer Engineering, Controls and Systems, Electromagnetics, Optics and Devices, Power and Energy

A declared emphasis area is not required. A student may choose to obtain an Electrical Engineering degree without a formal emphasis or may choose to obtain an Electrical Engineering degree with a declared emphasis in one or more of the emphasis areas of electrical engineering. A major change request is required to add the emphasis area option to the degree program.

For students who seek an Electrical Engineering degree without a formal emphasis, these emphasis areas may guide the choice of their ELEC ENG Electives A, B, C, D, and E as well as their free electives. Students should consult with their advisors on such course selections.

For students who seek an Electrical Engineering degree with a declared emphasis, courses in the declared emphasis area will be applied to ELEC ENG Electives A, D, and E in the degree requirements. For students who choose to have multiple emphasis areas, the additional courses will apply to ELEC ENG Elective B or C and free elective requirements. Students should seek guidance from their advisors on emphasis areas and on courses that are relevant to more than one emphasis area. Students may have an emphasis area or emphasis areas listed on their transcript by completing three three-credit-hour courses in electrical and computer engineering from the designated lists with at least one of the courses being at the 4XXX-level or above. This requirement will be satisfied by completing the relevant ABC Elective course, a 4XXX-level or above course for Elective D, and another 3XXX-level or above course for Elective E from the designated listing. The required ELEC ENG courses [ELEC ENG 3320](#), [ELEC ENG 3430](#), [ELEC ENG 3100](#), and [ELEC ENG 3600](#) and the course used to satisfy the power requirement ([ELEC ENG 3500](#) or [ELEC ENG 3540](#)) may not be used to meet the three course requirement. Transfer courses do not apply to emphasis areas. A co-listed course may count toward both areas. Experimental courses [ELEC ENG 3001](#), [ELEC ENG 4001](#), [ELEC ENG 5001](#), [COMP ENG 3001](#), [COMP ENG 4001](#), or [COMP ENG 5001](#) require departmental approval to apply toward an emphasis area.

Circuits and Electronics		
ELEC ENG 3120	Electronics II	3
ELEC ENG 41XX and ELEC ENG 51XX Courses		
Communications and Signal Processing		

ELEC ENG 3410	Digital Signal Processing	3
ELEC ENG 3440	Digital Communications II	3
ELEC ENG 44XX and ELEC ENG 54XX Courses		
Computer Engineering		
ELEC ENG 3410, COMP ENG 3XXX-level or above Courses (Excluding COMP ENG 3000, COMP ENG 4000, COMP ENG 5000, COMP ENG 3002, COMP ENG 4096, COMP ENG 4097, and COMP ENG 5070) See the COMP ENG degree program for details on COMP ENG areas.		
Controls and Systems		
ELEC ENG 3340	Basic Programmable Logic Controllers	3
ELEC ENG 43XX and ELEC ENG 53XX Courses		
Electromagnetics		
ELEC ENG 46XX and ELEC ENG 56XX Courses		
Optics and Devices		
ELEC ENG 3250	Electronic And Photonic Devices	3
ELEC ENG 42XX and ELEC ENG 52XX Courses		
Power and Energy		
ELEC ENG 3500	Electromechanics	3
ELEC ENG 3540	Power System Design And Analysis	3
ELEC ENG 5150	Photovoltaic Systems Engineering	3
ELEC ENG 5520	Power Electronics	3
ELEC ENG 5521	Power Electronics Laboratory	2
ELEC ENG 45XX and ELEC ENG 55XX Courses		

Accelerated BS/MS Program Option for EE and CpE Majors

Electrical engineering or computer engineering undergraduates in ECE at Missouri S&T may opt to apply for an accelerated BS/MS ECE program where a student can achieve both degrees faster than if pursuing the degrees separately. The degrees may be BS EE and MS EE, BS CpE and MS CpE, BS EE and MS CpE, or BS CpE and MS EE. The benefits of the program for admitted students are:

- Undergraduate and graduate courses may be chosen with greater flexibility,
- Up to six hours of 5000-level or above ECE coursework may apply to both the BS and MS requirements,
- The classes taken for shared BS/MS credit may be taken at the lower undergraduate tuition rate,
- The GRE is not required for admission,
- Other graduate credit courses may be taken anytime after entering the program, and
- Work on a thesis project may begin before the BS requirements are completed.

The BS-degree requirements are modified for admitted students such that EE Electives D and E or CpE Electives B and C will be satisfied by six-credit-hours of 5000-level or above ECE coursework. To be eligible for the accelerated BS/MS ECE program, an EE or CpE undergraduate must be at or beyond the junior level with a minimum of 60 credit hours and must have completed 18 credit hours of EE and/or CpE courses at Missouri S&T with at least a 3.50 GPA in the ECE courses. To be admitted, the

student must complete the program application and must have the recommendation of an ECE faculty member who agrees to serve as the graduate thesis advisor. No other MS degree requirements are changed. The MS degree must be for the thesis option. The program may be combined with existing honors research and emphasis area options. Admitted students will have both undergraduate and graduate records in the Registrar's Office.

The Accelerated program application must be completed within one semester after the shared-credit courses are completed. Courses taken for shared credit will be identified on the application form and on Graduate Form 1, which is submitted after the student enters the graduate program. The six hours of shared-credit coursework will be taken as undergraduate credit, must be approved by the academic advisor, and may not be undergraduate research, special problems, or transfer courses (a co-listed course can only apply for these undergraduate requirements if it is under an EE or CpE registration. Note that the choice of EE or CpE registration may affect how a course can apply within an MS program.) An additional six credit hours of coursework for graduate credit (beyond the shared BS/MS credits) can be taken while in the undergraduate program by applying for dual undergraduate/graduate enrollment. Taking additional courses for graduate credit will require formal application to the graduate program. Acceptance to the MS degree program from the Accelerated program is automatic so long as the student meets ECE graduate student academic performance requirements. To remain in the Accelerated program, the student must maintain good standing within the undergraduate EE or CpE program and must maintain continuous enrollment at Missouri S&T. If the student exits the program before completion of the MS degree requirements or fails to maintain continuous enrollment at Missouri S&T, the shared-credit courses may not apply toward graduate requirements in the event of future readmission.

The student is responsible for checking on how dual-enrollment status and graduate coursework will affect scholarships and other financial aid. Once you become a graduate student, you **are not** eligible for Federal Pell Grants, though are still eligible for Federal Financial Aid and will be eligible for fellowships and teaching/research assistantships. International students should check with international affairs during completion of an accelerated BS/MS to ensure immigration status will be maintained throughout the program.

Justification for request

The ECE faculty voted to replace CpSc 1570/1580 with CpSc 1500. CpSc 1500 is a new class which will be the pre-requisite for the upgraded CpSC 1570/1580.

Supporting Documents

Course Reviewer Comments

kristyg (06/09/20 3:14 pm): This was submitted too late for Fall 2020 deadline.

Program Change Request

Date Submitted: 06/01/20 4:30 pm

Viewing: **ENTPRNS-MI : Entrepreneurship
Minor**

File: 50.7

Last approved: 07/14/15 3:37 pm

Last edit: 06/09/20 3:16 pm

Changes proposed by: cecq8z

Catalog Pages Using this Program
[Business and Management Systems](#)
[Information Science and Technology](#)

Start Term

Spring 2021 ~~08/17/2015~~

Program Code

ENTPRNS-MI

Department

Business and Information Technology

Title

Entrepreneurship Minor

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. **Kristy Giacomelli-
Feys**

Approval Path

1. 06/08/20 4:22 pm
siauk: Approved for
RBUSADMN Chair
2. 06/09/20 3:16 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
3. 06/17/20 12:29 pm
Cecil Eng Huang
Chua (cchua):
Approved for Social
Sciences DSCC
Chair
4. 08/03/20 9:28 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:14 am
Marita Tibbetts
(tibbetmsg):

Program Requirements and Description

Approved for CCC Meeting Agenda
6. 08/19/20 10:27 am
Stephen Raper (srafer): Approved for Campus Curricula Committee Chair

History

1. Aug 5, 2014 by pantaleoa
2. Jun 17, 2015 by pantaleoa
3. Jun 18, 2015 by pantaleoa
4. Jul 14, 2015 by pantaleoa

Minor in Entrepreneurship

The minor in entrepreneurship requires the following 15 hours of coursework:

BUS 1110	Introduction to Management and Entrepreneurship	3
BUS 5980	Business Models for Entrepreneurship and Innovation	3
MKT 5310	Digital Marketing and Promotions	3
Two courses from the following list:		6
BUS 1414	Course BUS 1414 Not Found	
BUS 4150	Customer Focus and Satisfaction	
BUS 5580	Strategic Management	
IS&T 4641	Digital Commerce and the Internet of Things	
IS&T 4654	Web and Digital Media Development	
IS&T 4335	Fundamentals of Mobile Technology for Business	
IS&T 5251	Technological Innovation Management and Leadership	
IS&T 6654	Advanced Web and Digital Media Development	
IS&T 5886	Prototyping Human-Computer Interactions	
ENG MGT 5511	Technical Entrepreneurship	
ENG MGT 5411	Engineering Design Optimization	

Justification for request

In line with new AACSB requirements

Supporting Documents

Course Reviewer Comments

kristyg (06/09/20 3:16 pm): This was submitted too late for Fall 2020 deadline.

Key: 50

Program Change Request

Date Submitted: 06/01/20 4:30 pm

Viewing: **MGMT-MI : Management Minor**

File: 138.12

Last approved: 06/27/16 9:25 am

Last edit: 06/09/20 3:17 pm

Changes proposed by: cecq8z

Catalog Pages Using this Program
[Business and Management Systems](#)
[Information Science and Technology](#)

Start Term

Spring 2021 08/15/2016

Program Code

MGMT-MI

Department

Business and Information Technology

Title

Management Minor

In Workflow

1. **RBUSADMN Chair**
2. **CCC Secretary**
3. **Social 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. Kristy Giacomelli-Feys

Approval Path

1. 06/08/20 4:24 pm
siauk: Approved for RBUSADMN Chair
2. 06/09/20 3:17 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
3. 06/17/20 12:29 pm
Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
4. 08/03/20 9:29 am
Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post
5. 08/19/20 10:14 am
Marita Tibbetts (tibbettsmg):

Program Requirements and Description

Approved for CCC
Meeting Agenda
6. 08/19/20 10:28 am
Stephen Raper
(sraper): Approved
for Campus
Curricula
Committee Chair

History

1. Aug 5, 2014 by
pantaleoa
2. Jun 17, 2015 by
pantaleoa
3. Jun 17, 2015 by
pantaleoa
4. Jul 14, 2015 by
pantaleoa
5. Jun 27, 2016 by
Barry Flachsbart
(barryf)

Minor in Management

The minor in management requires the following 15 hours of coursework:

BUS 1110	Introduction to Management and Entrepreneurship	3
BUS 1414	Course BUS 1414 Not Found	
Three courses from the following list:		12
BUS 2910	Business Law	
BUS 3115	Introduction to Teambuilding and Leadership	
BUS 4111	Business Negotiations	
BUS 4150	Customer Focus and Satisfaction	
BUS 5360	Business Operations	
BUS 5470	Human Resource Management	
BUS 5580	Strategic Management	
BUS 5910	Privacy and Information Security Law	
IS&T 4261	Information Systems Project Management	
ENG MGT 3320	Introduction to Project Management	

Justification for request

In line with new AACSB requirements

Supporting Documents

Course Reviewer Comments

kristyg (06/09/20 3:17 pm): This was submitted too late for Fall 2020 deadline.

Program Change Request

Date Submitted: 03/24/20 1:22 pm

Viewing: **MUSIC-MI : Music Minor**

File: 190.1

Last edit: 08/19/20 10:15 am

Changes proposed by: karmannc

Catalog Pages Using this Program

[Music](#)

Start Term

Spring 2021

Program Code

MUSIC-MI

Department

Arts, Languages, & Philosophy

Title

Music Minor

In Workflow

1. **RPHILOSO Chair**
2. **CCC Secretary**
3. **Arts & Humanities 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. **Kristy Giacomelli-Feys**

Approval Path

1. 04/01/20 10:40 am
Audra Merfeld-Langston (audram):
Approved for RPHILOSO Chair
2. 04/03/20 3:19 pm
Kristy Giacomelli-Feys (kristyg):
Approved for CCC Secretary
3. 04/03/20 4:12 pm
Petra Dewitt (dewittp):
Approved for Arts & Humanities DSCC Chair
4. 04/28/20 9:05 am
Kristy Giacomelli-Feys (kristyg):
Approved for Pending CCC Agenda post

Program Requirements and Description

5. 05/06/20 10:14 am
Kristy Giacomelli-Feys (kristygf):
Rollback to Arts & Humanities DSCC Chair for CCC Meeting Agenda
6. 05/06/20 1:30 pm
Petra Dewitt (dewittp): Approved for Arts & Humanities DSCC Chair
7. 08/03/20 9:29 am
Kristy Giacomelli-Feys (kristygf): Approved for Pending CCC Agenda post
8. 08/19/20 10:15 am
Marita Tibbetts (tibbetmsg): Approved for CCC Meeting Agenda
9. 08/19/20 10:28 am
Stephen Raper (sraper): Approved for Campus Curricula Committee Chair

Music Minor Curriculum

1. Students will take three ensemble courses, to be chosen from Band, Choir, Orchestra.

2. Students will take twelve credits of courses chosen from the following list:

- Music 1150

- Music 2161

- Music 2162

- Music 3251

- Music 3252

- Music 1151

- Music 3253

- Music 2163

3. Other courses may be substituted with written permission from the Music Minor Advisor and approval from the Department Chair of ALP

~~Music Minor Curriculum The following courses will be taken: Eight hours of theory. Six hours of music history and literature. Six hours of applied private instruction (two years), culminating in an approved recital or other appearance. The successful music minor will demonstrate adequate keyboard proficiency or take keyboard until proficiency is attained. The music minor will participate in one or more major ensembles per semester (band, jazz, orchestra, vocal, opera).~~

Justification for request

Current minor requirements are antiquated and do not represent industry standards. New requirements will better align our curriculum with other universities offering a music minor.

Supporting Documents

Course Reviewer Comments

audram (04/01/20 10:39 am): Clarified point 1.

kristyg (05/06/20 10:14 am): Rollback: Correct course information

dewittp (05/06/20 1:29 pm): Updated course numbers as approved by CCC 5/6/20

tibbettsmg (08/19/20 10:15 am): MT update Term to Sp21

Program Change Request

New Program Proposal

Date Submitted: 07/21/20 1:28 pm

Viewing: **PROPOSED : Aggregates Management CT**

File: 359

Last edit: 08/19/20 1:24 pm

Changes proposed by: kabp3

Start Term
Spring 2021
Program Code
PROPOSED
Department
Mining & Nuclear Engineering
Title
Aggregates Management CT

In Workflow

1. **MINEXP ENG 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. **CAT entry**
11. **Peoplesoft**

Approval Path

1. 07/08/20 2:22 pm
Kwame Awuah-Offei (kwamea):
Approved for
MINEXP ENG Chair
2. 07/21/20 9:01 am
Kristy Giacomelli-Feys (kristyg):
Approved for CCC
Secretary
3. 07/21/20 12:11 pm
Stephen Raper (sraper): Rollback
to MINEXP ENG
Chair for
Engineering DSCC
Chair
4. 07/21/20 1:24 pm
Kwame Awuah-Offei (kwamea):
Rollback to Initiator

Program Requirements and Description

5. 07/21/20 1:28 pm
Kwame Awuah-
Offei (kwamea):
Approved for
MINEXP ENG Chair
6. 07/30/20 1:53 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
7. 07/30/20 1:59 pm
Stephen Raper
(sraper): Approved
for Engineering
DSCC Chair
8. 08/03/20 9:30 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
9. 08/19/20 1:24 pm
Marita Tibbetts
(tibbetmsg):
Approved for CCC
Meeting Agenda
10. 08/19/20 1:34 pm
Stephen Raper
(sraper): Approved
for Campus
Curricula
Committee Chair

PROGRAM DESCRIPTION

The Aggregates Management Certificate Program is designed to provide formalized education in management for the aggregates and industrial minerals mining sector. This certificate program aims to equip students with skills that allow them to be effective plant/mine managers for this sector. Students admitted to this certificate program must take the four required courses provided in the curriculum section, and obtain a cumulative GPA of 3.0 or better to earn the certificate. Students are admitted in non-matriculated status; however, if they complete the graduate certificate with a grade of "B" or better in each of the courses taken, they may be admitted to the Master of Science degree program in mining engineering, if they choose to. The certificate credits taken by students admitted to this program will count toward their master's degree.

ADMISSION:

The Aggregates Management Certificate Program is open to all persons holding a B.S., M.S.,

or Ph.D. degree in Engineering, Science, and/or Mathematics or are currently accepted into a graduate degree program at Missouri S&T.

Once admitted to the program, the student must take the four designated courses (provided in the curriculum section). In order to receive a Graduate Certificate, the student must have an average cumulative grade point of 3.0 or better in the certificate courses. Once admitted to the program, a student will be given three years to complete the program.

Students admitted to the Aggregates Management Certificate Program will have non-degree graduate status, however, they will earn graduate credit for the course they complete. If the student completes the four-course sequence with a grade of B or better in each of the courses taken, they, upon application, will be admitted to the M.S. degree program in mining engineering. The certificate credits taken by the students admitted to the M.S. degree program will count towards their master's degrees. Students who do not have all of the prerequisite courses necessary to begin the courses in the Aggregates Management Certificate Program will be allowed to take "bridge" courses at either the graduate or undergraduate level to prepare for the formal certificate courses.

CONTRIBUTING FACULTY:

Mining Engineering; Explosives Engineering

REQUIRED COURSES

MIN ENG 5212 Aggregates and Quarrying (LEC 3.0)

Advanced coverage of topics on the stone and aggregate industry, including surface and underground operations, plant equipment, economics, marketing, transportation, and environmental topics. The course will include at least one field trip and a design project. Prerequisite: Min Eng 3912; Preceded or accompanied by Civ Eng 3116.

MIN ENG 5412 Aggregates Materials Sizing and Characterization (LAB 1.0 and LEC 2.0)

Geological formation of aggregates; aggregate properties and their measurements; aggregates for specific end-user applications; specifications and standards; processing (crushing, screening, classification, and washing); plant design and flow sheet analysis; quality control and assurance. Field trip to a nearby quarry required. Prerequisite: Min Eng 2412.

MIN ENG 5612 Principles of Explosives Engineering (LAB 1.0 and LEC 2.0)

Theory and application of explosives in the mining industry; explosives, initiating systems, characteristics of explosive reactions and rock breakage, fundamentals of blast design, drilling and blasting, regulatory and safety considerations. Prerequisites: Min Eng 2126; successful background check. (Co-listed with Exp Eng 5612).

MIN ENG 6532 Mine Management II (LEC 3.0)

The course covers advanced concepts in managing mine operations. Topics to be covered include TQM, statistical process control, benchmarking, KPI, standards and standardization, ISO 9000: Quality Control, ISO 14000: Environmental systems, OHSAS 18000. Management systems, SA8000, Social Accountability and others. Prerequisite: Consent of instructor.

Justification for request

This course will allow professionals or recent graduates who are looking for a graduate certificate in the specific area of aggregates and construction materials mining to get specialized training beyond their BS degrees.

Supporting Documents

[Signed -Aggregates Management-cover letter.pdf](#)

[Aggregates Management - Graduate Certificate.pdf](#)

[MS&T PC June 2020 REVISED.pdf](#)

Course Reviewer Comments

sraper (07/21/20 12:11 pm): Rollback: DSCC - Eng desires clean-up of form: "At what point should the CT proposal in aggregates be cleaned up? It currently has in the Admissions section "(can either leave this as is or enter specific information)". I don't object to the CT, just feel like that part should be final before approval."

kabp3 (07/21/20 1:24 pm): Rollback: Fix comments from Steve Raper

kristyg (08/19/20 12:30 pm): Changed for consistency purposes

tibbettsmg (08/19/20 1:24 pm): MT updated term to Sp21

Program Change Request

Date Submitted: 07/08/20 2:14 pm

Viewing: **SFTYENG-CT : Safety Engineering**

File: 335.6

Last approved: 07/11/19 11:22 am

Last edit: 08/19/20 10:16 am

Changes proposed by: luksc

Catalog Pages Using this Program
[Engineering Management](#)

Start Term

Spring 2021 ~~Fall 2019~~

Program Code

SFTYENG-CT

Department

ENG MGT

Title

Safety Engineering

In Workflow

1. CCC Secretary
2. Engineering DSCC Chair
3. Pending CCC Agenda post
4. CCC Meeting Agenda
5. Campus Curricula Committee Chair
6. FS Meeting Agenda
7. Faculty Senate Chair
8. Registrar
9. Kristy Giacomelli-Feys

Approval Path

1. 07/21/20 9:01 am
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
2. 07/23/20 9:16 am
Stephen Raper (sraper): Approved for Engineering DSCC Chair
3. 08/03/20 9:30 am
Kristy Giacomelli-Feys (kristyg): Approved for Pending CCC Agenda post
4. 08/19/20 10:16 am
Marita Tibbetts (tibbettsmg): Approved for CCC Meeting Agenda
5. 08/19/20 10:28 am
Stephen Raper (sraper): Approved

Program Requirements and Description

for Campus
Curricula
Committee Chair

History

1. Jul 10, 2019 by
Crystal Wilson
(wilsoncry)
2. Jul 10, 2019 by
Crystal Wilson
(wilsoncry)
3. Jul 10, 2019 by
Crystal Wilson
(wilsoncry)
4. Jul 11, 2019 by
Crystal Wilson
(wilsoncry)
5. Jul 11, 2019 by
Crystal Wilson
(wilsoncry)

Safety Engineering

Safe engineering systems protect the health of workers and the public, preserve the environment, and improve the profitability of industrial facilities. The graduate certificate in safety engineering is a program of study that focuses on methods to reduce risks, prevent accidents, and/or mitigate the consequences to acceptable levels. Risk reduction is accomplished by identifying hazards with unacceptable consequences and then reducing the probability of occurrence (accident reduction) and/or reducing the consequences to acceptable levels (mitigation). The program of study consists of four courses: two required core courses and two courses selected from a specialization track.

Requires two core courses and two courses selected from a track		
Core Courses:		
ENG MGT 4312/CHEM ENG 5130	Risk Assessment and Reduction	3
ENG MGT 5316	Safety Engineering Management	3
Available Specialization Tracks:		
Track 1: Chemical/Metallurgical Process Safety		
Required:		
CHEM ENG 5140	Course CHEM ENG 5140 Not Found	3
CHEM ENG 6241	Intermediate Chemical Process Safety	3
Choose one course from the following:		
CHEM ENG 5305	Hazardous Materials Management	3

CHEM ENG 5190/ELEC ENG 5350	Plantwide Process Control	3
IS&T 5885	Human-Computer Interaction	3
MET ENG 5630	Environmental Aspects Of Metals Manufacturing	3
Track 2: Safety Engineering Management		
ENG MGT 5713	Management And Methods In Reliability	3
SYS ENG 6110	Optimization under Uncertainty	3
Track 3: Process Control Systems		
Choose two courses from the following:		
ELEC ENG 5870	Mechatronics	3
ELEC ENG 5350/CHEM ENG 5190	Plantwide Process Control	3
ELEC ENG 5340	Advanced PLC	3
CHEM ENG 5140	Course CHEM ENG 5140 Not Found	3
CHEM ENG 6241	Intermediate Chemical Process Safety	3
COMP ENG 5420	Introduction to Network Security	3
Track 4: Nuclear Process Safety		
Choose two courses from the following:		
IS&T 5885	Human-Computer Interaction	3
NUC ENG 4207	Nuclear Fuel Cycle	3
NUC ENG 4229	Nuclear Power Plant Systems	3
NUC ENG 4347	Radiological Engineering	3
NUC ENG 4281	Probabilistic Risk Assessment I	3
NUC ENG 6223	Nuclear Reactor Safety	3
Track 5: Nuclear Material Safety		
Required:		
NUC ENG 4312	Nuclear Radiation Measurements and Spectroscopy	3
Choose one course from the following:		
NUC ENG 4207	Nuclear Fuel Cycle	3
NUC ENG 4347	Radiological Engineering	3
NUC ENG 4363	Applied Health Physics	3
NUC ENG 6331	Radiation Shielding	3
Track 6: Radiological Health & Safety		
Required:		
NUC ENG 4363	Applied Health Physics	3
Choose one course from the following:		
NUC ENG 4207	Nuclear Fuel Cycle	3

NUC ENG 4312	Nuclear Radiation Measurements and Spectroscopy	3
NUC ENG 4347	Radiological Engineering	3
NUC ENG 6331	Radiation Shielding	3
Track 7: Human Factors		
Required:		
ENG MGT 4330	Human Factors	3
Choose one course from the following:		
BIO SCI 4383	Toxicology	3
PSYCH 4700	Industrial Psychology	3
PSYCH 4730	Environmental Psychology	3
Track 8: Reliability		
Choose two courses from the following:		
ENG MGT 5713	Management And Methods In Reliability	3
STAT 5353	Statistical Data Analysis	3
STAT 6570	Theory Of Reliability	3

Justification for request

ChemEng 5140 is not being offered, it has been replaced by ChemEng 6241. ChemEng 5305 is now a 1-credit course, so no longer appropriate for this certificate.

Supporting Documents

Course Reviewer Comments

tibbettsmg (08/19/20 10:16 am): MT update term to Sp21

New Experimental Course Proposal

Date Submitted: 05/26/20 10:21 pm

Viewing: **CIV ENG 6001.007 :**

Characterization and Modeling of Cement-Based Materials

File: 4722

Last edit: 08/03/20 9:09 am

Changes proposed by: mahon

Requested Spring 2021

Effective Change

Date

Department

Civil, Architectural, and Environmental Engineering

Discipline

Civil Engineering (CIV ENG)

Course Number 6001

Topic ID 007

Experimental

Title

Experimental Cement Characterization

Abbreviated

Course Title

Instructors

Hongyan Ma

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. CAT entry
8. Registrar

Approval Path

1. 05/27/20 11:49 am
Joel Burken (burken):
Approved for RCIVILEN Chair
2. 06/09/20 3:11 pm
Kristy Giacomelli-Feys (kristygf):
Approved for CCC Secretary
3. 07/23/20 9:15 am
Stephen Raper (sraper):

Approved for
Engineering DSCC
Chair

4. 08/03/20 9:09 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:16
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:27
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/19/20 1:34 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Characterization and Modeling of Cement-Based Materials
Experimental
Catalog
Description

The microstructure of cement-based materials manifests itself at multiple length scales, which determines the engineering properties, such as strength and permeability. How to characterize and model the microstructure at different scales, and how to simulate/derive properties based on microstructure will be introduced.

Prerequisites

None

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

Graduate students are interested in cementitious materials for constructions of civil infrastructure, military infrastructure, energy infrastructure, and even aerospace infrastructure. So it is necessary to develop a new course about the basic methodology to do fundamental research regarding cementitious materials and cement-based materials. The new course may benefit graduate students not only from civil engineering, but also from materials science, chemical engineering, petroleum engineering, mechanical and aerospace engineering, mining engineering, etc.

Semester(s)

previously taught

None

Co-Listed

Courses:

Course Reviewer

Comments

sraper (07/21/20 12:14 pm): modified justification to more implicitly indicate the course is for graduate students, not faculty. This was an objection from the DSCC.

New Experimental Course Proposal

Date Submitted: 05/26/20 3:56 pm

Viewing: **COMP ENG 6001.006 : Adaptive Resonance Theory and Applications**

File: 4721

Last edit: 08/03/20 9:37 am

Changes proposed by: mlr6xd

Requested Fall 2020

Effective Change

Date

Department

Electrical and Computer Engineering

Discipline

Computer Engineering (COMP ENG)

Course Number 6001

Topic ID 006

Experimental

Title

Experimental Adapt Res Theory

Abbreviated

Course Title

Instructors

Donald Wunsch

In Workflow

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

Approval Path

1. 05/26/20 7:57 pm
Daryl Beetner
(daryl): Approved for RELECENG Chair
2. 06/09/20 3:12 pm
Kristy Giacomelli-Feys (kristyg):
Approved for CCC Secretary
3. 07/23/20 9:15 am
Stephen Raper
(sraper):
Approved for

Engineering DSCC
Chair

4. 08/03/20 9:38 am

Kristy Giacomelli-

Feys (kristyg):

Approved for

Pending CCC

Agenda post

5. 08/19/20 10:17

am

Marita Tibbetts

(tibbettsmg):

Approved for CCC

Meeting Agenda

6. 08/19/20 10:27

am

Stephen Raper

(sraper):

Approved for

Campus Curricula

Committee Chair

7. 08/19/20 1:37 pm

Marita Tibbetts

(tibbettsmg):

Approved for CAT

entry

Adaptive Resonance Theory and Applications

Experimental

Catalog

Description

This course will cover advanced topics in adaptive resonance theory (ART), including clustering, biclustering, supervised learning, reinforcement learning, and a variety of

image and data analysis techniques built on ART. Students will also encounter case studies of the predictive power of ART and related theories regarding learning mechanisms.

Prerequisites

A graduate course in neural networks, clustering, neuroscience or computational intelligence, and strong aptitude for and interest in original research

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for
new course:

This topic is attracting thousands of papers and has been applied successfully in many applications, but we have no course like it. A recent survey of innovative publications in ART is:

Leonardo Enzo Brito da Silva, Islam Elnabarawy and Donald C. Wunsch II, "A Survey of Adaptive Resonance Theory Neural Network Models for Engineering Applications," Neural Networks Special Issue In Honor of the 80th Birthday of Stephen Grossberg, Vol.120, December 2019, pp. 167-210. DOI: 10.1016/j.neunet.2019.09.012

Semester(s)

previously taught

none

Co-Listed

Courses:

ELEC ENG 6001 - Special Topics

Course Reviewer

Comments

New Experimental Course Proposal

Date Submitted: 06/08/20 5:36 pm

Viewing: **MECH ENG 5001.005 :**

Neuromechanics of Human Movement

File: 4723

Last edit: 08/03/20 9:29 am

Changes proposed by: nisbett

Requested Fall 2020

Effective Change

Date

Department

Mechanical & Aerospace Engineering

Discipline

Mechanical Engineering (MECH ENG)

Course Number 5001

Topic ID 005

Experimental

Title

Experimental Neuromech Human

Abbreviated Movement

Course Title

Instructors

Yun-Seong Song

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. CAT entry
8. Registrar

Approval Path

1. 06/08/20 5:37 pm
J. Keith Nisbett
(nisbett):
Approved for
RMECHENG Chair
2. 06/09/20 3:17 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
3. 07/23/20 9:16 am
Stephen Raper
(sraper):
Approved for

Engineering DSCC
Chair

4. 08/03/20 9:29 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/14/20 2:27 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Meeting Agenda
6. 08/18/20 2:46 pm
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/18/20 3:20 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Neuromechanics of Human Movement

Experimental

Catalog

Description

To guide engineering designs and implementations for human users, this course presents a broad overview of the human sensory-motor behavior and the neural/physical factors that affect human movement. Topics include a survey of the

human sensorimotor system, dynamics of human movement, experimental techniques, and case studies of human-machine interaction.

Prerequisites

Mech Eng 4479 or equivalent

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

This is a topic of significant interest for developing field of bio-related robotics.

Semester(s)

previously taught

None

Co-Listed

Courses:

Course Reviewer

Comments

New Experimental Course Proposal

Date Submitted: 07/30/20 4:48 pm

Viewing: **MUSIC 2001.004 : The Heart of Rock n' Roll**

File: 4734

Last edit: 08/19/20 10:18 am

Changes proposed by: karmannc

Requested Spring 2021

Effective Change

Date

Department

Arts, Languages, & Philosophy

Discipline

Music (MUSIC)

Course Number 2001

Topic ID 004

Experimental

Title

Experimental Heart of Rock n' Roll

Abbreviated

Course Title

Instructors

David Samson

In Workflow

1. RPHILOSO Chair
2. CCC Secretary
3. Arts & Humanities DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. CAT entry
8. Registrar

Approval Path

1. 07/30/20 5:56 pm
Audra Merfeld-Langston
(audram):
Approved for RPHILOSO Chair
2. 08/03/20 9:07 am
Kristy Giacomelli-Feys (kristyg):
Approved for CCC Secretary
3. 08/03/20 9:10 am
Petra Dewitt

(dewittp):

Approved for Arts
& Humanities
DSCC Chair

4. 08/03/20 9:35 am

Kristy Giacomelli-
Feys (kristyg):

Approved for
Pending CCC
Agenda post

5. 08/19/20 10:18
am

Marita Tibbetts
(tibbettsmg):

Approved for CCC
Meeting Agenda

6. 08/19/20 10:28
am

Stephen Raper
(sraper):

Approved for
Campus Curricula
Committee Chair

7. 08/19/20 1:33 pm

Marita Tibbetts
(tibbettsmg):

Approved for CAT
entry

The Heart of Rock n' Roll

Experimental

Catalog

Description

Explore the development of popular music genres from early rhythm & blues through the 50s (Elvis and Chuck Berry), 60s (the British Invasion and Woodstock), 70s (experimental rock and disco), 80s (punk, new wave and hair bands), 90s (gangster rap, grunge, boy bands) and today.

Prerequisites

Any 1000 level Music course (may be taken concurrently), or consent of instructor.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

This course will add more variety in the music minor curriculum. It is also a topic that has a greater appeal to current students and thus should have a wide audience not only for music minors, but for the larger university population.

Semester(s)

previously taught

Co-Listed

Courses:

Course Reviewer

Comments

New Experimental Course Proposal

Date Submitted: 05/09/20 4:44 pm

Viewing: **STAT 5001.003 : Computational Bayesian Methods using Python**

File: 4715

Last edit: 08/03/20 9:31 am

Changes proposed by: paigero

Requested Spring 2021

Effective Change

Date

Department

Mathematics & Statistics

Discipline

Statistics (STAT)

Course Number 5001

Topic ID 003

Experimental

Title

Experimental Computational Bayes

Abbreviated

Course Title

Instructors

Robert Paige

In Workflow

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

Approval Path

1. 05/14/20 9:38 pm
vsam: Approved for RMATHEMA Chair
2. 06/09/20 3:17 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
3. 06/24/20 1:01 pm
Katie Shannon (shannonk): Approved for

Sciences DSCC
Chair

4. 08/03/20 9:31 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:18
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:28
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/19/20 1:39 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Computational Bayesian Methods using Python

Experimental

Catalog

Description

An introduction to Bayesian data analytic tools implemented in the Python programming language and their appropriate and effective use. The focus of the

course is on the computational strategies and algorithms for Bayesian models and a discussion of theoretical underpinnings of the methods implemented.

Prerequisites

One of Stat 3113 or 3115 or 3117 or 5643; and one of Stat 5346 or 5353 or 6841 or 6343 or 6344 or 6545

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

In theory, Bayesian statistics is very simple. With the specification of a likelihood function and a prior distribution one can always obtain predictions, intervals of estimate and numerous other statistical quantities with a direct probabilistic interpretations; if one can performed the required integrations. Unfortunately, integrals that one encounters outside of a few classical problems cannot be evaluated in closed-form or easily approximated. The computational strategies and algorithms are specifically designed to approximate these intractable integrals in an efficient way.

This course will cover a basic treatment of hierarchical models, linear and generalized linear models, mixture models, Bayesian Causal Inference, nonparametric Bayes methods and Bayesian calibration of computer models. The numerical methods considered will include Markov Chain Monte Carlo, Importance Sampling, the Metropolis-Hastings Algorithm, and Gibbs Sampling and Convergence Diagnostics. Laplace approximations and other analytic approximations will also be considered.

Semester(s)

previously taught

Not previously taught

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4715

[Preview Bridge](#)

New Experimental Course Proposal

Date Submitted: 05/14/20 7:09 pm

Viewing: **STAT 5001.004 : Design and**

Analysis of Clinical Trials

File: 4719

Last edit: 08/03/20 9:31 am

Changes proposed by: paigero

Requested Fall 2020

Effective Change

Date

Department

Mathematics & Statistics

Discipline

Statistics (STAT)

Course Number 5001

Topic ID 004

Experimental

Title

Experimental Clinical Trials

Abbreviated

Course Title

Instructors

Robert Paige

In Workflow

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

Approval Path

1. 05/14/20 9:38 pm
vsam: Approved
for RMATHEMA
Chair
2. 06/09/20 3:17 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
3. 06/24/20 1:02 pm
Katie Shannon
(shannonk):
Approved for

Sciences DSCC
Chair

4. 08/03/20 9:31 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:18
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:28
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/19/20 1:40 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Design and Analysis of Clinical Trials

Experimental

Catalog

Description

An introduction to clinical trials and their design; Phase I, II, and III designs; ethical issues; stopping rules; interim analysis; statistical modeling of trial data; adaptive

randomization and designs; equivalence testing; baseline assessment; further issues in the analysis clinical trials data.

Prerequisites

One of Stat 3113 or 3115 or 3117 or 5643; and one of Stat 5346 or 5353 or 6841 or 6343 or 6344 or 6545.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

A clinical trial is a research study using consenting human subjects that tests the effectiveness and safety of a treatment, a diagnostic tool, or a preventative intervention. As such they are key source of data for the Data Scientist. The importance of the class is emphasized by the on-going Covid-19 global pandemic. This course would be of interest to students in statistics, human factors research, psychology, and the biological sciences.

Semester(s)

previously taught

none.

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4719

[Preview Bridge](#)

New Experimental Course Proposal

Date Submitted: 05/14/20 6:35 pm

Viewing: **STAT 5001.005 : Foundations of Statistical Learning**

File: 4717

Last edit: 08/03/20 9:33 am

Changes proposed by: paigero

Requested Fall 2020

Effective Change

Date

Department

Mathematics & Statistics

Discipline

Statistics (STAT)

Course Number 5001

Topic ID 005

Experimental

Title

Experimental Statistical Learning

Abbreviated

Course Title

Instructors

Robert Paige

In Workflow

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

Approval Path

1. 05/14/20 9:38 pm
vsam: Approved for RMATHEMA Chair
2. 06/09/20 3:18 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
3. 06/24/20 1:03 pm
Katie Shannon (shannonk): Approved for

Sciences DSCC
Chair

4. 08/03/20 9:33 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:18
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:28
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/19/20 1:41 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Foundations of Statistical Learning

Experimental

Catalog

Description

An introduction to the statistical foundations of data-analytic techniques commonly used in Data Mining and the analysis of Big Data, including spline and kernel

methods, principal component analysis, dimension reduction, neural networks, tree-based methods, nearest neighbors methods, support vector machines, bagging and boosting.

Prerequisites

Math 2222, Math 3108 and one of Stat 3113 or 3115 or 3117 or 5643

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

Data Mining and Big Data are part of what many consider to be a revolution in the data sciences and as such have generated much interest. The techniques covered in Statistical Learning provide access to much of what is going on in Data Mining and Big Data.

Semester(s)

previously taught

None.

Co-Listed

Courses:

Course Reviewer

Comments

New Experimental Course Proposal

Date Submitted: 05/14/20 6:59 pm

Viewing: **STAT 5001.006 : Design and Analysis of Epidemiologic Studies**

File: 4718

Last edit: 08/03/20 9:32 am

Changes proposed by: paigero

Requested Fall 2020

Effective Change

Date

Department

Mathematics & Statistics

Discipline

Statistics (STAT)

Course Number 5001

Topic ID 006

Experimental

Title

Experimental Statistical Epidemiology

Abbreviated

Course Title

Instructors

Robert Paige

In Workflow

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

Approval Path

1. 05/14/20 9:38 pm
vsam: Approved for RMATHEMA Chair
2. 06/09/20 3:18 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
3. 06/24/20 1:03 pm
Katie Shannon (shannonk): Approved for

Sciences DSCC
Chair

4. 08/03/20 9:32 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:18
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:28
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/19/20 1:42 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Design and Analysis of Epidemiologic Studies

Experimental

Catalog

Description

An introduction to epidemiological studies; potential outcomes; causality; adjustment for confounding, selection bias and measurement bias.

Prerequisites

One of Stat 3113 or 3115 or 3117 or 5643

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

The justification for this course is two-fold. First, of course is the on-going Covid-19 global pandemic and the need for future Data Scientists to be educated in epidemiology. Second, this course will cover statistical causation in detail which in and of itself will be of interest to Data Scientists. In this same vein, this course would also be of interest to any student who would like to gain a better understanding of how to interpret the results of a statistical data analysis and/or would like to gain knowledge of how to perform causal data analyses.

Semester(s)

previously taught

none.

Co-Listed

Courses:

Course Reviewer

Comments

New Experimental Course Proposal

Date Submitted: 05/14/20 6:28 pm

Viewing: **STAT 5001.007 : Statistical Shape**

Analysis

File: 4716

Last edit: 08/03/20 9:33 am

Changes proposed by: paigero

Requested Fall 2020

Effective Change

Date

Department

Mathematics & Statistics

Discipline

Statistics (STAT)

Course Number 5001

Topic ID 007

Experimental

Title

Experimental Shape Analysis

Abbreviated

Course Title

Instructors

Robert Paige

In Workflow

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

Approval Path

1. 05/14/20 9:38 pm
vsam: Approved
for RMATHEMA
Chair
2. 06/09/20 3:18 pm
Kristy Giacomelli-
Feys (kristyg):
Approved for CCC
Secretary
3. 06/24/20 1:05 pm
Katie Shannon
(shannonk):
Approved for

Sciences DSCC
Chair

4. 08/03/20 9:33 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:18
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:29
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/19/20 1:43 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Statistical Shape Analysis

Experimental

Catalog

Description

Statistical shape analysis considers random objects where location, rotation and scale information is removed. This is a new area of statistics that has a huge variety

of novel applications in many areas of science including agriculture, archeology, bioinformatics, biology, computer science, engineering, genetics, geography, geology and medicine.

Prerequisites

MATH 2222 and one of Stat 3113 or 3115 or 3117 or 5643

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

This is a novel area of statistics which is very interdisciplinary and should be of interest to students in a variety of STEM fields

Semester(s)

previously taught

None

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4716

[Preview Bridge](#)

New Experimental Course Proposal

Date Submitted: 05/08/20 12:57 am

Viewing: **STAT 5001.008 : Topological Data**

Analysis

File: 4711

Last edit: 08/19/20 10:19 am

Changes proposed by: paigero

Requested Spring 2021

Effective Change

Date

Department

Mathematics & Statistics

Discipline

Statistics (STAT)

Course Number 5001

Topic ID 008

Experimental

Title

Experimental TDA

Abbreviated

Course Title

Instructors

Robert Paige

In Workflow

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

Approval Path

1. 05/08/20 9:03 am
vsam: Approved for RMATHEMA Chair
2. 06/09/20 3:18 pm
Kristy Giacomelli-Feys (kristyg): Approved for CCC Secretary
3. 06/24/20 1:05 pm
Katie Shannon (shannonk): Approved for

Sciences DSCC
Chair

4. 08/03/20 9:34 am
Kristy Giacomelli-
Feys (kristyg):
Approved for
Pending CCC
Agenda post
5. 08/19/20 10:19
am
Marita Tibbetts
(tibbettsmg):
Approved for CCC
Meeting Agenda
6. 08/19/20 10:29
am
Stephen Raper
(sraper):
Approved for
Campus Curricula
Committee Chair
7. 08/19/20 1:44 pm
Marita Tibbetts
(tibbettsmg):
Approved for CAT
entry

Topological Data Analysis

Experimental

Catalog

Description

Topological data analysis is concerned with the topological structure of large and complex data sets using select tools from computational topology. This course will

provide an intuitive overview of relevant concepts from topology and applications of the Mapper algorithm and persistent homology to data types such as point clouds, digital images and networks

Prerequisites

MATH 3108 and programming experience.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Justification for

new course:

Topological data analysis approaches data science with a tools developed from algebraic topology. As a result it is based upon mathematics that are quite different from those used in the development of more classical data analysis techniques. As a result it can used in situations where classical methods fail. It is especially useful in situations where the data has a meaningful complex structure that is not easily modelled using standard data analysis methods.

Semester(s)

previously taught

Not previously taught

Co-Listed

Courses:

Course Reviewer

Comments