



Campus Curricula Committee Meeting Agenda

January 13, 2015

2:30-4:00 p.m., Room 110H Bertelsmeyer Hall

CourseLeaf Approval of Co-Listed Courses

Review of submitted Degree Change forms:

File #148.11 Business & Management Systems: Business & Management Systems BS
File #44.13 Engineering Management: Engineering Management BS
File #58.11 Finance: Finance Minor
File #75.7 Information Science & Technology: Information Science & Technology BS
File #238 Proposed: Human-Computer Interaction and User Experience Minor
File #239 Proposed: Business Analytics and Data Science Minor

Review of submitted Course Change forms:

File #4170 Chemical Engineering 6010: Graduate Seminar
File #2235.1 Economics 2114: Managerial Economics
File #4166 Economics 3000: Special Problems
File #4144 Economics 4010: Seminar
File #2107.1 Economics 4641: Foundations of Sustainability
File #2187.1 Economics 4642: Introduction to Global Eco- and Social-preneurship and Innovation
File #968.4 Economics 4643: Ethical Problems in a Global Environment
File #4163 Economics 5010: Seminar
File #4165 Economics 6000: Special Problems
File #4164 Economics 6010: Seminar
File #4160 Economics 6641: Advanced Foundations of Sustainability
File #4048.7 Economics 6643: Advanced Ethical Problems in a Global Environment
File #92.1 Engineering Management 1210: Economic Analysis of Engineering Projects
File #1393.1 Engineering Management 2310: Introduction to System Engineering
File #2379.1 Engineering Management 3310: Operations and Production Management
File #827.1 Engineering Management 3320: Introduction to Project Management
File #496.1 Engineering Management 3510: Marketing Management
File #2431.1 Engineering Management 4110: General Management-Design and Intergration
File #2430.1 Engineering Management 4310: Materials Handling and Plant Layout
File #164.1 Engineering Management 4907: Engineering Management Senior Design
File #393.1 Engineering Management 5412: Operations Management Science
File #651.1 Engineering Management 5510: Industrial Marketing Systems Analysis
File #870.1 Engineering Management 5512: Legal Environment



File #2070.1	Engineering Management 5610: Advanced Facilities Planning & Design
File #4120	Geological Engineering 5332: Fundamentals of Groundwater Hydrology
File #4119	Geological Engineering 5415: Soil Mechanics for Geoprosessionals
File #4121	Geological Engineering 6400: Practice Oriented Project
File #745.1	Geophysics 3210: Introduction to Geophysics
File #768.1	Geophysics 5251: Exploration and Development Seismology
File #745.1	Geophysics 5261: Computational Geophysics
File #2205.1	Geophysics 5736: Geophysical Field Methods
File #1330.1	Geophysics 5761: Transportation Applications of Geophysics
File #2225.1	Information Science & Technology 3333: Data Networks and Information Security
File #4156	Information Science & Technology 3420: Introduction to Data Science and Management
File #4157	Information Science & Technology 4450: Introduction to Information Visualization
File #4040.8	Information Science & Technology 5420: Business Analytics and Data Science
File #124.3	Information Science & Technology 5886: Prototyping Human-Computer Interactions
File #75.1	Information Science & Technology 6336: Foundations of Internet Computing
File #4132	Information Science & Technology 6450: Information Visualization
File #4147	Nuclear Engineering 4350: Introduction to Nuclear Medical Science
File #4148	Nuclear Engineering 5350: Advanced Nuclear Medical Science

Review of submitted Experimental Course forms:

File #4162	Aerospace Engineering 2001.TBD: Introduction to Spacecraft Design
File #4158	Chemical Engineering 4001.TBD: Bioprocess Safety
File #4092	Political Science 3001.TBD: Politics of the Middle East
File #4169	Russian 5001.TBD: Advanced Scientific Russian

Program Change Request

Date Submitted: 12/17/14 10:52 am

Viewing: **BUS&MS-BS : Business and Mgmt Systems BS**

File: 148.11

Last approved: 08/05/14 2:58 pm

Last edit: 12/19/14 2:52 pm

Changes proposed by: barryf

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

Start Term **Fall 2015** ~~8/1/2014~~
Program Code BUS&MS-BS
Department Business and Information Technology
Title Business and Mgmt Systems BS

Program Requirements and Description

Bachelor of Science Business and Management Systems

In Business and Management Systems, the Bachelor of Science degree consists of 120 credit hours. First, all undergraduate students in Business and Management Systems are required to complete a prescribed General Education Requirements Core that corresponds to the recommendations of the Missouri State Coordinating Board for Higher Education and consists of 54 credit hours in the areas of Natural Systems, Human Institutions, Quantitative Skills, and Communication Skills. In addition, all undergraduate students are required to complete a 27 credit hour core consisting of courses in Information Technology, Management, and Entrepreneurship. A minimum grade of "C" is required for courses in these areas. Finally, the degree includes 12 credit hours of free electives.

The remaining 27 credit hours of the required 120 credit hours for the Business and Management Systems degree are divided into a prescribed 18 credit hour degree core and 9 credit hours of degree specific electives. A minimum grade of "C" is required in these courses. The electives for this degree are then chosen from business-related upper-level courses.

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. josephj
11. juliep
12. pantaleoa

Approval Path

1. 12/17/14 10:58 am
siauk: Approved for
RINFSCTE Chair
2. 12/17/14 11:00 am
kleb6b: Approved
for CCC Secretary
3. 12/17/14 9:09 pm
barryf: Approved for
Social Sciences
DSCC Chair
4. 12/19/14 8:05 am
kleb6b: Approved
for Pending CCC
Agenda post
5. 12/19/14 2:51 pm
kleb6b: Rollback to
Pending CCC
Agenda post for
CCC Meeting
Agenda

History

1. Aug 5, 2014 by
barryf

Freshman Year			
First Semester	Credits	Second Semester	Credits
PSYCH 1101	3	MATH 1140	3
BUS 1810 ¹	1	IS&T 1750	3
BUS 1110	3	IS&T 1750	3
ENGLISH 1120	3	ENGLISH 1600 or TCH COM 1600	3
Science Elective ³	3	ECON 1200	3
Laboratory w/ Science Elective ³	1	Science Elective ³	3

	14		15
Sophomore Year			
First Semester	Credits	Second Semester	Credits
BUS 1210	3	History Elective	3
MATH 1212	4	FINANCE 2150	3
IS&T 4554	3	IS&T 4552	3
IS&T 1551	3	IS&T 1552	3
ECON 1100	3	ERP 2110	3
SP&M S 1185	3	POL SCI 1200	3
SP&M S 1185	3		
	16		15
Junior Year			
First Semester	Credits	Second Semester	Credits
Business Elective	3	ECON 2300	3
Speech or Tech Com Elective	3	BUS 5580	3
MKT 3110	3	ENGLISH 2560 or TCH COM 2560	3
IS&T 4654	3	Business Elective	3
STAT 3111	3	Free Elective	3
BUS 3220	3		
	15		15
Senior Year			
First Semester	Credits	Second Semester	Credits
Free Elective	3	Business Elective	3
BUS 2910	3	BUS 5980 ¹	3
BUS 3360	3	BUS 4675	3
Fine Art, Social Science, or Humanities Electives ²	3	Fine Art, Social Science, or Humanities Elective ²	3
BUS 5360	3	Free Electives	3
Business Elective	3		
	15		15
Total Credits: 120			

A grade of "C" or better is required in the following courses for graduation: [IS&T 1552](#), [ERP 2110](#), [BUS 1110](#), [BUS 1210](#), [ECON 1100](#), [ECON 1200](#), [MKT 3110](#), [FINANCE 2150](#), [BUS 4675](#), [BUS 3360](#), [IS&T 4654](#), ~~[BUS 3220](#)~~, ~~[BUS 5580](#)~~, and [ECON 2300](#).

¹ Writing Intensive Course

² Any course in the following areas not used for other degree requirements: Art, Economics, English, Foreign Language, History, Literature, Music, Philosophy, Political Science, Psychology, Sociology, Theater.

³ Any course in the following areas: Biology, Chemistry, Geology, Geological Engineering, Physics.

Areas of Concentration

All students are required to complete twelve credit hours chosen from 2000, 3000, 4000, or 5000-level courses in business, economics, finance, enterprise resource planning, or information science & technology. A "C" or better grade is required in all twelve credit hours. If the student chooses to designate an area of concentration for these courses, focusing at least 3 courses (9 credits) in one area, he or she may do so. Students are not required to choose a concentration area. Areas of concentration are:

E-Commerce

IS&T 5652	Advanced Web Development	3
IS&T 4644	Electronic and Mobile Commerce	3

IS&T 4654	Web and Digital Media Development	3
IS&T 4642	E-Commerce Architecture	3
IS&T 4257	Network Economy	3
IS&T 5168	Law and Ethics in E-Commerce	3
<u>IS&T 5652</u>	<u>Advanced Web Development</u>	<u>3</u>
<u>IS&T 4641</u>	<u>Electronic and Mobile Commerce</u>	<u>3</u>
<u>IS&T 4642</u>	<u>E-Commerce Architecture</u>	<u>3</u>
<u>IS&T 4257</u>	<u>Network Economy</u>	<u>3</u>
<u>IS&T 5168</u>	<u>Law and Ethics in E-Commerce</u>	<u>3</u>

Enterprise Resource Planning

Any 9 hours of ERP-designated courses at the 4000-level or above.

Finance

<u>FINANCE 5160</u>	Corporate Finance II	3
<u>FINANCE 5260</u>	Investments I	3
<u>ECON 4720</u>	International Finance	3
Any other Finance course at the 3000-level or above.		

ECON 4410, and ECON 5337 cannot be used toward this concentration.

Human-Computer Interaction

IS&T 5654	Course IS&T 5654 Not Found	3
IS&T 5885	Human-Computer Interaction	3
IS&T 5886	Prototyping Human-Computer Interactions	3
IS&T 5887	Human-Computer Interaction Evaluation	3
<u>IS&T 5652</u>	<u>Advanced Web Development</u>	<u>3</u>
<u>IS&T 5885</u>	<u>Human-Computer Interaction</u>	<u>3</u>
<u>IS&T 5886</u>	<u>Prototyping Human-Computer Interactions</u>	<u>3</u>
<u>IS&T 5887</u>	<u>Human-Computer Interaction Evaluation</u>	<u>3</u>

Management

BUS 3111	Course BUS 3111 Not Found	3
<u>BUS 3115</u>	Introduction to Teambuilding and Leadership	3
<u>BUS 5470</u>	Human Resource Management	3
IS&T 5254	Technological Innovation Management and Leadership	3
<u>BUS 4111</u>	<u>Business Negotiations</u>	<u>3</u>
<u>IS&T 5251</u>	<u>Technological Innovation Management and Leadership</u>	<u>3</u>

Marketing

<u>MKT 3210</u>	Consumer Behavior	3
<u>MKT 5310</u>	Digital Marketing and Promotions	3
<u>MKT 4150</u>	Customer Focus and Satisfaction	3
<u>MKT 4580</u>	Marketing Strategy	3
<u>ERP 4610</u>	Customer Relationship Management in ERP Environment	3

Justification for Replacing Speech and Tech Comm Elective with IS&T 4654-Web and New Media

request Design and Development. Also correcting some "course not found" issues as numbers have changed.

Supporting
Documents

Course Reviewer **kleb6b (12/17/14 10:59 am):** Change start term

Comments **kleb6b (12/19/14 2:51 pm):** Rollback: Fix "undefined" references

kleb6b (12/19/14 2:52 pm): Fix "undefined" references

Key: 148

Program Change Request

Date Submitted: 11/18/14 1:18 pm

Viewing: **ENG MG-BS : Engineering Management BS**

File: 44.13

Last approved: 11/18/14 9:10 am

Last edit: 11/18/14 1:18 pm

Changes proposed by: sraper

Catalog Pages Using this Program	Engineering Management
Start Term	Fall 2015 8/1/2014
Program Code	ENG MG-BS
Department	Engineering Management and Systems Engineering
Title	Engineering Management BS

Program Requirements and Description

Bachelor of Science Engineering Management

Entering freshmen intending to study Engineering Management are admitted to the Freshman Engineering Program. They may, however, state an Engineering Management preference, which will be used as a consideration for available freshman departmental scholarships. The focus of the Freshman Engineering 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.

The Bachelor of Science degree in Engineering Management requires a minimum of 128 credit hours. 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 Engineering Management.

Each student's program of study must contain a minimum of 21 credit hours of course work in general education and must be chosen according to the following rules:

1. All students are required to take one American history course, one economics course, ~~one humanities course~~, and undefined. The history course is to be selected from undefined, undefined, undefined, or undefined. ~~The economics course may be either undefined or undefined.~~ The **economics humanities** course **may be either undefined or undefined**. All students must **choose one additional humanities or social science course** ~~be selected~~ from "The Approved List of Humanities and Social Sciences Courses for Engineering Degrees" maintained by the Office of Undergraduate Studies.
2. Depth requirement. Three credit hours must be taken in humanities or social sciences at the 2000-level or above and must be selected from the approved list. This course must have as a prerequisite one of the humanities or social sciences courses already taken. Foreign language courses numbered 1180 will be considered to satisfy this requirement. Students may receive humanities credit for foreign language courses in their native tongue only if the course is at the 4000-level or above. All courses taken to satisfy the depth requirement must be taken after graduating from high school.
3. The remaining two courses are to be chosen from the list of approved humanities/social sciences courses and may include one communications course in addition to undefined.
4. Any specific departmental requirements in the general studies area must be satisfied.
5. Special topics, special problems and honors seminars are allowed only by petition to and approval by the student's department chair.

The Engineering Management 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

In Workflow

1. RENGNGMT 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. josephj
11. juliep
12. pantaleoa

Approval Path

1. 11/18/14 5:55 pm
enke: Approved for RENGNGMT Chair
2. 11/19/14 9:01 am
kleb6b: Approved for CCC Secretary
3. 12/05/14 9:14 am
sraper: Approved for Engineering DSCC Chair

History

1. Sep 24, 2013 by lahne
2. Apr 28, 2014 by sraper
3. Jun 12, 2014 by pantaleoa
4. Nov 18, 2014 by kleb6b

world problems are emphasized as research, analysis, synthesis, and design are presented and discussed through classroom and laboratory instruction.

Free Electives Footnote:

Free electives. Each student is required to take three hours of free electives in consultation with his/her 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	1	MECH ENG 1720	3
CHEM 1310 ¹	4	MATH 1215 ¹	4
CHEM 1319	1	PHYSICS 1135 ¹	4
CHEM 1100	1	ECON 1100 or 1200	3
MATH 1214 ¹	4	Humanities Elective ²	3
ENGLISH 1120	3	COMP SCI 1972 ¹	2
HISTORY 1200 , or 1300 , or 1310 , or POL SCI 1200	3	COMP SCI 1982	1
	17		17
Sophomore Year			
First Semester	Credits	Second Semester	Credits
MATH 2222 ¹	4	MATH 3304 ¹	3
PHYSICS 2135 ¹	4	STAT 3115 or 3117 ¹	3
CIV ENG 2200 ¹	3	ENG MGT 2110 ¹	3
ENG MGT 1210 ¹	2	ENG MGT 2211 ¹	3
ENG MGT 2310 ¹	3	MECH ENG 2350	2
		PSYCH 1101	3
	16		17
Junior Year			
First Semester	Credits	Second Semester	Credits
ENG MGT 3310 ¹	3	ENG MGT 4710 ¹	3
CIV ENG 2210	3	MECH ENG 2527	3
CIV ENG 2211	1	ELEC ENG 2800	3
ENG MGT 3510 ¹	3	ENGLISH 3560	3
COMP SCI 1974 ¹	2	ENG MGT 3320 ¹	3
COMP SCI 1984	4		
SP&M S 1185 or 2181	3		
Humanities and Social Sciences	-		
SP&M S 1185 or 2181	3		
Humanities and Social Sciences ²	3		
	16		15
Senior Year			
First Semester	Credits	Second Semester	Credits
Emphasis Area Required Course	3	ENG MGT Technical Elective	3
Emphasis Area Required Course	3	ENG MGT Technical Elective	3
Emphasis Area Required Course	3	ENG MGT 4907 ¹	3
ENG MGT 4110 ¹	3	Upper Level Hum/SS ²	3
ENG MGT Technical Elective	3	Free Elective ³	3
	15		15

Total Credits: 128

Example Emphasis Area Programs for Engineering Management Students

One unique aspect of the Engineering Management degree is the student's ability to select an established emphasis area or create a specialized emphasis. Two examples of established emphasis areas are shown below.

Management of Technology

ENG MGT 5511	Technical Entrepreneurship	3
ENG MGT 5512	Legal Environment	3
ENG MGT 5410	Industrial System Simulation	3
ENG MGT 5614	Supply Chain Management Systems	3
ENG MGT Technical Electives (in consultation with your advisor)		6

Industrial Engineering

ENG MGT 4310	Materials Handling And Plant Layout	3
ENG MGT 4330	Human Factors	3
ENG MGT 5410	Industrial System Simulation	3
ENG MGT 5414	Introduction To Operations Research	3
ENG MGT Technical Electives (in consultation with your advisor)		6

General

Engineering Area Courses (Engineering Discipline)	15
ENG MGT-Technical Elective	3

Note: All electives must be chosen in consultation with the student's advisor. Students must satisfy the common engineering freshman year course requirements in addition to the sophomore, junior, and senior year requirements listed above with a minimum of 128 hours.

1	Must have a grade of "C" or better in these courses for graduation. undefined and undefined may be substituted for undefined and undefined, respectively.
2	Humanities and Social Science 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.
3	Each student is required to take three hours of free electives in consultation with his/her 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.
4	Students are required to select an emphasis area and maintain a minimum 2.0 GPA for these courses.
5	All Engineering Management students must take the Associate Engineering Manager Certification exam prior to graduation. A passing grade on this examination is not required to earn a B.S. degree. This requirement is part of the Missouri S&T assessment process as described in Assessment Requirements found elsewhere in this catalog. Students must sign a release form giving the University access to their Associate Engineering Manager Certification score.

Justification for
request

Changes were approved by EMSE faculty during August 2014 department retreat.

Supporting
Documents

Course Reviewer
Comments

Key: 44

Program Change Request

Date Submitted: 10/21/14 12:29 pm

Viewing: **FINANCE-MI : Finance Minor**

File: 58.11

Last approved: 04/28/14 10:54 am

Last edit: 11/13/14 3:01 pm

Changes proposed by: barryf

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

Start Term **Fall 2015** ~~8/1/2014~~

Program Code FINANCE-MI

Department Business and Information Technology

Title Finance Minor

Program Requirements and Description

Minor in Finance

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

ECON 1100	Principles Of Microeconomics	3
or ECON 1200	Principles Of Macroeconomics	
FINANCE 2150	Corporate Finance I	3
FINANCE 5260	Investments-I	3
ECON 4720	International Finance	3
One additional FINANCE course at the 3000-level or above (Undergraduate Research is acceptable).		3
Three additional FINANCE electives at the 3000 level or above (Undergraduate Research is acceptable)		9
Total Credits		15

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. [josephj](#)
11. [juliep](#)
12. [pantaleoa](#)

Approval Path

1. 11/13/14 1:36 pm
siauk: Approved for RINFSCTE Chair
2. 11/13/14 2:15 pm
kleb6b: Approved for CCC Secretary
3. 11/13/14 3:01 pm
kleb6b: Rollback to CCC Secretary for Pending CCC Agenda post
4. 11/13/14 3:21 pm
kleb6b: Approved for CCC Secretary
5. 11/17/14 9:48 am
barryf: Approved for Social Sciences DSCC Chair

History

1. Apr 28, 2014 by
barryf

Justification for request The Finance faculty desires more flexibility in the 9 hours beyond the initial 6.

Supporting Documents

Course Reviewer Comments **kleb6b (11/13/14 3:01 pm):** Rollback: Rollback to correct workflow

Key: 58

Program Change Request

Date Submitted: 12/17/14 10:53 am

Viewing: **IST-BS : Information Science and Tch BS**

File: 75.7

Last approved: 04/28/14 11:04 am

Last edit: 12/19/14 2:51 pm

Changes proposed by: barryf

Catalog Pages Information Science and Technology
Using this
Program

Start Term **Fall 2015 8/1/2014**
Program Code IST-BS
Department Business and Information Technology
Title Information Science and Tch BS

Program Requirements and Description

Bachelor of Science Information Science and Technology

In Information Science and Technology, the Bachelor of Science degree consists of 120 credit hours. First, all undergraduate students in Information Science and Technology are required to complete a prescribed General Education Requirements Core that corresponds to the recommendations of the Missouri State Coordinating Board for Higher Education and consists of 54 credit hours in the areas of Natural Systems, Human Institutions, Quantitative Skills, and Communication Skills. In addition, all undergraduate students are required to complete a 27 credit hour core consisting of courses in Information Technology, Management, and Entrepreneurship. A minimum grade of "C" is required for courses in these areas. Finally, the degree includes 12 credit hours of free electives.

The remaining 27 credit hours of the required 120 credit hours for the Information Science and Technology degree are divided into a prescribed 18 credit hour degree core and 9 credit hours of specific degree electives. A minimum grade of "C" is required in these courses. The Information Science and Technology Degree requires courses in Database Management, Systems Analysis, **Introduction to Data Science Web** and **Management, Digital Media Development**, Computing Internals, Networks and Communications, and **Electronic and Mobile Commerce. E-Commerce**. The electives for this degree consist of advanced coursework in the areas introduced by the required courses.

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. josephj
11. juliep
12. pantaleoa

Approval Path

1. 12/17/14 10:56 am
siauk: Approved for RINFSCTE Chair
2. 12/17/14 10:58 am
kleb6b: Approved for CCC Secretary
3. 12/17/14 9:14 pm
barryf: Approved for Social Sciences DSCC Chair
4. 12/19/14 8:08 am
kleb6b: Approved for Pending CCC Agenda post
5. 12/19/14 2:51 pm
kleb6b: Rollback to Pending CCC Agenda post for CCC Meeting Agenda

History

1. Apr 28, 2014 by
barryf

Freshman Year			
First Semester	Credits	Second Semester	Credits
<u>BUS 1810</u> ¹	1	<u>PSYCH 1101</u>	3
<u>ENGLISH 1120</u>	3	<u>MATH 1212</u>	4
<u>MATH 1140</u> ⁵	3	IS&T 1554	3
Science Elective ²	3	<u>IS&T 1551</u>	3
IS&T 1750	3	<u>BUS 1110</u>	3
<u>IS&T 1750</u>	3	<u>BUS 1210</u>	3

Laboratory w/Science Elective	1		
	14		16
Sophomore Year			
First Semester	Credits	Second Semester	Credits
ECON 1200	3	Fine Art, Social Science, or Humanities Elective³	3
SP&M S 1185	3	IS&T 3131	3
IS&T 1552	3	IS&T 3131	3
SP&M S 1185	3	Science Elective ²	3
IS&T 1552	3	IS&T Eolective	3
ENGLISH 1600 or TCH COM 1600	3	STAT 3111	3
ERP 2110	3	ECON 1100	3
	15		15
Junior Year			
First Semester	Credits	Second Semester	Credits
IS&T 4654	3	IS&T Elective	3
IS&T 4654	3	IS&T 3343	3
FINANCE 2150	3	IS&T 3343	3
IS&T 3423	3	MKT 3110	3
IS&T 3333	3	IS&T 4641	3
IS&T Elective	3	IS&T 3420	3
IS&T 3423	3	IS&T 4641	3
IS&T 3333	3	ENGLISH 2560 or TCH COM 2560	3
Fine Art, Social Science, or Humanities Elective³	3		
	15		15
Senior Year			
First Semester	Credits	Second Semester	Credits
Free Electives	6	BUS 5980	3
Fine Art, Social Science, or Humanities Elective ³	3	POL SCI 1200	3
Speech or Tech Com Elective	3	IS&T Elective or Emphasis Area⁴	3
History Elective	3	Free Electives	6
	15		15
Total Credits: 120			

A grade of "C" or better is required in the following courses for graduation; [BUS 1810](#) , [BUS 5980](#) , [IS&T 1750](#) , [IS&T 1551](#) , [IS&T 1552](#) , , [BUS 1110](#) , [BUS 1210](#) , [MKT 3110](#) , [FINANCE 2150](#) , [ECON 1100](#) , [ECON 1200](#) , [IS&T 4654](#) , [IS&T 3423](#) , [IS&T 3131](#) , [IS&T 3333](#) , [IS&T 3420](#) ~~[IS&T 4641](#)~~ , and [IS&T 3343](#) .

¹	Writing Intensive Course
²	Any course in the following areas: Biology, Chemistry, Geology, Geological Engineering, Physics.
³	Any course in the following areas not used for other degree requirements: Art, Economics, English, Foreign Language, History, Literature, Music, Philosophy, Political Science, Psychology, Sociology, Theater.
⁴	A grade of "C" or better is required in IS&T Electives and Emphasis Area courses for graduation. Students choosing the Human-Computer Interaction Emphasis Area must take IS&T 5885 , IS&T 5886 , and IS&T 5887 . Students choosing the Enterprise Resource Planning Emphasis Area must take 9 hours of ERP-designated courses at the 4000-level or above. Students who choose no Emphasis Area must take three courses from: IS&T 4000-level or above, COMP SCI 4700 , COMP SCI 5601 .
⁵	MATH 1120 may be substituted for MATH 1140 .

Emphasis Areas

Two Emphasis Areas may be taken to specialize if the student wishes to do so. The first, Human-Computer Interaction, consists of three courses:

IS&T 5885	Human-Computer Interaction	3
IS&T 5886	Prototyping Human-Computer Interactions	3
IS&T 5887	Human-Computer Interaction Evaluation	3
<u>IS&T 5885</u>	<u>Human-Computer Interaction</u>	<u>3</u>
<u>IS&T 5886</u>	<u>Prototyping Human-Computer Interactions</u>	<u>3</u>
<u>IS&T 5887</u>	<u>Human-Computer Interaction Evaluation</u>	<u>3</u>

The second Emphasis Area, Enterprise Resource Planning, consists of any 9 hours of ERP-designated courses at the 4000-level or above.

Justification for request

Replacing a Speech or Technical Communication Elective by IS&T 4654-Web and Digital Media Development in one semester, then replacing IS&T 4654 in the semester where it was removed by IS&T 3420-Introduction to Data Science and Management (a new course). [The effect is to replace the Speech and Tech Com Elective by IS&T 3420.]

Also fixing some "course not found" errors.

The "undefined" notes are correct when expanded, but don't seem to be passed forward correctly. All numbers in these notes appear to be correct.

Supporting Documents

Course Reviewer

kleb6b (12/17/14 10:58 am): Change start term

Comments

kleb6b (12/19/14 2:51 pm): Rollback: Fix "undefined" references

Program Change Request

New Program Proposal

Date Submitted: 12/12/14 6:35 pm

Viewing: **PROPOSED : Business Analytics and Data Science Minor**

File: 239

Last edit: 12/19/14 8:11 am

Changes proposed by: barryf

Start Term	Fall 2015
Program Code	PROPOSED
Department	Business and Information Technology
Title	Business Analytics and Data Science Minor

Program Requirements and Description

The Minor in Business Analytics and Data Science requires the following 15 hours of coursework:

IS&T 1750	Introduction to Management Information Systems	3
IS&T 3423	Database Management	3
IS&T 3420	Introduction to Data Science and Management	
IS&T 4450	Introduction to Information Visualization	
IS&T 5420	Business Analytics and Data Science	3

In Workflow

1. RINFSCTE Chair
2. CCC Secretary
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. josephj
10. juliep
11. pantaleoa

Approval Path

1. 12/12/14 9:40 pm
siauk: Approved for RINFSCTE Chair
2. 12/15/14 8:46 am
kleb6b: Approved for CCC Secretary

Justification for request A number of our undergraduates are interested in this area and we have recently added appropriate courses to comprise a minor.

Supporting Documents

Course Reviewer Comments **kleb6b (12/19/14 8:11 am):** Changed "Minor in Business Analytics and Data Science" to "Business Analytics and Data Science Minor"

Key: 239

Program Change Request

New Program Proposal

Date Submitted: 11/13/14 12:55 pm

Viewing: **PROPOSED : Human-Computer Interaction and User Experience Minor**

File: 238

Last edit: 11/13/14 12:55 pm

Changes proposed by: barryf

Start Term	Fall 2015
Program Code	PROPOSED
Department	Business and Information Technology
Title	Human-Computer Interaction and User Experience Minor

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. josephj
11. juliep
12. pantaleoa

Program Requirements and Description

The Minor in Human-Computer Interaction and User Experience requires the following 15 hours of coursework:

IS&T 4654	Web and Digital Media Development	3
IS&T 4680	Introduction to Web and New Media Studies	3
IS&T 5885	Human-Computer Interaction	3
IS&T 5886	Prototyping Human-Computer Interactions	3
IS&T 5887	Human-Computer Interaction Evaluation	3

Approval Path

1. 11/13/14 1:37 pm
siauk: Approved for RINFSCTE Chair
2. 11/13/14 3:21 pm
kleb6b: Approved for CCC Secretary
3. 11/17/14 9:47 am
barryf: Approved for Social Sciences DSCC Chair

Justification for request Increased interest by undergraduate students in a focus on HCI and User Experience.

Supporting Documents

Course Reviewer Comments

Key: 238

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/15/14 2:34 pm

Viewing: **CHEM ENG 6010 : Graduate Seminar**

File: 4170

Last edit: 12/15/14 2:34 pm

Changes proposed by: marlene

Requested Fall 2015

Effective Change
Date

Department Chemical and Biochemical Engineering

Discipline Chemical Engineering (CHEM ENG)

Course Number 6010

Title Graduate Seminar

Abbreviated Graduate Seminar
Course Title

Catalog

Description

Discussion of current topics. One of these topics will be expanded to write an in depth report.

Prerequisites

Graduate standing.

Field Trip

Statement

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

Required for Yes
Majors

Elective for No
Majors

Justification for new course: The topics will cover new areas of research where most of the speakers will be invited. The students are required to write a report on one of the presentations that will include current quantitative description and analysis, suggested future work and

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/15/14 2:43 pm
aldahhanm:
Approved for
RCHEMENG Chair
2. 12/15/14 4:21 pm
kleb6b: Approved
for CCC Secretary
3. 12/17/14 11:14
am
srafer: Approved
for Engineering
DSCC Chair

list of related references. Grades will be given based on attendance record and the quality of the submitted report. Students will be taking the course for one credit hour unless there is a conflict. We incorrectly mapped ChE 410 into ChE 5010 we are correcting for that with ChE 6010.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4170

Course Inventory Change Request

Date Submitted: 12/05/14 10:40 am

Viewing: **ECON 2114 : Managerial Economics**

File: 2235.1

Last edit: 12/05/14 2:06 pm

Changes proposed by: marcys

Programs
referencing this
course

ECON-BS: Economics BS

Requested
Effective Change
Date

Summer 2015 ~~Fall 2014~~

Department

Economics

Discipline

Economics (ECON)

Course Number

2114

Title

Managerial Economics

Abbreviated
Course Title

Managerial Economics

Catalog

Description

Focuses on micro- and macroeconomic contributions to managerial decision-making, business analysis and strategy. The roles of information, economic incentives, efficient markets, profits and decision-making under risk and uncertainty will be explored in both domestic and global settings. ~~Business students who become managers of business enterprises should understand how market-economic forces create opportunities for making profit. Business students need to be trained in managerial applications of microeconomic theory. Managerial Economics brings together those topics in micro theory that can be applied to business decision making.~~

Prerequisites

Econ 1100 & 1200.

Field Trip

Statement

Credit Hours

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

In Workflow

1. RECONOMI 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/05/14 4:05 pm gelles: Approved for RECONOMI Chair
2. 12/08/14 7:47 am kleb6b: Approved for CCC Secretary
3. 12/17/14 9:10 pm barryf: Approved for Social Sciences DSCC Chair

Required for
Majors

No

Elective for
Majors

Yes

Justification for
change:

Updating course to focus on a wider range of students.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 2235

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/09/14 5:28 pm

Viewing: **ECON 3000 : Special Problems**

File: 4166

Last edit: 12/09/14 5:28 pm

Changes proposed by: marcys

Requested	Summer 2015
Effective Change	
Date	
Department	Economics
Discipline	Economics (ECON)
Course Number	3000
Title	Special Problems
Abbreviated	Special Problems
Course Title	

Catalog

Description

Problems or readings on specific subjects or projects in the department. Consent of instructor required.

Prerequisites

Field Trip

Statement

Credit Hours	LEC: 0	LAB: 0	IND: 0-6	RSD: 0
Total: 0-6				

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

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

Justification for new course: Course was not created during the renumbering structure.

Semesters

In Workflow

1. RECONOMI 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/09/14 5:31 pm gelles: Approved for RECONOMI Chair
2. 12/10/14 7:44 am kleb6b: Approved for CCC Secretary
3. 12/17/14 9:10 pm barryf: Approved for Social Sciences DSCC Chair

previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4166

Course Inventory Change Request

New Course Proposal

Date Submitted: 11/12/14 1:56 pm

Viewing: **ECON 4010 : Seminar**

File: 4144

Last edit: 11/12/14 1:56 pm

Changes proposed by: marcys

Requested Spring 2015

Effective Change

Date

Department Economics

Discipline Economics (ECON)

Course Number 4010

Title Seminar

Abbreviated Seminar

Course Title

Catalog

Description

Discussion of current topics.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 0 LAB: 0 IND: 0.0-6.0 RSD: 0

Total: 0.0-6.0

Required for No

Majors

Elective for Yes

Majors

Justification for new course: Economics does not have a 'Seminar course' component in our curriculum so we're adding it.

Semesters 0

previously

In Workflow

1. RECONOMI 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. Ishelton

11. Peoplesoft

Approval Path

1. 11/17/14 3:20 pm

gelles: Approved

for RECONOMI

Chair

2. 11/18/14 8:58 am

kleb6b: Approved

for CCC Secretary

3. 11/20/14 1:50 pm

barryf: Approved

for Social

Sciences DSCC

Chair

offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4144

Course Inventory Change Request

Date Submitted: 12/05/14 11:19 am

Viewing: **ECON 4641 : Foundations of Sustainability**

File: 2107.1

Last edit: 12/05/14 11:19 am

Changes proposed by: marcys

Programs
referencing this
course

[GS ECON-MI: Global Sustainable Economics Minor](#)
[HUM ENG-MI: Humanitarian Engineering and Science Minor](#)

Other Courses
referencing this
course

In The Prerequisites:
[ECON 4642 : Introduction to Global Eco- and Social-
preneurship and Innovation](#)
[ECON 6642 : Global Eco- and Social-preneurship and
Innovation](#)

Requested
Effective Change
Date

Summer 2015 ~~Fall 2014~~

Department

Economics

Discipline

Economics (ECON)

Course Number

4641

Title

Foundations of Sustainability

Abbreviated
Course Title

Foundations of Sustainability

Catalog
Description

This interdisciplinary course is designed as an introduction to sustainability in commerce. It examines the concept of environmental, social, and economic issues in an organizational context. Principles, processes, and practices of sustainability will be explored.

Prerequisites

~~Senior or Graduate standing.~~

Field Trip
Statement

Credit Hours

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

In Workflow

1. **RECONOMI 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/05/14 4:05 pm
gelles: Approved
for RECONOMI
Chair
2. 12/08/14 7:47 am
kleb6b: Approved
for CCC Secretary
3. 12/17/14 9:10 pm
barryf: Approved
for Social
Sciences DSCC
Chair

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

Elective for Majors	Yes
------------------------	------------

Justification for change:	Correcting mistakes from renumbering process.
------------------------------	---

Semesters previously offered as an experimental course	
--	--

Co-Listed Courses:	
-----------------------	--

Course Reviewer Comments	
-----------------------------	--

Key: 2107

Course Inventory Change Request

Date Submitted: 12/05/14 10:42 am

Viewing: **ECON 4642 : Introduction to Global Eco- and Social-preneurship and Innovation**

File: 2187.1

Last edit: 12/05/14 2:09 pm

Changes proposed by: marcys

Programs referencing this course
[GS ECON-MI: Global Sustainable Economics Minor](#)
[HUM ENG-MI: Humanitarian Engineering and Science Minor](#)

Requested Effective Change Date
Summer 2015 ~~Fall 2014~~

Department Economics

Discipline Economics (ECON)

Course Number 4642

Title Introduction to Global Eco- and Social-preneurship and Innovation

Abbreviated Course Title Intro Global Innovation

Catalog

Description

This interdisciplinary course applies an entrepreneurial mindset to the environmental and social opportunities and challenges facing the global community. Topics are examined from multiple perspectives: nonprofit, hybrid, and for-profit organizations. ~~Credit cannot be earned for both Econ 4642 and 5642.~~

Prerequisites

~~Econ 4641.~~

Field Trip

Statement

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

Required for Majors **No**

In Workflow

1. **RECONOMI 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/05/14 4:05 pm gelles: Approved for RECONOMI Chair
2. 12/08/14 7:48 am kleb6b: Approved for CCC Secretary
3. 12/17/14 9:10 pm barryf: Approved for Social Sciences DSCC Chair

Elective for
Majors

Yes

Justification for
change:

Corrected mistakes from initial submission.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 2187

Course Inventory Change Request

Date Submitted: 12/05/14 10:46 am

Viewing: **ECON 4643 : Ethical Problems in a Global Environment**

File: 968.4

Last approved: 05/03/14 4:23 am

Last edit: 12/05/14 2:11 pm

Changes proposed by: marcys

Requested **Summer 2015** ~~Fall 2014~~

Effective Change
Date

Department Economics

Discipline Economics (ECON)

Course Number 4643

Title Ethical Problems in a Global Environment

Abbreviated Ethical Probs Global Env
Course Title

Catalog

Description

Focuses on the international dimension of ethics including corporate responsibility from economic, social, and environmental perspectives. It addresses the ethical challenges of decision making, stakeholder engagement, and governance at micro- (personal), meso- (org), and macro- (system) levels. ~~Credit will not be given for both Econ 4643 and Econ 5643.~~

Prerequisites

~~Senior or graduate standing.~~

Field Trip

Statement

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

Total: 3

Required for
Majors No

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

In Workflow

1. **RECONOMI 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/05/14 4:05 pm gelles: Approved for RECONOMI Chair
2. 12/08/14 7:48 am kleb6b: Approved for CCC Secretary
3. 12/17/14 9:10 pm barryf: Approved for Social Sciences DSCC Chair

History

1. May 3, 2014 by lahne (968.1)

Majors

Justification for change: Correcting errors from renumbering process.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 968

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/09/14 4:43 pm

Viewing: **ECON 5010 : Seminar**

File: 4163

Last edit: 12/09/14 4:43 pm

Changes proposed by: marcys

Requested Summer 2015

Effective Change

Date

Department Economics

Discipline Economics (ECON)

Course Number 5010

Title Seminar

Abbreviated Seminar

Course Title

Catalog

Description

Discussion of current topics.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 0 LAB: 0 IND: 0-6 RSD: 0

Total: 0-6

Required for No

Majors

Elective for Yes

Majors

Justification for new course: Economics does not have a 'Seminar course' component at this level in the curriculum so we are adding one.

Semesters 0

previously

In Workflow

1. RECONOMI 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. Ishelton

11. Peoplesoft

Approval Path

1. 12/09/14 5:09 pm

gelles: Approved

for RECONOMI

Chair

2. 12/10/14 7:45 am

kleb6b: Approved

for CCC Secretary

3. 12/17/14 9:11 pm

barryf: Approved

for Social

Sciences DSCC

Chair

offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4163

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/09/14 5:17 pm

Viewing: **ECON 6000 : Special Problems**

File: 4165

Last edit: 12/09/14 5:31 pm

Changes proposed by: marcys

Requested	Summer 2015
Effective Change	
Date	
Department	Economics
Discipline	Economics (ECON)
Course Number	6000
Title	Special Problems
Abbreviated	Special Problems
Course Title	

Catalog

Description

Problems or readings on specific subjects or projects in the department. Consent of instructor required.

Prerequisites

Field Trip

Statement

Credit Hours	LEC: 0	LAB: 0	IND: 0-6	RSD: 0
Total: 0-6				

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

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

Justification for new course: One was not created during the renumbering structure.

Semesters

In Workflow

1. RECONOMI 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/09/14 5:31 pm gelles: Approved for RECONOMI Chair
2. 12/10/14 7:45 am kleb6b: Approved for CCC Secretary
3. 12/17/14 9:13 pm barryf: Approved for Social Sciences DSCC Chair

previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4165

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/09/14 4:46 pm

Viewing: **ECON 6010 : Seminar**

File: 4164

Last edit: 12/09/14 4:46 pm

Changes proposed by: marcys

Requested Summer 2015

Effective Change

Date

Department Economics

Discipline Economics (ECON)

Course Number 6010

Title Seminar

Abbreviated Seminar

Course Title

Catalog

Description

Discussion of current topics.

Prerequisites

Field Trip

Statement

Credit Hours LEC: 0 LAB: 0 IND: 0-6 RSD: 0

Total: 0-6

Required for No

Majors

Elective for Yes

Majors

Justification for new course: Economics does not have a 'Seminar course' component in their curriculum at this level so it is being added.

Semesters

previously

In Workflow

1. RECONOMI 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. Ishelton

11. Peoplesoft

Approval Path

1. 12/09/14 5:09 pm

gelles: Approved

for RECONOMI

Chair

2. 12/10/14 7:45 am

kleb6b: Approved

for CCC Secretary

3. 12/17/14 9:13 pm

barryf: Approved

for Social

Sciences DSCC

Chair

offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4164

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/05/14 11:33 am

Viewing: **ECON 6641 : Advanced Foundations of Sustainability**

File: 4160

Last edit: 12/05/14 11:33 am

Changes proposed by: marcys

Requested Summer 2015

Effective Change

Date

Department Economics

Discipline Economics (ECON)

Course Number 6641

Title Advanced Foundations of Sustainability

Abbreviated Adv Found. of Sustainabi

Course Title

Catalog

Description

This interdisciplinary course is designed as an introduction to sustainability in commerce. It examines environmental, social, and economic issues in an organized context. Principles, processes and practices in sustainability will be explored. Project or written case study required.

Prerequisites

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Required for

No

Majors

Elective for

Yes

Majors

Justification for

This course (previously Econ 342) was a senior AND graduate class. Due to the

In Workflow

1. RECONOMI 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. Ishelton

11. Peoplesoft

Approval Path

1. 12/05/14 4:06 pm

gelles: Approved
for RECONOMI
Chair

2. 12/08/14 7:49 am

kleb6b: Approved
for CCC Secretary

3. 12/17/14 9:13 pm

barryf: Approved
for Social
Sciences DSCC
Chair

new course: renumbering issue, we are changing prereqs and creating Econ 6641 as the graduate version of the existing course; in preparation for Mining Economics Masters and graduate certificate.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4160

Course Inventory Change Request

Date Submitted: 12/05/14 10:49 am

Viewing: **ECON 6643 5643-: Advanced Ethical Problems in a Global Environment**

File: 4048.7

Last approved: 05/03/14 4:23 am

Last edit: 12/05/14 2:12 pm

Changes proposed by: marcys

Requested **Summer 2015** ~~Fall 2014~~

Effective Change
Date

Department Economics

Discipline Economics (ECON)

Course Number **6643-5643**

Title Advanced Ethical Problems in a Global Environment

Abbreviated Adv Ethical Prob GlobEnv
Course Title

Catalog

Description

Focuses on the international dimension of ethics including corporate responsibility from economic, social, and environmental perspectives. It addresses the ethical challenges of decision-making, stakeholder engagement, and governance at micro- (personal), and meso-(org), and macro-(systems) levels. Case studies will be included as part of the course.

Prerequisites

~~Senior or graduate standing. Credit will not be given for both Econ 4643 and Econ 5643.~~

Field Trip

Statement

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

Total: 3

Required for No

Majors

In Workflow

1. RECONOMI 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. Ishelton
11. Peoplesoft

Approval Path

1. 12/05/14 4:06 pm gelles: Approved for RECONOMI Chair
2. 12/08/14 7:49 am kleb6b: Approved for CCC Secretary
3. 12/17/14 9:14 pm barryf: Approved for Social Sciences DSCC Chair

History

1. May 3, 2014 by marcys

Elective for
Majors

Yes

Justification for
change:

Correcting errors from renumbering process.

Semesters
previously
offered as an
experimental
course

BUS 301 in SS 2012

ECON 301 in SS 2013

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4048

Course Inventory Change Request

Date Submitted: 11/18/14 2:33 pm

Viewing: **ENG MGT 1210 : Economic Analysis of Engineering Projects**

File: 92.1

Last edit: 11/19/14 9:02 am

Changes proposed by: sraper

Programs referencing this course	ARC ENG-BS: Architectural Engineering BS CR ENG-BS: Ceramic Engineering BS CV ENG-BS: Civil Engineering BS ENG MG-BS: Engineering Management BS GE ENG-BS: Geological Engineering BS MC ENG-BS: Mechanical Engineering BS MT ENG-BS: Metallurgical Engineering BS
Other Courses referencing this course	In The Prerequisites: ENG MGT 2211 : Engineering Accounting and Finance ENG MGT 6211 : Advanced Financial Management ENG MGT 6212 : Investment ENG MGT 6213 : Financial Engineering ENG MGT 6215 : Financial Risk Management EXP ENG 5514 : Display Fireworks Manufacturing SYS ENG 6612 : Investment SYS ENG 6613 : Financial Engineering SYS ENG 6615 : Financial Risk Management

Requested Effective Change Date	Fall 2015 2014
Department	Engineering Management and Systems Engineering
Discipline	Engineering Management (ENG MGT)
Course Number	1210
Title	Economic Analysis of Engineering Projects
Abbreviated Course Title	Econ Analysis of Engr Projects

Catalog Description	Engineering project analysis from an engineering economics perspective. Topics include: interest, equivalent worth, comparing alternatives, rate of return methods,
------------------------	---

In Workflow

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

Approval Path

1. 11/18/14 5:55 pm
enke: Approved
for RENG MNGT
Chair
2. 11/19/14 9:02 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:14 am
sraper: Approved
for Engineering
DSCC Chair

depreciation and taxes, inflation and price changes, benefit-cost analysis and risk analysis.

Prerequisites Math **1214.** ~~1215.~~

Field Trip
Statement

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

Required for
Majors **Yes**

Elective for
Majors **No**

Justification for
change: Approved by EMSE Faculty during August 2014 Retreat.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 92

Course Inventory Change Request

Date Submitted: 11/18/14 2:38 pm

Viewing: **ENG MGT 2310 : Introduction to ~~Complex~~ System Engineering Management**

File: 1393.1

Last edit: 11/18/14 2:38 pm

Changes proposed by: sraper

Programs ENG MG-BS: Engineering Management BS
referencing this course

Requested Fall **2015** ~~2014~~
Effective Change Date

Department Engineering Management and Systems Engineering

Discipline Engineering Management (ENG MGT)

Course Number 2310

Title Introduction to ~~Complex~~ System **Engineering Management**

Abbreviated Intro ~~Complex~~ System **Eng**

Course Title ~~Mgt~~

Catalog

Description

Provide an understanding of ~~complex~~ systems **engineering** and tools to manage ~~complexity in~~ system design, construction, and operation. Topics include systems thinking, modeling and simulation of systems, uncertainty in engineering, risk, and decision making in certain and uncertain environments.

Prerequisites

Math 1208 or Math 1214.

Field Trip

Statement

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

Required for **Yes**
Majors

In Workflow

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

Approval Path

1. 11/18/14 5:56 pm
enke: Approved
for RENG MNGT
Chair
2. 11/19/14 9:02 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

Elective for
Majors

No

Justification for
change:

Approved by by EMSE faculty during August retreat. Title change and catalog
description provide more closely reflects course content and objectives.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 1393

Course Inventory Change Request

Date Submitted: 11/18/14 2:44 pm

Viewing: **ENG MGT 3310 : Operations and And-Production Management**

File: 2379.1

Last edit: 12/19/14 8:42 am

Changes proposed by: sraper

Programs
referencing this
course

[EL ENG-BS: Electrical Engineering BS](#)
[ENG MG-BS: Engineering Management BS](#)
[ENG MGT-MI: Engineering Management Minor](#)

Other Courses
referencing this
course

In The Prerequisites:
[ENG MGT 5314 : Computer Integrated Manufacturing Systems](#)
[ENG MGT 5412 : Operations Management Science](#)
[ENG MGT 5515 : Integrated Product And Process Design](#)
[ENG MGT 5615 : Production Planning And Scheduling](#)
[MECH ENG 5757 : Integrated Product And Process Design](#)

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department Engineering Management and Systems Engineering

Discipline Engineering Management (ENG MGT)

Course Number 3310

Title Operations **and** ~~And~~-Production Management

Abbreviated
Course Title Oper & Production Mgt

Catalog
Description

Concepts of operations and production management are presented at an introductory level. Qualitative and quantitative tools and techniques used for the optimization of the operations component of the total enterprise are explored in the context of improved productivity and strategic competitiveness.

Prerequisites **Eng Mgt 2110.** ~~Eng Mgt 2110 and 2211; Stat 3115 or Stat 3117.~~

Field Trip
Statement

In Workflow

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

Approval Path

1. 11/18/14 5:57 pm
enke: Approved
for RENG MNGT
Chair
2. 11/19/14 9:02 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

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

Justification for
change:

Approved by EMSE faculty during August 2014 retreat.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 2379

Course Inventory Change Request

Date Submitted: 11/18/14 2:45 pm

Viewing: **ENG MGT 3320 : Introduction to Project Management**

File: 827.1

Last edit: 11/18/14 2:45 pm

Changes proposed by: sraper

Programs
referencing this
course

[ENG MG-BS: Engineering Management BS](#)
[MGMT-MI: Management Minor](#)

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department

Engineering Management and Systems Engineering

Discipline

Engineering Management (ENG MGT)

Course Number

3320

Title

Introduction to Project Management

Abbreviated
Course Title

Intro to Project Management

Catalog
Description

This course covers the fundamentals of project management including project definition, project selection, project planning, estimating, scheduling, resource allocation and project control.

Prerequisites

Junior or above standing. ~~Eng Mgt 2110.~~

Field Trip
Statement

Credit Hours

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

Required for
Majors

Yes

Elective for

No

In Workflow

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

Approval Path

1. 11/18/14 5:57 pm
enke: Approved
for RENGMNGT
Chair
2. 11/19/14 9:02 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

Majors

Justification for change: Approved by EMSE faculty during August 2014 retreat.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 827

Course Inventory Change Request

Date Submitted: 11/18/14 2:43 pm

Viewing: **ENG MGT 3510 : Marketing Management**

File: 496.1

Last edit: 11/18/14 2:43 pm

Changes proposed by: sraper

Programs referencing this course	<u>ENG MG-BS: Engineering Management BS</u>
Other Courses referencing this course	<u>In The Prerequisites:</u> <u>BUS 4150 : Customer Focus and Satisfaction</u> <u>BUS 4675 : International Business</u> <u>BUS 5580 : Strategic Management</u> <u>BUS 6150 : Advanced Customer Focus and Satisfaction</u> <u>BUS 6675 : Advanced International Business</u> <u>MKT 4150 : Customer Focus and Satisfaction</u> <u>MKT 4580 : Marketing Strategy</u> <u>MKT 6150 : Advanced Customer Focus and Satisfaction</u> <u>MKT 6580 : Advanced Marketing Strategy</u>
Requested Effective Change Date	Fall 2015 2014
Department	Engineering Management and Systems Engineering
Discipline	Engineering Management (ENG MGT)
Course Number	3510
Title	Marketing Management
Abbreviated Course Title	Marketing Management
Catalog Description	Study of basic functions of marketing in the technological enterprise, including product selection and development, market research, market development, selection of distribution channels and advertising, marketing strategy.
Prerequisites	Preceded or accompanied by Eng Mgt 2110. A grade of "C" or better is required in this course to meet Engineering Management degree requirements.

In Workflow

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

Approval Path

1. 11/18/14 5:57 pm
enke: Approved
for RENGMNGT
Chair
2. 11/19/14 9:03 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

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:	Approved by EMSE faculty during August 2014 Retreat.
------------------------------	--

Semesters previously offered as an experimental course	
--	--

Co-Listed Courses:	
-----------------------	--

Course Reviewer Comments	
-----------------------------	--

Key: 496

Course Inventory Change Request

Date Submitted: 11/18/14 2:50 pm

Viewing: **ENG MGT 4110 : General Management-Design and And-Integration**

File: 2431.1

Last edit: 12/19/14 8:45 am

Changes proposed by: sraper

Programs
referencing this
course

[ENG MG-BS: Engineering Management BS](#)

Other Courses
referencing this
course

In The Prerequisites:
[ENG MGT 4907 : Engineering Management Senior Design](#)

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department

Engineering Management and Systems Engineering

Discipline

Engineering Management (ENG MGT)

Course Number

4110

Title

General Management-Design **and And**-Integration

Abbreviated
Course Title

General Mgt-Dsgn & Integ

Catalog
Description

Integrating and executing marketing, production, finance, and engineering policies and strategies for the benefit of an enterprise. Analysis, forecasting, and design methods using case studies and management simulation.

Prerequisites

Eng Mgt **2210, 2211; preceded or accompanied by Eng Mgt 2211, 3510, 3310, 3320, 4710, and 3320;** senior standing. ~~A grade of "C" or better is required in this course to meet Engineering Management degree requirements.~~

Field Trip
Statement

In Workflow

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

Approval Path

1. 11/18/14 5:54 pm
enke: Approved
for RENG MNGT
Chair
2. 11/19/14 9:03 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

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

Required for Majors	Yes
------------------------	-----

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

Justification for change:	Approved by EMSE faculty during August 2014 retreat.
------------------------------	--

Semesters previously offered as an experimental course	
--	--

Co-Listed Courses:	
-----------------------	--

Course Reviewer Comments	
-----------------------------	--

Key: 2431

Course Inventory Change Request

Date Submitted: 11/18/14 3:25 pm

Viewing: **ENG MGT 4310 : Materials Handling and ~~And~~ Plant Layout**

File: 2430.1

Last edit: 12/19/14 8:46 am

Changes proposed by: sraper

Programs
referencing this
course

[ENG MG-BS: Engineering Management BS](#)

Other Courses
referencing this
course

In The Prerequisites:

[ENG MGT 5610 : Advanced Facilities Planning & Design](#)

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department

Engineering Management and Systems Engineering

Discipline

Engineering Management (ENG MGT)

Course Number

4310

Title

Materials Handling **and** ~~And~~ Plant Layout

Abbreviated
Course Title

MtIs Hndl & Plnt Layout

Catalog
Description

The design and objectives of materials handling equipment including diversity of application in industry from the viewpoint of efficient movement of materials and products from the receiving areas to the shipping areas. The layout of a plant to include materials handling equipment is considered throughout. Cost comparison of various systems will be made.

Prerequisites

Junior standing.

Field Trip
Statement

Credit Hours

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

In Workflow

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

Approval Path

1. 11/18/14 5:59 pm
enke: Approved
for RENG MNGT
Chair
2. 11/19/14 9:03 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

Required for
Majors

Yes

Elective for
Majors

Yes

Justification for
change:

Approved by EMSE faculty during August 2014 retreat. This course is required for Industrial Engineering Emphasis students and a technical elective for MOT emphasis area and general option students.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 2430

Course Inventory Change Request

Date Submitted: 11/18/14 3:17 pm

Viewing: **ENG MGT 4907 : Engineering Management Senior Design**

File: 164.1

Last edit: 11/18/14 3:17 pm

Changes proposed by: sraper

Programs
referencing this
course

[ENG MG-BS: Engineering Management BS](#)

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department

Engineering Management and Systems Engineering

Discipline

Engineering Management (ENG MGT)

Course Number

4907

Title

Engineering Management Senior Design

Abbreviated
Course Title

Eng Mgt Senior Design

Catalog
Description

Open-ended design projects will be addressed with small teams. The emphasis will be on solving industry-based projects that are broad in nature and which will require the students to incorporate the knowledge and skills acquired in earlier course work in the solution of the problems.

Prerequisites

Preceded or accompanied by Eng Mgt **4110**. ~~4110 and 4710~~.

Field Trip
Statement

Credit Hours

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

Required for
Majors

Yes

In Workflow

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

Approval Path

1. 11/18/14 5:58 pm
enke: Approved
for RENG MNGT
Chair
2. 11/19/14 9:03 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

Elective for
Majors

No

Justification for
change:

Approved by EMSE faculty during August 2014 retreat.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 164

Course Inventory Change Request

Date Submitted: 11/18/14 3:32 pm

Viewing: **ENG MGT 5412 : Operations Management Science**

File: 393.1

Last edit: 11/18/14 3:32 pm

Changes proposed by: scraper

Catalog Pages referencing this course	<u>Engineering Management</u>
Programs referencing this course	<u>ENG MG-MS: Engineering Management MS</u>
Other Courses referencing this course	<u>In The Prerequisites:</u> <u>STAT 6238 : Stochastic Optimization</u>

Requested Effective Change Date	Fall 2015 2014
Department	Engineering Management and Systems Engineering
Discipline	Engineering Management (ENG MGT)
Course Number	5412
Title	Operations Management Science
Abbreviated Course Title	Operations Management Sci

Catalog
Description

Application of management science with an emphasis on supporting managerial decision-making. Design and operations of systems are modeled and analyzed using quantitative and qualitative techniques implemented using modern technology. Specific approaches include mathematical modeling and optimization, probabilistic/statistical analysis, and simulation.

Prerequisites **Graduate standing.** ~~Eng Mgt 3310 with at least a "C" or graduate standing.~~

Field Trip

In Workflow

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

Approval Path

1. 11/18/14 6:00 pm
enke: Approved
for RENG MNGT
Chair
2. 11/19/14 9:03 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
scraper: Approved
for Engineering
DSCC Chair

Statement

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

Required for Majors	Yes
------------------------	-----

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

Justification for change:	Required core course for Engineering Management Masters program. Approved by EMSE faculty during August 2014 retreat.
------------------------------	--

Semesters previously offered as an experimental course	
--	--

Co-Listed Courses:	
-----------------------	--

Course Reviewer Comments	
-----------------------------	--

Key: 393

Course Inventory Change Request

Date Submitted: 11/18/14 3:26 pm

Viewing: **ENG MGT 5510 : Industrial Marketing Systems Analysis**

File: 651.1

Last edit: 11/18/14 3:26 pm

Changes proposed by: sraper

Requested Fall **2015** ~~2014~~

Effective Change
Date

Department Engineering Management and Systems Engineering

Discipline Engineering Management (ENG MGT)

Course Number 5510

Title Industrial Marketing Systems Analysis

Abbreviated Indus Market System Anal
Course Title

Catalog

Description

An analysis of the factors of engineered products, customers, communication, promotion, personal selling, persuasion and management within a dynamic industrial sales environment.

Prerequisites

Senior 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
change:

Approved by EMSE faculty during August 2014 retreat.

In Workflow

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

Approval Path

1. 11/18/14 6:00 pm
enke: Approved for RENG MNGT Chair
2. 11/19/14 9:03 am
kleb6b: Approved for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved for Engineering DSCC Chair

Semesters
previously
offered as an
experimental
course
Co-Listed
Courses:

Course Reviewer
Comments

Key: 651

Course Inventory Change Request

Date Submitted: 11/18/14 3:21 pm

Viewing: **ENG MGT 5512 : Legal Environment**

File: 870.1

Last edit: 11/18/14 3:21 pm

Changes proposed by: sraper

Programs
referencing this
course

[ENG MG-BS: Engineering Management BS](#)
[INORGPS-MS: Industrial Organizational Psychology MS](#)
[PRE LAW-MI: Pre Law Minor](#)

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department

Engineering Management and Systems Engineering

Discipline

Engineering Management (ENG MGT)

Course Number

5512

Title

Legal Environment

Abbreviated
Course Title

Legal Environment

Catalog

Description

Study of the effect of the legal environment on the decisions which the engineering manager must make. The course investigates the social forces that produced this environment and the responsibilities incumbent upon the engineer.

Prerequisites

Senior or graduate standing.

Field Trip

Statement

Credit Hours

LEC: 3 LAB: 0 IND: 0 RSD: 0

Total: 3

Required for
Majors

Yes

Elective for
Majors

Yes

In Workflow

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

Approval Path

1. 11/18/14 5:58 pm
enke: Approved
for RENGMNGT
Chair
2. 11/19/14 9:04 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved
for Engineering
DSCC Chair

Justification for
change:

Approved by EMSE faculty during August 2014 retreat. This course is required for
MOT Emphasis area students and is a technical elective for the Industrial Engineering
Emphasis area and the General Option.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 870

Course Inventory Change Request

Date Submitted: 11/18/14 3:29 pm

Viewing: **ENG MGT 5610 : Advanced Facilities Planning & Design**

File: 2070.1

Last edit: 11/18/14 3:29 pm

Changes proposed by: sraper

Requested Fall **2015** ~~2014~~

Effective Change
Date

Department Engineering Management and Systems Engineering

Discipline Engineering Management (ENG MGT)

Course Number 5610

Title Advanced Facilities Planning & Design

Abbreviated Adv Facil Plan & Design
Course Title

Catalog

Description

An integrated approach to the planning and design of facilities; examination of advanced techniques and tools for facility location, space allocation, facility layout materials handling system design, work place design; e.g. mathematical programming and simulation modeling.

Prerequisites

Graduate standing. ~~Eng Mgt 4310 or instructor's permission.~~

Field Trip

Statement

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

Required for Majors **No**

Elective for Majors **Yes**

Justification for Approved by EMSE faculty during August 2014 retreat.

In Workflow

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

Approval Path

1. 11/18/14 6:00 pm
enke: Approved for RENG MNGT Chair
2. 11/19/14 9:04 am
kleb6b: Approved for CCC Secretary
3. 12/05/14 9:15 am
sraper: Approved for Engineering DSCC Chair

change:

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 2070

Course Inventory Change Request

New Course Proposal

Date Submitted: 09/24/14 2:40 pm

Viewing: **GEO ENG 5332 : Fundamentals of Groundwater Hydrology**

File: 4120

Last edit: 11/25/14 2:35 pm

Changes proposed by: norbert

Requested Fall 2015

Effective Change
Date

Department Geosciences and Geological and Petroleum
Engineering

Discipline Geological Engineering (GEO ENG)

Course Number 5332

Title Fundamentals of Groundwater Hydrology

Abbreviated
Course Title Groundwater Hydrology

Catalog

Description

Focus on fundamental analysis and survey of groundwater hydrology with emphasis on practical geo-environmental and subsurface hydrology issues of interest to working professionals. Topics will include general hydrology, surface and subsurface interconnection, basic groundwater flow and well test analysis, and a brief intro to contaminant transport.

Prerequisites

Field Trip

Statement
none

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

Required for
Majors No

Elective for Yes

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/08/14 10:42 am
reflori: Approved for RGEOENG Chair
2. 12/08/14 11:09 am
kleb6b: Approved for CCC Secretary
3. 12/15/14 4:28 pm
sraper: Approved for Engineering DSCC Chair

Majors

Justification for new course: This class is intended to be taught as a distance class to working professionals from a wide variety of academic backgrounds; therefore, the mathematical complexity will be at a basic level and the focus is on a general understanding of groundwater hydrology.

Semesters previously offered as an experimental course

FS 13, FS 14

Co-Listed Courses:

Course Reviewer Comments

Key: 4120

Course Inventory Change Request

New Course Proposal

Date Submitted: 09/24/14 2:31 pm

Viewing: **GEO ENG 5415 : Soil Mechanics for Geopprofessionals**

File: 4119

Last edit: 11/25/14 2:36 pm

Changes proposed by: norbert

Requested	Summer 2015
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geological Engineering (GEO ENG)
Course Number	5415
Title	Soil Mechanics for Geopprofessionals
Abbreviated Course Title	Soil Mechanics

Catalog

Description

The basic principles of soil mechanics necessary for professionals to practice in the field of geoconstruction. Topics related to the practical aspects of engineering include: soil classification, index properties, water flow through soils, compaction, compressibility, and shear strength. These basic principles will be applied to real world problems.

Prerequisites

Field Trip

Statement

none

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

Required for Majors No

Elective for Majors Yes

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/08/14 10:43 am
reflori: Approved for RGEOENG Chair
2. 12/08/14 11:09 am
kleb6b: Approved for CCC Secretary
3. 12/15/14 4:28 pm
sraper: Approved for Engineering DSCC Chair

Justification for new course:	This course is for distance ed./ Fort Leonard Wood graduate students only.
Semesters previously offered as an experimental course	SS 13, SS 12
Co-Listed Courses:	

Course Reviewer
Comments

Key: 4119

Course Inventory Change Request

New Course Proposal

Date Submitted: 09/25/14 8:40 am

Viewing: **GEO ENG 6400 : Practice Oriented Project**

File: 4121

Last edit: 11/25/14 2:22 pm

Changes proposed by: norbert

Requested	Spring 2015
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geological Engineering (GEO ENG)
Course Number	6400
Title	Practice Oriented Project
Abbreviated Course Title	Project

Catalog

Description

This class will consist of a single term project. Students will, in consultation with the instructor, pick a topic relevant to their studies, and produce a comprehensive, in depth, professionally written report, including a literature review on the state of the practice on that topic.

Prerequisites

Limited to students enrolled in the Masters of Engineering (M.E.) in Geotechnics Program.

Field Trip

Statement

none.

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

Required for Majors	Yes
---------------------	-----

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

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/08/14 10:44 am
reflori: Approved for RGEOENG Chair
2. 12/08/14 11:10 am
kleb6b: Approved for CCC Secretary
3. 12/15/14 4:28 pm
sraper: Approved for Engineering DSCC Chair

Justification for new course:	A minimum 3-hour practice-oriented project is required for all M.E. candidates. Currently students do this by registering for a GE 6000 Special Problems class. Because there is a maximum of 4 hours allowed of Special Problems, this creates a situation where students cannot take a second 3 hours Special Problems class.
-------------------------------	---

Semesters previously offered as an experimental course	N/A required class
--	--------------------

Co-Listed Courses:	
--------------------	--

Course Reviewer Comments	
--------------------------	--

Key: 4121

Course Inventory Change Request

Date Submitted: 09/05/14 9:59 am

Viewing: **GEOPHYS 3210 ~~2210~~: Introduction to Geophysics**

File: 745.1

Last edit: 09/05/14 9:59 am

Changes proposed by: liukh

Requested	Fall 2015 2014
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geophysics (GEOPHYS)
Course Number	3210 2210
Title	Introduction to Geophysics
Abbreviated Course Title	Introduction to Geophysics

Catalog

Description

An introduction to a broad area of solid earth geophysics and exploration geophysics. Topics include plate tectonics, earthquake study, structure and dynamics of the Earth's deep interior, gravity, magnetism, heat flow, and geophysical exploration for natural resources.

Prerequisites

Math 1208 and Geology 1110.

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 the course number to 3210.
-------------------	-----------------------------------

In Workflow

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

Approval Path

- 12/08/14 10:44 am
reflori: Approved for RGEOENG Chair
- 12/08/14 11:10 am
kleb6b: Approved for CCC Secretary
- 12/19/14 8:10 am
imorgan: Approved for Sciences DSCC Chair

change:

This course was renumbered from Geophys 270. Many graduate students took it for graduate studies. We propose to change it to a 3000 level course so that graduate students can take it.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 745

Course Inventory Change Request

Date Submitted: 12/08/14 9:57 am

Viewing: **GEOPHYS 5251 4251: Exploration and And Development Seismology**

File: 768.1

Last edit: 12/19/14 9:59 am

Changes proposed by: liukh

Other Courses
referencing this
course

In The Catalog Description:
[GEO ENG 6784 : Advanced Engineering And Environmental Geophysics](#)

Requested
Effective Change
Date

Department

Discipline

Course Number

Title

Abbreviated
Course Title

Fall **2015 2014**

Geosciences and Geological and Petroleum Engineering

Geophysics (GEOPHYS)

5251-4251

Exploration **and And** Development Seismology

Expl & Devlp Seismology

Catalog
Description

Principles of reflection seismology as applied to the delineation of geologic structures and the determination of stratigraphy and lithology. Emphasis on both the capabilities and limitations of the seismic method. The laboratory utilizes both modeled and actual seismic data.

Prerequisites

Math 2222.

Field Trip
Statement

Credit Hours

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

Required for

No

In Workflow

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

Approval Path

1. 12/08/14 11:46 am
reflori: Approved for RGEOENG Chair
2. 12/08/14 11:59 am
kleb6b: Approved for CCC Secretary
3. 12/19/14 8:13 am
imorgan: Approved for Sciences DSCC Chair

Majors

Elective for
Majors**No**Justification for
change:

Change the course number to 5251. The course Geophys 4251 (formerly 385) has been taking by both undergraduate and graduate students. We propose to change to a 5000 level course so that graduate students can take it.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:Course Reviewer
Comments

imorgan (12/19/14 8:12 am): Effective date changed to FS 2015 because of
deadlines (OK per department representative)

Key: 768

Course Inventory Change Request

Date Submitted: 08/29/14 3:36 pm

Viewing: **GEOPHYS 5261 4221: Computational Geophysics**

File: 1008.1

Last edit: 12/08/14 12:00 pm

Changes proposed by: patty

Requested	Fall 2015 2014
Effective Change Date	
Department	Geosciences and Geological and Petroleum Engineering
Discipline	Geophysics (GEOPHYS)
Course Number	5261 4221
Title	Computational Geophysics
Abbreviated Course Title	Computational Geophysics

Catalog

Description

Scientific programming in a UNIX/Linux environment, with emphasis on solving geophysical problems such as linear and nonlinear inversion, spectral analysis, seismicity, seismic wave attenuation, shear-wave splitting, and seismic tomography.

Prerequisites

Geophys 2210.

Field Trip

Statement

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

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

Elective for Majors	Yes
---------------------	------------

In Workflow

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

Approval Path

- 12/08/14 11:46 am
reflori: Approved for RGEOENG Chair
- 12/08/14 12:00 pm
kleb6b: Approved for CCC Secretary
- 12/19/14 8:14 am
imorgan: Approved for Sciences DSCC Chair

Justification for change:	Change the course number to 5261. The course Geophys 4221 (formerly 320) has been taking by both undergraduate and graduate students. We propose to change to
---------------------------	---

a 5000 level course so that graduate students can take it.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Course Reviewer

Comments

Key: 1008

Course Inventory Change Request

Date Submitted: 08/29/14 3:33 pm

Viewing: **GEOPHYS 5736 4211: Geophysical Field Methods**

File: 2205.1

Last edit: 12/08/14 11:15 am

Changes proposed by: pattyr

Requested Fall **2015 2014**

Effective Change

Date

Department Geosciences and Geological and Petroleum Engineering

Discipline Geophysics (GEOPHYS)

Course Number **5736 4211**

Title Geophysical Field Methods

Abbreviated Course Title Geophysical Field Meth

Catalog

Description

Imaging of selected subsurface features and engineering structures using various geophysical tools. Special emphasis is placed on ground penetrating radar and surface wave techniques.

Prerequisites

Junior level standing or higher.

Field Trip

Statement

One field trip at student expense required.

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

Total: 3

Required for Majors **No**

Elective for Majors **Yes**

Justification for change: Change course number from 4211 to 5736. This course is co-listed with Geo Eng 5736. Students were confused by the different course numbers. Therefore, we

In Workflow

1. **RGEOENG Chair**

2. **CCC Secretary**

3. **Sciences DSCC Chair**

4. **Pending CCC Agenda post**

5. **CCC Meeting Agenda**

6. **Campus Curricula Committee Chair**

7. **FS Meeting Agenda**

8. **Faculty Senate Chair**

9. **Registrar**

10. **Ishelton**

11. **Peoplesoft**

Approval Path

1. 12/08/14 10:55 am

reflori: Approved for RGEOENG Chair

2. 12/08/14 11:15 am

kleb6b: Approved for CCC Secretary

3. 12/19/14 8:14 am

imorgan: Approved for Sciences DSCC Chair

propose to change this course number to be the same as Geo Eng's.

Semesters

previously

offered as an

experimental

course

Co-Listed

GEO ENG 5736 - Geophysical Field Methods

Courses:

Course Reviewer

Comments

Key: 2205

Course Inventory Change Request

Date Submitted: 08/29/14 3:29 pm

Viewing: **GEOPHYS 5761 3241: Transportation Applications of Geophysics**

File: 1330.1

Last edit: 12/19/14 8:17 am

Changes proposed by: patty

Other Courses referencing this course

In The Catalog Description:
[GEO ENG 5761 : Transportation Applications of Geophysics](#)

Requested Effective Change Date: Fall **2015 2014**

Department: Geosciences and Geological and Petroleum Engineering

Discipline: Geophysics (GEOPHYS)

Course Number: **5761-3241**

Title: Transportation Applications of Geophysics

Abbreviated Course Title: Transport Appl of Geophysics

Catalog Description

Overview of geophysical and non-destructive test methods that are commonly used to investigate transportation structures and their foundations. Emphasis is placed on bridge system substructure, bridge system superstructure, pavement, roadway subsidence, subsurface characterization and vibration measurements.

Prerequisites

Junior level standing or higher.

Field Trip Statement

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

Required for: **No**

In Workflow

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

Approval Path

1. 12/08/14 10:54 am
reflori: Approved for RGEOENG Chair
2. 12/08/14 11:16 am
kleb6b: Approved for CCC Secretary
3. 12/19/14 8:17 am
imorgan: Approved for Sciences DSCC Chair

Majors

Elective for
Majors **Yes**

Justification for
change: Change course number from 3241 to 5761. This course is co-listed with Geo Eng 5761. Students were confused by the different course numbers. Therefore, we propose to change this course number to be the same as Geo Eng's.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses: GEO ENG 5761 - Transportation Applications of Geophysics
CIV ENG 5750 - Transportation Applications of Geophysics

Course Reviewer
Comments **imorgan (12/19/14 8:17 am):** Check for CC forms for GEO ENG 5761 and CIV ENG 5750. (I meant to make a similar comment on the GEOPHYS 5736 form but I forgot.)

Key: 1330

Course Inventory Change Request

Date Submitted: 12/12/14 6:31 pm

Viewing: **IS&T 3333 : Data Networks and Information Security**

Introduction To Telecommunications Networks

File: 2225.1

Last edit: 12/12/14 6:31 pm

Changes proposed by: barryf

Programs referencing this course	<u>IST-BS: Information Science and Tch BS</u> <u>MOBLB&T-MI: Mobile Bus & Tech Minor</u>
Other Courses referencing this course	<u>In The Prerequisites:</u> <u>IS&T 3321 : Network Performance Design And Management</u> <u>IS&T 4335 : Fundamentals of Mobile Technology for Business</u> <u>IS&T 4642 : E-Commerce Architecture</u> <u>IS&T 6335 : Mobile Technology for Business</u>
Requested Effective Change Date	Fall 2015 2014
Department	Business and Information Technology
Discipline	Info Science & Technology (IS&T)
Course Number	3333
Title	Data Networks and Information Security Introduction To Telecommunications Networks
Abbreviated Course Title	Networks & Info Security Telecom Networks
Catalog Description	The course provides an overview of intro to current and evolving networking telecommunications technologies, including voice, data and information security principles. video- Concepts include network technologies, standards and protocols; network construction, operation and management; switching and switching; routing; area networks; wireless network infrastructure; security frameworks, policies, and management. and mobile network infrastructure.
Prerequisites	IS&T 1750 ; IS&T 1552 or Comp Sci 1510.

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/12/14 9:35 pm
siauk: Approved for RINFSCTE Chair
2. 12/15/14 8:44 am
kleb6b: Approved for CCC Secretary
3. 12/15/14 1:07 pm
barryf: Approved for Social Sciences DSCC Chair

**Field Trip
Statement****Credit Hours** LEC: **1.5~~2~~** LAB: **1.5~~1~~** IND: 0 RSD: 0 Total: 3**Required for
Majors** **No****Elective for
Majors** **No**

**Justification for
change:** Updating course to provide more laboratory time, reflecting the additional emphasis
on security, and adding one prerequisite.**Semesters
previously
offered as an
experimental
course****Co-Listed
Courses:**

**Course Reviewer
Comments**

Key: 2225

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/12/14 6:31 pm

Viewing: **IS&T 3420 : Introduction to Data Science and Management**

File: 4156

Last edit: 12/15/14 8:44 am

Changes proposed by: barryf

Programs referencing this course
[IST-BS: Information Science and Tch BS](#)
[PROPOSED: Minor in Business Analytics and Data Science](#)

Requested Effective Change Date
 Fall 2015

Department
 Business and Information Technology

Discipline
 Info Science & Technology (IS&T)

Course Number
 3420

Title
 Introduction to Data Science and Management

Abbreviated Course Title
 Intro Data Science & Mgt

Catalog Description

Introduces students to increasing business success through analysis of large-scale data collections. Topics include: import/export of data, summary statistics, cross-tabulation, data transformations (sub setting, merging, sorting and aggregation), modeling methods, and visualization. Significant programming in R is expected.

Prerequisites

IS&T 1552 or Comp Sci 1510.

Field Trip Statement

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

Required for Majors
 Yes

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/12/14 9:39 pm
siauk: Approved for RINFSCTE Chair
2. 12/15/14 8:44 am
kleb6b: Approved for CCC Secretary
3. 12/15/14 1:07 pm
barryf: Approved for Social Sciences DSCC Chair

Elective for
Majors

No

Justification for
new course:

Required for IS&T majors.
Also required in Minor in Business Analytics and Data Science.

Semesters
previously
offered as an
experimental
course

None.

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4156

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/13/14 7:17 pm

Viewing: **IS&T 4450 : Introduction to Information Visualization**

File: 4157

Last edit: 12/15/14 8:45 am

Changes proposed by: barryf

Programs
referencing this
course

PROPOSED: Minor in Business Analytics and Data Science

Requested Fall 2015

Effective Change
Date

Department Business and Information Technology

Discipline Info Science & Technology (IS&T)

Course Number 4450

Title Introduction to Information Visualization

Abbreviated Intro Info Visualization
Course Title

Catalog
Description

Topics include: the visualization development framework, traditional presentations of data, human perception and aesthetics, colorspace theory, visualization algorithms and software, modern visualizations of large data sets. Application of R packages will be emphasized throughout.

Prerequisites

Statistics, Calculus, and Programming Knowledge.

Field Trip
Statement

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

Required for
Majors Yes

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/14/14 12:11
am
siauk: Approved
for RINFSCTE
Chair
2. 12/15/14 8:45 am
kleb6b: Approved
for CCC Secretary
3. 12/15/14 1:07 pm
barryf: Approved
for Social
Sciences DSCC
Chair

Elective for Majors	Yes
Justification for new course:	Paired with IS&T 6450. Required for the Minor in Business Analytics and Data Science, but elective otherwise.
Semesters previously offered as an experimental course	
Co-Listed Courses:	
Course Reviewer Comments	siauk (12/12/14 9:39 pm): Rollback: "Paired with IST 6420" should be "Paired with IST 6450"

Key: 4157

Course Inventory Change Request

Date Submitted: 12/12/14 6:32 pm

Viewing: **IS&T 5420 : Business ~~Introduction to Big Data~~ Analytics and Data Science**

File: 4040.8

Last approved: 04/25/14 3:05 pm

Last edit: 12/15/14 8:45 am

Changes proposed by: barryf

Catalog Pages
referencing this
course

[Business Administration](#)
[Information Science and Technology](#)

Programs
referencing this
course

[PROPOSED: Minor in Business Analytics and Data Science](#)

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department

Business and Information Technology

Discipline

Info Science & Technology (IS&T)

Course Number

5420

Title

Business ~~Introduction to Big Data~~ Analytics and Data Science

Abbreviated

Bus ~~Intro Big Data~~ Analytics &

Course Title

Data Sci

Catalog
Description

Analysis of large business data sets via statistical summaries, cross-tabulation, correlation, and variance matrices. Techniques in model selection, prediction, and validation utilizing general linear and logistic regression, Bayesian methods, clustering, and visualization. Extensive programming in R is expected. ~~This course addresses the foundations of using predictive statistics on big data sets to impact decision-making. Focus is applied examples using realistic data. Models implemented include regression (parametric/nonparametric), classification, decision trees, and clustering with analytical estimation accomplished using popular software.~~

Prerequisites

Calculus, Statistics, and Programming knowledge. ~~One of Stat 3113, Stat 3115, Stat~~

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. Ishelton
11. Peoplesoft

Approval Path

1. 12/12/14 9:39 pm
siauk: Approved for RINFSCTE Chair
2. 12/15/14 8:45 am
kleb6b: Approved for CCC Secretary
3. 12/15/14 1:07 pm
barryf: Approved for Social Sciences DSCC Chair

History

1. Apr 25, 2014 by
barryf

~~3117, Stat 5643 and one of Math 1212, Math 1215, Math 2222, or equivalents.~~

Field Trip

Statement

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

Required for
Majors ~~No~~ **Yes**

Elective for
Majors Yes

Justification for
change:

Title and description changed to reflect current terminology utilized in the area.
Prereqs made more clear to reflect graduate students, who don't take S&T UG
courses, in general.
Course is required in the Business Analytics and Data Science Graduate Certificate.
Course is required in the Business Analytics and Data Science Minor.
Otherwise, course is elective.

Semesters
previously
offered as an
experimental
course

Spring 2014

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4040

Course Inventory Change Request

Date Submitted: 12/12/14 6:32 pm

Viewing: **IS&T 5886 : Prototyping Human-Computer Interactions** ~~Interaction Prototyping~~

File: 124.3

Last approved: 04/25/14 3:05 pm

Last edit: 12/15/14 8:46 am

Changes proposed by: barryf

Catalog Pages referencing this course	<u>Business Administration</u> <u>Information Science and Technology</u>
Programs referencing this course	<u>BUS&MS-BS: Business and Mgmt Systems BS</u> <u>E&S COM-MI: Elect & Social Commerce Minor</u> <u>ENTPRNS-MI: Entrepreneurship Minor</u> <u>INORGPS-MS: Industrial Organizational Psychology MS</u> <u>IST-BS: Information Science and Tch BS</u> <u>MOBLB&T-MI: Mobile Bus & Tech Minor</u>

Requested Effective Change Date	Fall 2015 2014
Department	Business and Information Technology
Discipline	Info Science & Technology (IS&T)
Course Number	5886
Title	Prototyping Human-Computer Interactions Interaction Prototyping
Abbreviated Course Title	HCI Prototyping HCI

Catalog Description	This course explores novel HCI covers methods and UX technologies tools for creating low and high fidelity prototypes of IT systems as well as methods and tools for creating system prototypes , design concepts , including best practices and guidelines for optimal user experiences . different form factors (e.g., desktop vs. Example concepts include mobile applications, behavioral monitoring, gamification, natural user interfaces, haptics, and computers as social actors.
---------------------	--

In Workflow

- 1. RINFSCTE Chair**
- 2. CCC Secretary**
- 3. Social Sciences DSCC Chair**
- 4. Pending CCC Agenda post**
- CCC Meeting Agenda
- Campus Curricula Committee Chair
- FS Meeting Agenda
- Faculty Senate Chair
- Registrar
- Ishelton
- Peoplesoft

Approval Path

- 12/12/14 9:40 pm
siauk: Approved for RINFSCTE Chair
- 12/15/14 8:46 am
kleb6b: Approved for CCC Secretary
- 12/15/14 1:07 pm
barryf: Approved for Social Sciences DSCC Chair

History

- Apr 25, 2014 by lahne (124.1)

~~mobile~~

Prerequisites Preceded or accompanied by IS&T 5885.

Field Trip
Statement

Credit Hours LEC: 1.5 LAB: 1.5 IND: 0 RSD: 0 Total: 3

Required for
Majors No

Elective for
Majors No

Justification for
change: Updating course to specify the prototyping work better.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 124

Course Inventory Change Request

Date Submitted: 12/12/14 6:33 pm

Viewing: **IS&T 6336 : Foundations of Internet Computing**

File: 75.1

Last edit: 12/15/14 8:46 am

Changes proposed by: barryf

Programs
referencing this
course

IST-MS: Info Science & Tech MS

Requested
Effective Change
Date

Fall **2015** ~~2014~~

Department

Business and Information Technology

Discipline

Info Science & Technology (IS&T)

Course Number

6336

Title

Foundations of Internet Computing

Abbreviated
Course Title

Internet Computing

Catalog

Description

The foundations of Internet Computing include computer networks and Web sites. Networks are covered thoroughly and research directions for **networking and information security** ~~networks~~ are discussed. Web site design and research findings about site usability considerations are examined. ~~Security of communications for computing, especially wireless communications, are explored.~~

Prerequisites

IS&T MS entrance requirements, including solid programming knowledge.

Field Trip

Statement

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

Required for
Majors

No

Elective for

No

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. Ishelton

11. Peoplesoft

Approval Path

1. 12/12/14 9:40 pm
siauk: Approved
for RINFSCTE
Chair

2. 12/15/14 8:46 am
kleb6b: Approved
for CCC Secretary

3. 12/15/14 1:08 pm
barryf: Approved
for Social
Sciences DSCC
Chair

Majors

Justification for change: Shortened course description and clarified part.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Key: 75

Course Inventory Change Request

New Course Proposal

Date Submitted: 12/13/14 7:18 pm

Viewing: **IS&T 6450 : Information Visualization**

File: 4132

Last edit: 12/13/14 7:18 pm

Changes proposed by: barryf

Requested Fall 2015

Effective Change

Date

Department Business and Information Technology

Discipline Info Science & Technology (IS&T)

Course Number 6450

Title Information Visualization

Abbreviated Info Visualization

Course Title

Catalog

Description

Topics/activities include: the visualization development framework, traditional presentations of data, human perception and aesthetics, colorspace theory, visualization algorithms and software, case studies of modern topology, research into visualization algorithms and implementations in R. Students will produce significant programs and visualizations.

Prerequisites

Statistics, Calculus, and Programming Knowledge.

Field Trip

Statement

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

Total: 3

Required for Yes

Majors

Elective for Yes

Majors

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. Ishelton

11. Peoplesoft

Approval Path

1. 12/14/14 12:12

am

siauk: Approved

for RINFSCTE

Chair

2. 12/15/14 8:46 am

kleb6b: Approved

for CCC Secretary

3. 12/15/14 1:08 pm

barryf: Approved

for Social

Sciences DSCC

Chair

Justification for new course: Is being made a required course in the Business Analytics and Data Science Graduate Certificate.
Elective for majors in general.

Paired course IS&T 4450-Introduction to Information Visualization is also being created.

Semesters previously offered as an experimental course

Fall 2014.

Co-Listed Courses:

Course Reviewer Comments **siauk (12/12/14 9:40 pm):** Rollback: "Paired course IS&T 4420—Introduction to Information Visualization and Analytics" should be "Paired course IS&T 4450—Introduction to Information Visualization"

Key: 4132

Course Inventory Change Request

New Course Proposal

Date Submitted: 11/18/14 1:43 pm

Viewing: **NUC ENG 4350 : Introduction to Nuclear Medical Science**

File: 4147

Last edit: 11/18/14 2:34 pm

Changes proposed by: leehk

Requested	Spring 2015
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	4350
Title	Introduction to Nuclear Medical Science
Abbreviated Course Title	Intro. Nucl. Medial Sci.

Catalog

Description

Introduction to physics and technologies involved in various radiological imaging and treatment systems in the medical field, such as digital radiography, digital mammography, computed tomography and nuclear medicine instruments will be covered.

Prerequisites

Nuc Eng 4312 or equivalent.

Field Trip

Statement

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

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

Elective for Majors	Yes
---------------------	-----

In Workflow

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

Approval Path

1. 11/18/14 2:24 pm
frimpong:
Approved for
RMINNUCL Chair
2. 11/18/14 2:34 pm
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:17 am
srafer: Approved
for Engineering
DSCC Chair

Justification for new course: This course has been offered three times as experimental course for graduate students. The level of the course is also suitable for senior undergraduate students. This course should be co-listed together with NE 5350.

Semesters previously offered as an experimental course SP 2010, FS 2011 and SP 2014

Co-Listed Courses: NUC ENG 5350 - Advanced Nuclear Medical Science

Course Reviewer
Comments

Key: 4147

Course Inventory Change Request

New Course Proposal

Date Submitted: 11/18/14 2:44 pm

Viewing: **NUC ENG 5350 : Advanced Nuclear Medical Science**

File: 4148

Last edit: 11/21/14 8:39 am

Changes proposed by: kleb6b

Requested	Spring 2015
Effective Change Date	
Department	Mining & Nuclear Engineering
Discipline	Nuclear Engineering (NUC ENG)
Course Number	5350
Title	Advanced Nuclear Medical Science
Abbreviated Course Title	Adv Nuclear Medical Sci

Catalog

Description

Advanced level of technologies involved in medical modalities, such as digital radiography, digital mammography, modern computed tomography, gamma camera, SPECT and PET will be covered.

Prerequisites

Nuc Eng 4312 or equivalent.

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 was successfully offered three ☐ times and needs to be offered regularly. In addition, as the course is useful for first-level graduate students or senior level

In Workflow

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

Approval Path

1. 11/18/14 2:45 pm
frimpong: Approved for RMINNUCL Chair
2. 11/18/14 2:49 pm
kleb6b: Approved for CCC Secretary
3. 12/05/14 9:17 am
srafer: Approved for Engineering DSCC Chair

undergraduate students, both NE 4350 and NE 5350 should be offered as dual-listed

Semesters SP 2010, FS 2011, SP 2014

previously
offered as an
experimental
course

Co-Listed

Courses:

Course Reviewer	sraper (11/21/14 8:39 am): Revised course description provided by Hyoung-Koo Lee
Comments	via email.

Key: 4148

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/05/14 1:42 pm

Viewing: **AERO ENG 2001.TBD : Introduction to Spacecraft Design**

File: 4162

Last edit: 12/05/14 2:08 pm

Changes proposed by: nisbett

Requested Spring 2015

Effective Change
Date

Department Mechanical & Aerospace Engineering

Discipline Aerospace Engineering (AERO ENG)

Course Number 2001

Topic ID TBD

Experimental Title
Introduction to Spacecraft Design

Experimental Abbreviated
Course Title
Intro Spacecraft Design

Instructors Dr. Hank Pernicka

Experimental

Catalog

Description

Introduction to basics of spacecraft design, including design requirements, subsystem definition, and vehicle design synthesis. Lab work includes design and fabrication of a small spacecraft payload that is flight tested on a high altitude balloon to 100,000 feet. Post-flight data reduction and analysis are performed.

Prerequisites Aero Eng 2861.

Field Trip
Statement

Credit Hours

LEC: 1

LAB: 1

IND: 0

RSD: 0

Total: 2

Justification for
new course:

This is to provide a design course at the sophomore level for students interested in spacecraft design.

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. Registrar

Approval Path

1. 12/05/14 2:04 pm
drallmei:
Approved for
RMECHENG Chair
2. 12/05/14 2:08 pm
kleb6b: Approved
for CCC Secretary
3. 12/15/14 4:27 pm
sraper: Approved
for Engineering
DSCC Chair

Semester(s) None
previously taught

Co-Listed
Courses:

Course Reviewer
Comments

Key: 4162

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/05/14 7:41 am

Viewing: **CHEM ENG 4001.TBD : Bioprocess Safety**

File: 4158

Last edit: 12/05/14 7:41 am

Changes proposed by: kleb6b

Requested Spring 2015

Effective Change
Date

Department Chemical and Biochemical Engineering

Discipline Chemical Engineering (CHEM ENG)

Course Number 4001

Topic ID TBD

Experimental Bioprocess Safety
Title

Experimental Bioprocess Safety
Abbreviated
Course Title

Instructors Dr. Daniel Forciniti

Experimental
Catalog
Description

This course covers risk assessment, biohazard containment and inactivation practices, and other- biosafety issues relevant to industrial bioprocessing. Considerations relating to the release of genetically modified organisms are also discussed.

Prerequisites Preceded or accompanied by Chem Eng 4210 or graduate level standing.

Field Trip
Statement

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

Justification for new course: We are offering a new biosafety class because our Biochemical Engineering Emphasis Program does not include a chemical safety class. Therefore, students in the emphasis program learn pieces of process safety in other classes but to fully comply

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. Registrar

Approval Path

1. 12/05/14 9:10 am
aldahhanm:
Approved for
RCHEMENG Chair
2. 12/05/14 9:10 am
kleb6b: Approved
for CCC Secretary
3. 12/05/14 9:18 am
sraper: Approved
for Engineering
DSCC Chair

with ABET requirements we need them to take a dedicated safety class.

Semester(s)

previously taught

Co-Listed

Courses:

Course Reviewer

Comments

Key: 4158

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 11/18/14 2:33 pm

Viewing: **POL SCI 3001.TBD : Politics of the Middle East**

File: 4092

Last edit: 11/18/14 5:49 pm

Changes proposed by: rlc

Requested	Spring 2015
Effective Change	
Date	
Department	History and Political Science
Discipline	Political Science (POL SCI)
Course Number	3001
Topic ID	TBD
Experimental	Politics of the Middle East
Title	
Experimental	Middle East Politics
Abbreviated	
Course Title	
Instructors	Dr. Tseggai Isaac

Experimental Catalog Description

Explores the significant events that have framed modern political realities in the Middle East, beginning with the end of the Ottoman Empire in the First World War and then exploring the colonial experiences of the Middle Eastern people under British and French rule and the post-colonial geostrategic alignments and the creation of the state of Israel.

Prerequisites Political Science 1200, 2400, 2500 or Hist 1310.

Field Trip Statement

Credit Hours	LEC: 3.0	LAB: 0	IND: 0	RSD: 0	Total: 3.0
--------------	----------	--------	--------	--------	------------

Justification for
new course: Broaden the department curriculum.

In Workflow

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

Approval Path

1. 11/18/14 4:13 pm
lgragg: Approved for RHISTORY Chair
2. 11/18/14 4:22 pm
kleb6b: Approved for CCC Secretary
3. 11/18/14 5:49 pm
ivliyeva: Approved for Arts & Humanities DSCC Chair

Semester(s) Spring 2013
previously taught

Co-Listed
Courses:

Course Reviewer **kleb6b (06/12/14 10:47 am):** Rollback: 4 Digit Number

Comments **kleb6b (11/18/14 1:54 pm):** Rollback: Abbreviated Course Title and shorten
Description

ivliyeva (11/18/14 5:49 pm): I am not sure if we need to approve this form if the
previous EC was good for 5 years, but just in case, let's consider approving.

Key: 4092

Course Inventory Change Request

New Experimental Course Proposal

Date Submitted: 12/13/14 8:16 am

Viewing: **RUSSIAN 5001.TBD : Advanced Scientific Russian**

File: 4169

Last edit: 12/15/14 10:56 am

Changes proposed by: ivliyeva

Requested	Fall 2015
Effective Change Date	
Department	Arts, Languages, & Philosophy
Discipline	Russian (RUSSIAN)
Course Number	5001
Topic ID	TBD
Experimental Title	Advanced Scientific Russian
Experimental Abbreviated Course Title	Adv. Scientific Russian
Instructors	Irina Ivliyeva

Experimental Catalog Description

Reading and discussion of advanced scientific texts. Emphasis on Russian grammar, syntax, and pronunciation (advanced level). Focus on principles of scientific texts' analysis and synthesis. Final project. This course is designed to give the department an opportunity to test a new course with senior/graduate level emphasis.

Prerequisites Undergraduate senior or graduate level. Consent of instructor required.

Field Trip Statement

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

Justification for new course: Correlates with the 3001 "Scientific Russian" which will be offered in the Fall 2015. This course will allow graduating seniors or graduate students to complete the Russian 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. Registrar

Approval Path

1. 12/13/14 10:16 am
Ivliyeva: Approved for RPHILOSO Chair
2. 12/15/14 8:47 am
Kleb6b: Approved for CCC Secretary
3. 12/15/14 10:56 am
Ivliyeva: Approved for Arts & Humanities DSCC Chair

Semester(s) None
previously taught
Co-Listed
Courses:

Course Reviewer
Comments

Key: 4169