

Campus Curricula Committee Meeting Agenda

December 5, 2023

8:15am - 9:30am, Parker Hall 203

(For Faculty Senate Meeting of January 25, 2024)

Review of submitted Course Change forms:

File: 4720.4	BUS 1414 : The Inclusive Workplace
File: 1850.1	BUS 1811 : Introduction to College Success II
File: 2131.1	BUS 3105 : Management and Business Law Essentials
File: 2130.1	BUS 3205 : Accounting Essentials
File: 2133.1	BUS 3305 : Operations Management Essentials
File: 2135.1	BUS 3705 : Management Information Systems Essentials
File: 2134.1	BUS 3805 : Mathematics and Statistics Essentials
File: 2141.1	BUS 4970 : Senior Business Design I
File: 2143.1	BUS 4980 : Senior Business Design II
File: 2454.9	COMP ENG 5410 : Introduction to Computer Communication Networks
File: 2460.5	COMP ENG 5420 : Introduction to Network Security
File: 2299.1	COMP ENG 6440 : Network Modeling and Analysis
File: 2140.1	FINANCE 3205 : Finance Essentials
File: 2006.1	IS&T 3443 : Database Applications in Business
File: 264.5	IS&T 3553 : Modular Software Systems in Java
File: 4364.6	IS&T 5131 : Foundations of Computer Architecture
File: 5004	MATH 5762 : Marketing Revolution with Machine Learning
File: 1903.12	MET ENG 3220 : Introduction To Extractive Metallurgy
File: 874.4	MIN ENG 1912 : Principles Of Mining Engineering
File: 2520.4	MIN ENG 2126 : Introduction To Mining Safety
File: 1534.8	MIN ENG 2925 : Surveying For Mineral Engineers
File: 1412.2	MIN ENG 3912 : Materials Handling In Mines
File: 41.12	MIN ENG 3913 : Mineral Identification and Exploration
File: 1128.11	MIN ENG 4097 : Capstone Design Project
File: 1344.9	MIN ENG 5522 : Ore Reserve Analysis and Geostatistics
File: 408.8	MIN ENG 5612 : Principles of Explosives Engineering
File: 590.7	MIN ENG 5823 : Rock Mechanics
File: 1696.8	MIN ENG 5912 : Mine Power and Drainage
File: 2264.6	MIN ENG 5932 : Underground Mining Methods
File: 2265.5	MIN ENG 5933 : Surface Mining Methods
File: 2132.1	MKT 3105 : Marketing and Strategy Essentials
File: 5008	MUSIC 1001 : Special Topics
File: 4247.2	TCH COM 3570 : Writing in the Sciences

Review of submitted Program Change forms:

File: 255.27 BUSAPPS-MI : Business Applications and Software Development Minor
File: 153.87 CP ENG-BS : Computer Engineering BS
File: 40.14 E&S COM-MI : Electronic & Social Commerce Minor
File: 238.11 HCI-MI : Human-Computer Interaction and User Experience Minor
File: 95.34 MI ENG-BS : Mining Engineering BS
File: 101.20 MOBLB&T-MI : Mobile Business & Digital Transformation
File: 122.11 PRE MBA-MI : Pre MBA Minor
File: 375.7 SCITEC-CTU : UCT - Science, Technology, and Society

Review of submitted Experimental Course forms:

File: 5006 TCH COM 5001.005 : Advanced Web-Based Communication

New Business:

General education requirements discussion.

Minor guideline approved by Faculty Senate.

Request by IST to limit 5xxx courses to majors through prerequisites.

Exception to deadline request for CHEM 5001.001 : Chemistry and Circular Economy of Critical Minerals

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 7:31 am

Viewing: **BUS 1414 : The Inclusive Workplace**

File: 4720.4

Last approved: 09/28/20 6:01 am

Last edit: 10/17/23 11:49 am

Changes proposed by: cecq8z

Programs
referencing this
course

[MOBLB&T-MI: Mobile Business & Digital Transformation](#)
[E&S COM-MI: Electronic & Social Commerce Minor](#)

Requested Fall 2024 ~~Spring 2021~~
Effective Change
Date

Department Business and Information Technology
Discipline Business (BUS)
Course Number 1414

Title
The Inclusive Workplace

Abbreviated The Inclusive Workplace
Course Title

Catalog
Description

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

Prerequisites

In Workflow

1. RBUSADMN
Chair

2. CCC Secretary

3. Social Sciences
DSCC Chair

4. Pending CCC
Agenda post

5. CCC Meeting
Agenda

6. Campus Curricula
Committee Chair

7. FS Meeting
Agenda

8. Faculty Senate
Chair

9. Registrar

10. CAT entry

11. Peoplesoft

Approval Path

1. 10/17/23 11:16
am
Cassie Elrod
(cassa): Approved
for RBUSADMN
Chair

2. 10/17/23 11:54
am
Jennifer
Pohlsander
(jpnfd): Approved
for CCC Secretary

3. 10/17/23 12:05
pm

Field Trip
Statement

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

Required for Yes
Majors

Elective for No
Majors

Justification for
change:

No one to teach course. Part of overall purge of idle courses in department.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/17/23 11:49 am):** Updated term to Fall 2024.
Comments

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

4. 11/20/23 2:24 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Sep 28, 2020 by
Cecil Eng Huang
Chua (cchua)

Key: 4720

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 7:32 am

Viewing: **BUS 1811 : Introduction to College Success II**

File: 1850.1

Last edit: 10/17/23 11:50 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 07/01/2024
Effective Change Date	
Department	Business and Information Technology
Discipline	Business (BUS)
Course Number	1811
Title	Introduction to College Success II
Abbreviated Course Title	Intro to College Success II

Catalog Description	A continuation of BUS 10. Students learn essential skills for success in Business and Information Technology. The course creates a sense of community in the department and prepares the students for the business world.			
Prerequisites				
Field Trip Statement				
Credit Hours	LEC: 0	LAB: 0.5	IND: 0	RSD: 0
Total:	0.5			
Required for Majors	No			

In Workflow
1. RBUSADMN Chair
2. CCC Secretary
3. Social Sciences DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path
1. 10/17/23 11:17 am Cassie Elrod (cassa): Approved for RBUSADMN Chair
2. 10/17/23 11:59 am Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/17/23 12:05 pm

Elective for
Majors

No

Justification for
change:

No one to teach course. Part of overall purge of idle courses in department.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

jpnfd (10/17/23 11:50 am): Updated term to Fall 2024.

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

4. 11/20/23 2:24 pm

Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

Key: 1850

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 7:33 am

Viewing: **BUS 3105 : Management and Business Law Essentials**

File: 2131.1

Last edit: 10/17/23 11:50 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 07/01/2024
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Business (BUS)
Course Number	3105
Title	Management and Business Law Essentials
Abbreviated	Mgt and Bus Law Essentials
Course Title	

Catalog				
Description	This course is an introduction to the essentials of management and business law for running a business. It is designed for students planning to enter the MBA program who need this area and for non-business students who want some business background. Credit in this course cannot be applied to any major or minor in Business, IS&T, or Economics.			
Prerequisites	Senior or Junior Standing; 3.0 GPA required.			
Field Trip				
Statement				
Credit Hours	LEC: 1.5	LAB: 0	IND: 0	RSD: 0

In Workflow
1. RBUSADMN Chair
2. CCC Secretary
3. Social Sciences DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path
1. 10/17/23 11:17 am Cassie Elrod (cassa): Approved for RBUSADMN Chair
2. 10/17/23 12:02 pm Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/17/23 12:05 pm

Total: 1.5

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

No one to teach course. Part of overall department purge.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/17/23 11:50 am):** Updated term to Fall 2024.
Comments

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

4. 11/20/23 2:24 pm

Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

Key: 2131

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:10 am

Viewing: **BUS 3205 : Accounting Essentials**

File: 2130.1

Last edit: 10/17/23 11:50 am

Changes proposed by: cecq8z

Programs
referencing this
course

CON E&M-MI: Construction Engineering and Management
Minor

Requested
Effective Change
Date

Fall 2024 ~~07/01/2024~~

Department Business and Information Technology

Discipline Business (BUS)

Course Number 3205

Title

Accounting Essentials

Abbreviated Accounting Essentials

Course Title

Catalog
Description

This course is an introduction to the essentials of financial and managerial accounting for running a business. It is designed for students planning to enter the MBA program who need this area and for non-business students who want some business background. Credit in this course cannot be applied to any major or minor in Business, IS&T, or Economics.

Prerequisites

Senior or Junior standing; 3.0 GPA required.

Field Trip

In Workflow

1. RBUSADMN
Chair

2. CCC Secretary

3. Social Sciences
DSCC Chair

4. Pending CCC
Agenda post

5. CCC Meeting
Agenda

6. Campus Curricula
Committee Chair

7. FS Meeting
Agenda

8. Faculty Senate
Chair

9. Registrar

10. CAT entry

11. Peoplesoft

Approval Path

1. 10/17/23 11:19
am
Cassie Elrod
(cassa): Approved
for RBUSADMN
Chair

2. 10/17/23 1:03 pm
Jennifer
Pohlsander
(jpnfd): Approved
for CCC Secretary

3. 10/17/23 1:24 pm
Cecil Eng Huang
Chua (cchua):

Statement					Approved for Social Sciences DSCC Chair 4. 11/20/23 2:24 pm Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post
Credit Hours	LEC: 1.5	LAB: 0	IND: 0	RSD: 0	
Total: 1.5					
Required for Majors	No				
Elective for Majors	No				

Justification for change: No one to teach course. Part of overall course cleanup in department.

Semesters previously offered as an experimental course

Co-Listed Courses:

Course Reviewer Comments

jpnfd (10/17/23 11:50 am): Updated term to Fall 2024.

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:10 am

Viewing: **BUS 3305 : Operations Management Essentials**

File: 2133.1

Last edit: 10/17/23 11:51 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 07/01/2024
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Business (BUS)
Course Number	3305
Title	Operations Management Essentials
Abbreviated	Operations Essentials
Course Title	

Catalog				
Description	This course is an introduction to the essentials of operations management for running a business. It is designed for students planning to enter the MBA program who need this area and for non-business students who want some business background. Credit in this course cannot be applied to any major or minor in Business, IS&T, or Economics.			
Prerequisites	Senior or Junior Standing; 3.0 GPA required.			
Field Trip				
Statement				
Credit Hours	LEC: 1.5	LAB: 0	IND: 0	RSD: 0
Total: 1.5				

In Workflow
1. RBUSADMN Chair
2. CCC Secretary
3. Social Sciences DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path
1. 10/17/23 11:19 am Cassie Elrod (cassa): Approved for RBUSADMN Chair
2. 10/17/23 1:05 pm Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/17/23 1:24 pm Cecil Eng Huang Chua (cchua):

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

No one to teach course. Part of overall course cleanup in department.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Approved for
Social Sciences
DSCC Chair

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved
for Pending CCC
Agenda post

Course Reviewer
Comments

jpnfd (10/17/23 11:51 am): Updated term to Fall 2024.

Key: 2133

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:11 am

Viewing: **BUS 3705 : Management Information Systems Essentials**

File: 2135.1

Last edit: 10/17/23 11:51 am

Changes proposed by: cecq8z

Requested	Fall 2024 07/01/2024
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Business (BUS)
Course Number	3705
Title	Management Information Systems Essentials
Abbreviated	MIS Essentials
Course Title	

Catalog				
Description	This course is an introduction to the essentials of management information systems for running a business. It is designed for students planning to enter the MBA program who need this area and for non-business students who want some business background. Credit in this course cannot be applied to any major or minor in Business, IS&T, or Economics.			
Prerequisites	Senior or Junior Standing; 3.0 GPA required.			
Field Trip				
Statement				
Credit Hours	LEC: 1.5	LAB: 0	IND: 0	RSD: 0

In Workflow
1. RBUSADMN Chair
2. CCC Secretary
3. Social Sciences DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path
1. 10/17/23 11:19 am Cassie Elrod (cassa): Approved for RBUSADMN Chair
2. 10/17/23 1:07 pm Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/17/23 1:24 pm Cecil Eng Huang Chua (cchua):

Total: 1.5

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

No one to teach course. Part of overall course cleanup in department.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/17/23 11:51 am):** Updated term to Fall 2024.
Comments

Approved for
Social Sciences
DSCC Chair

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved
for Pending CCC
Agenda post

Key: 2135

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:11 am

Viewing: **BUS 3805 : Mathematics and Statistics Essentials**

File: 2134.1

Last edit: 10/17/23 11:51 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 07/01/2024
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Business (BUS)
Course Number	3805
Title	Mathematics and Statistics Essentials
Abbreviated	Math Essentials
Course Title	

Catalog				
Description	This course is an introduction to the essentials of mathematics and statistics for running a business. It is designed for students planning to enter the MBA program who need this area and for non-business students who want some business background. Credit in this course cannot be applied to any major or minor in Business, IS&T, or Economics.			
Prerequisites	Senior or Junior Standing; 3.0 GPA required.			
Field Trip				
Statement				
Credit Hours	LEC: 1.5	LAB: 0	IND: 0	RSD: 0
Total: 1.5				

In Workflow
1. RBUSADMN Chair
2. CCC Secretary
3. Social Sciences DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path
1. 10/17/23 11:20 am Cassie Elrod (cassa): Approved for RBUSADMN Chair
2. 10/17/23 1:09 pm Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/17/23 1:24 pm Cecil Eng Huang Chua (cchua):

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

No one to teach course. Part of overall course cleanup in department.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Approved for
Social Sciences
DSCC Chair

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

Course Reviewer
Comments

jpnfd (10/17/23 11:51 am): Updated term to Fall 2024.

Key: 2134

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:23 am

Viewing: **BUS 4970 : Senior Business Design I**

File: 2141.1

Last edit: 10/17/23 11:51 am

Changes proposed by: cecq8z

Other Courses
referencing this
course

In The Prerequisites:

BUS 4980 : Senior Business Design II

Requested Effective Change Date	<u>Fall 2024</u> 07/01/2024
Department	Business and Information Technology
Discipline	Business (BUS)
Course Number	4970
Title	Senior Business Design I
Abbreviated Course Title	Senior Business Design I

Catalog Description

In this course, students will become familiar with the principles of entrepreneurship; learn about the basic purpose, content and structure of business plans; and develop business presentation skills through practice. At the end of the semester, student teams will give presentations to a bank in an attempt to secure a loan to run the business the following semester.

Prerequisites

Senior Standing.

Field Trip

In Workflow

1. RBUSADMN Chair

2. CCC Secretary

3. Social Sciences DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

Approval Path

1. 10/17/23 11:20 am
Cassie Elrod (cassa): Approved for RBUSADMN Chair

2. 10/17/23 1:16 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 10/17/23 1:24 pm
Cecil Eng Huang Chua (cchua):

Statement					Approved for Social Sciences DSCC Chair 4. 11/20/23 2:24 pm Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post
Credit Hours	LEC: 1	LAB: 0	IND: 0	RSD: 0	
Total: 1					
Required for Majors	No				
Elective for Majors	No				

Justification for change: No one to teach course. Culling course as part of overall departmental course cleanup.

Semesters previously offered as an experimental course

Co-Listed Courses:

Course Reviewer Comments

jpnfd (10/17/23 11:51 am): Updated term to Fall 2024.

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:23 am

Viewing: **BUS 4980 : Senior Business Design II**

File: 2143.1

Last edit: 10/17/23 11:52 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 07/01/2024
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Business (BUS)
Course Number	4980
Title	Senior Business Design II
Abbreviated	Senior Business Design II
Course Title	

Catalog				
Description	In this course, students will be expected to carry out the business plans created in Bus 4970. Progress reports are submitted roughly every 3 weeks during the semester. At the end of the semester, students terminate the business organization and profits are donated to a non-profit organization in the team's name.			
Prerequisites	Bus 4970.			
Field Trip				
Statement				
Credit Hours	LEC: 2	LAB: 0	IND: 0	RSD: 0
Total: 2				
Required for	No			

- In Workflow
1. RBUSADMN Chair

2. CCC Secretary

3. Social Sciences DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/17/23 11:21 am
Cassie Elrod (cassa): Approved for RBUSADMN Chair

2. 10/17/23 1:17 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 10/17/23 1:24 pm
Cecil Eng Huang Chua (cchua):

Majors

Elective for No

Majors

Approved for

Social Sciences

DSCC Chair

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

Justification for
change:

No one to teach course. Culling course as part of overall departmental course
cleanup.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/17/23 11:52 am):** Updated term to Fall 2024.
Comments

Key: 2143

[Preview Bridge](#)

Course Change Request

Date Submitted: 09/22/23 10:57 am

Viewing: **COMP ENG 5410 : Introduction to Computer Communication Networks**

File: 2454.9

Last approved: 05/24/16 4:57 am

Last edit: 10/10/23 9:27 am

Changes proposed by: stanleyj

Programs referencing this course	CP ENG-BS: Computer Engineering BS CP ENG-MI: Computer Engineering Minor NET CNS-CT: Cyber Physical Systems CT NET CNC-CT: Cyber Physical Systems CT
Other Courses referencing this course	In The Prerequisites: COMP ENG 5420 : Introduction to Network Security COMP ENG 6430 : High Speed Networks COMP ENG 6440 : Network Performance Analysis COMP SCI 6303 : Pervasive Computing COMP SCI 6602 : Network Performance Analysis

Requested Effective Change Date	Summer 2024 Fall 18 Prereq Attribute Update
Department	Electrical and Computer Engineering
Discipline	Computer Engineering (COMP ENG)
Course Number	5410
Title	Introduction to Computer Communication Networks
Abbreviated Course Title	Intro to Comm Networks

Catalog Description	The objective of this course is to introduce the concepts, terminology, theoretical
---------------------	---

In Workflow

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

Approval Path

1. 09/22/23 11:38 am
Jonathan Kimball (kimballjw):
Approved for RELECENG Chair
2. 10/10/23 10:40 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/11/23 1:24 pm
Mark Fitch (mfitch):
Approved for

foundations, and methods used for data communication in computer networks.

Emphasis will be ~~Design of computer networks with emphasis~~ on network architecture, services ~~protocols~~ and protocols, interoperability, standards, ~~performance considerations,~~ and performance considerations. ~~network technologies. Topics include: LAN, MAN, WAN, congestion/flow/error control, routing, addressing, broadcasting, multicasting, switching, and internetworking. A modeling tool is used for network design and simulation.~~

Prerequisites

Comp Eng 3150 or computer hardware competency and Stat 3117 or Stat 3115 or Stat 5643 or equivalent.

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:	Comp Eng 5410 is a core course for the CpE BS program. The existing catalog description is too specific (and antiquated) and needs to be updated for general communication network core topics covered in the course.
---------------------------	---

Semesters previously offered as an experimental course

Co-Listed Courses:

Course Reviewer	jpnfd (09/25/23 9:26 am): Updated Effective Change Date.
Comments	jpnfd (10/10/23 9:27 am): Per Dept. email 10/10/23: The changes to CpE 5410 correspond to far less than 50% of the course content. It's an overdue update to make our materials more consistent.

Engineering DSCC
Chair
4. 11/20/23 2:24 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Feb 9, 2015 by stanleyj (2454.1)
2. Oct 19, 2015 by stanleyj (2454.4)
3. May 24, 2016 by stanleyj (2454.6)

Course Change Request

Date Submitted: 09/22/23 11:02 am

Viewing: **COMP ENG 5420 : Introduction to Network Security**

File: 2460.5

Last approved: 03/06/17 3:15 am

Last edit: 10/10/23 9:28 am

Changes proposed by: stanleyj

Programs referencing this course
[NET CNS-CT: Cyber Physical Systems CT](#)
[SFTYENG-CT: Safety Engineering](#)
[NET CNC-CT: Cyber Physical Systems CT](#)

Other Courses referencing this course
In The Prerequisites:
[COMP ENG 6420 : Wireless Ad hoc and Sensor Networks](#)
[COMP ENG 6510 : Resilient Networks](#)
[COMP SCI 6605 : Advanced Network Security](#)
[ELEC ENG 6430 : Wireless Ad hoc and Sensor Networks](#)
[SYS ENG 6322 : Resilient Networks](#)
[SYS ENG 6324 : Wireless Ad hoc and Sensor Networks](#)

Requested Effective Change Date
[Summer 2024](#) ~~08/14/2017~~

Department Electrical and Computer Engineering
Discipline Computer Engineering (COMP ENG)
Course Number 5420

Title
Introduction to Network Security

Abbreviated Course Title
Intro Network Security

Catalog Description
This course examines basic issues in [cryptography](#) ~~network management, testing,~~

In Workflow

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

Approval Path

1. 09/22/23 11:38 am
Jonathan Kimball (kimballjw): Approved for RELECENG Chair
2. 10/10/23 10:37 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/11/23 1:24 pm
Mark Fitch (mfitch): Approved for

and network security. ~~security; it also discusses key encryption, key management, authentication, intrusion detection, malicious attack, and insider threats.~~ Topics include encryption, key management, authentication, data integrity, intrusion detection, malicious attack, and insider threats, among others. ~~Security of electronic mail and electronic commerce systems is also presented.~~

Prerequisites

Comp Eng 5410 or Comp Sci 5600.

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: The existing course description has been updated minor curriculum updates for the course.

Semesters previously offered as an experimental course

Co-Listed Courses:

Course Reviewer **jpnfd (09/25/23 9:27 am):** Updated Effective Change Date.
Comments **jpnfd (10/10/23 9:28 am):** Per Dept. email 10/10/23: The changes to CpE 5420 correspond to far less than 50% of the course content. It's an overdue update to make our materials more consistent.

Engineering DSCC
Chair
4. 11/20/23 2:24 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Feb 9, 2015 by stanleyj (2460.1)
2. Mar 6, 2017 by stanleyj (2460.4)

Course Change Request

Date Submitted: 09/22/23 11:22 am

Viewing: **COMP ENG 6440 : Network Modeling and Performance Analysis**

File: 2299.1

Last edit: 09/27/23 1:32 pm

Changes proposed by: stanleyj

Programs referencing this course

[NET CNS-CT: Cyber Physical Systems CT](#)
[NET CNC-CT: Cyber Physical Systems CT](#)

Other Courses referencing this course

In The Catalog Description:

[COMP SCI 6602 : Network Performance Analysis](#)

Requested [Fall 2024](#) ~~07/01/2024~~
Effective Change Date

Department Electrical and Computer Engineering
Discipline Computer Engineering (COMP ENG)
Course Number 6440
Title Network [Modeling and](#) ~~Performance~~ Analysis
Abbreviated Network [Model](#) ~~Performance~~
Course Title Analysis

Catalog Description

[This course introduces analytical](#) ~~Provides an introduction to performance modeling and computational methods for modeling and analysis of complex networked systems, including cyber-physical systems. computer networks.~~ Topics include stochastic [processes](#) ~~processes; performance measurement and monitoring;~~ quantitative models for [networks](#) ~~network performance,~~ e.g., Markovian models for

- In Workflow
1. RELECENG Chair

2. CCC Secretary

3. Engineering DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 09/22/23 11:39 am
Jonathan Kimball (kimballjw):
Approved for RELECENG Chair

2. 10/04/23 6:50 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 10/11/23 1:24 pm
Mark Fitch (mfitch):
Approved for Engineering DSCC

queues. ~~queues; simulation; and statistical analysis of experiments.~~

Prerequisites

Comp Eng 5410 or Comp Sci 3610; ~~4600~~; Stat 3117 or 5643.

Field Trip

Statement

Credit Hours

LEC: 3

LAB: 0

IND: 0

RSD: 0

Total: 3

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

The course title and description have been updated to better reflect the course curriculum. The revised course description provides minor updates to existing course description. The change in prerequisite from Comp Sci 4600 to Comp Sci 3610 reflects current Computer Science networking course offerings.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

COMP SCI 6602 - Network Performance Analysis

Course Reviewer
Comments

jpnfd (09/26/23 1:01 pm): Per email from Dr. Stanley 9/25/23, "The course title and catalog description changes for CpE 6440 do not correspond to a significant change in the course content (much less than 50%). The catalog description update makes the course more adaptive to changes in technology and techniques in the same core topic area that this course was created. The title change better reflects the updated catalog description."

jpnfd (09/26/23 2:13 pm): Updated effective date.

jpnfd (09/26/23 3:49 pm): Updated abbreviated course title per email from Dr. Stanley 9/26/23

jpnfd (09/27/23 1:32 pm): Course is co-listed with Comp Sci. Email sent to Comp Sci Chair, Dr.Park, on 9/27/23 with copy of form. He reviewed and replied that he approves of the proposed changes.

Chair

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:28 am

Viewing: **FINANCE 3205 : Finance Essentials**

File: 2140.1

Last edit: 10/17/23 11:52 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 07/01/2024
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Finance (FINANCE)
Course Number	3205
Title	Finance Essentials
Abbreviated	Finance Essentials
Course Title	

Catalog				
Description	This course is an introduction to the essentials of corporate finance for running a business. This course is designed for students planning to enter the MBA program. Credit in this course cannot be applied to any major or minor in Business, Information Sciences and Technology.			
Prerequisites	Senior or Junior Standing; 3.0 GPA required.			
Field Trip				
Statement				
Credit Hours	LEC: 1.5	LAB: 0	IND: 0	RSD: 0
Total: 1.5				
Required for	No			

In Workflow
1. RBUSADMN Chair
2. CCC Secretary
3. Social Sciences DSCC Chair
4. Pending CCC Agenda post
5. CCC Meeting Agenda
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path
1. 10/17/23 11:21 am Cassie Elrod (cassa): Approved for RBUSADMN Chair
2. 10/17/23 1:26 pm Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/17/23 3:18 pm Cecil Eng Huang Chua (cchua):

Majors

Elective for No

Majors

Justification for
change:

No one to teach course. Culling course as part of overall departmental course
cleanup.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/17/23 11:52 am):** Updated term to Fall 2024.
Comments

Approved for
Social Sciences
DSCC Chair

4. 11/20/23 2:24 pm

Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

Key: 2140

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:25 am

Viewing: **IS&T 3443 : Database Applications in Business**

File: 2006.1

Last edit: 10/17/23 11:52 am

Changes proposed by: cecq8z

Programs
referencing this
course

[BUSAPPS-MI: Business Applications and Software Development Minor](#)

Requested Effective Change Date Fall 2024 ~~07/01/2024~~

Department Business and Information Technology
Discipline Info Science & Technology (IS&T)
Course Number 3443

Title Database Applications in Business

Abbreviated Course Title Database Applications in Bus

Catalog Description

Design, development and implementation of application software typical to the modern business environment utilizing popular commercial database management systems such as Oracle and Access. Focus given to business case modeling, requirement analysis, database design, and implementation challenges. Project oriented.

Prerequisites

IS&T 3343.

Field Trip

In Workflow

1. RINFSCTE Chair

2. CCC Secretary

3. Social Sciences DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

Approval Path

1. 10/17/23 9:57 am
Cassie Elrod (cassa): Approved for RINFSCTE Chair

2. 10/17/23 1:48 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 10/17/23 3:18 pm
Cecil Eng Huang Chua (cchua): Approved for Social Sciences

Statement

Credit Hours
Total: 3

LEC: 3

LAB: 0

IND: 0

RSD: 0

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

No one to teach course. Culling course as part of overall departmental course cleanup.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

jpnfd (10/17/23 11:52 am): Updated term to Fall 2024.

DSCC Chair

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

Key: 2006

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:26 am

Viewing: **IS&T 3553 : Modular Software Systems in Java**

File: 264.5

Last approved: 10/29/18 5:56 am

Last edit: 10/17/23 11:52 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> Spring 2019
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Info Science & Technology (IS&T)
Course Number	3553
Title	Modular Software Systems in Java
Abbreviated	Mod Sftwr Sysys in Java
Course Title	

Catalog				
Description	Introduction to Software Life Cycle and characteristics of large modular software systems. Exploration of software support for such systems, using Java, including use of GUI interfaces, advanced I/O and String handling, Interfaces, Threads, and other modularity features. Program project included.			
Prerequisites	IS&T 3131 and either IS&T 1562 or IS&T 1552.			
Field Trip				
Statement				
Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0
Total: 3				

- In Workflow
1. RINFSCTE Chair

2. CCC Secretary

3. Social Sciences
DSCC Chair

4. Pending CCC
Agenda post

5. CCC Meeting
Agenda

6. Campus Curricula
Committee Chair

7. FS Meeting
Agenda

8. Faculty Senate
Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/17/23 11:10
am
Cassie Elrod
(cassa): Approved
for RINFSCTE
Chair

2. 10/17/23 2:08 pm
Jennifer
Pohlsander
(jpnfd): Approved
for CCC Secretary

3. 10/17/23 3:18 pm
Cecil Eng Huang
Chua (cchua):
Approved for

Required for Majors	No	Social Sciences DSCC Chair
Elective for Majors	Yes	4. 11/20/23 2:24 pm Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post
Justification for change: No one to teach course. Culling course as part of overall departmental course cleanup.		
Semesters previously offered as an experimental course		History 1. Oct 29, 2018 by barryf (264.1)
Co-Listed Courses:		
Course Reviewer Comments	jpnfd (10/17/23 11:52 am): Updated term to Fall 2024.	

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:27 am

Viewing: **IS&T 5131 : Foundations of Computer Architecture**

File: 4364.6

Last approved: 10/23/17 3:28 am

Last edit: 10/17/23 11:53 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 01/09/2018
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Info Science & Technology (IS&T)
Course Number	5131
Title	Foundations of Computer Architecture
Abbreviated	Fndations Computer Arch
Course Title	

Catalog				
Description	Design-oriented foundations of computer components and operation. Standard codes; number systems; base conversions; computer arithmetic; boolean algebra; operating system components including memory management, device management; plus related computer architecture topics. Research paper required.			
Prerequisites	Graduate Standing, strong programming knowledge.			
Field Trip				
Statement				
Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0

- In Workflow
1. RINFSCTE Chair

2. CCC Secretary

3. Social Sciences DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/17/23 11:12 am
Cassie Elrod (cassa): Approved for RINFSCTE Chair

2. 10/17/23 3:02 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 10/17/23 3:18 pm
Cecil Eng Huang Chua (cchua): Approved for

Total: 3		Social Sciences
Required for Majors	No	DSCC Chair
Elective for Majors	Yes	4. 11/20/23 2:24 pm
Justification for change:		Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post
No one to teach course. Culling course as part of overall departmental course cleanup.		
Semesters previously offered as an experimental course	None	History
Co-Listed Courses:		1. Mar 20, 2017 by barryf
		2. Oct 23, 2017 by barryf (4364.4)
Course Reviewer Comments	jpnfd (10/17/23 11:53 am): Updated term to Fall 2024.	

Key: 4364

[Preview Bridge](#)

Course Change Request

New Course Proposal

Date Submitted: 10/10/23 3:16 pm

Viewing: **MATH 5762 : Marketing Revolution with Machine Learning**

File: 5004

Last edit: 10/18/23 4:02 pm

Changes proposed by: singlerj

Requested	Fall 2024
Effective Change	
Date	
Department	Mathematics & Statistics
Discipline	Mathematics (MATH)
Course Number	5762
Title	Marketing Revolution with Machine Learning
Abbreviated	ML in Marketing
Course Title	

Catalog				
Description	This course introduces machine learning and artificial intelligence applications in marketing innovation contexts through case studies and industry collaborations, explores the underlying mathematics and implements algorithms using Python programming language.			
Prerequisites	Graduate standing or one of the following: Math 1212 or Math 1214.			
Field Trip				
Statement				
Credit Hours	LEC: 3	LAB: 0	IND: 0	RSD: 0
Total: 3				
Required for	No			

In Workflow

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

Approval Path

- 1. 10/11/23 10:06 am
Xiaoming Wang (xwx4z): Approved for RMATHEMA Chair
- 2. 10/18/23 4:02 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
- 3. 11/03/23 9:03 am
Katie Shannon (shannonk): Approved for

Majors

Elective for
Majors Yes

Sciences DSCC

Chair

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

Justification for
new course:

As part of our new data science program, this interdisciplinary course would provide our students with hands-on experience of machine learning (ML) applications in the industry. It would break through the boundary of traditional disciplines (marketing, and mathematics) in relation to disruptive innovation in marketing via ML.

The course was co-listed with MKT 5001

Semesters
previously
offered as an
experimental
course Spring 2022 (8 students enrolled) Spring 2023 (12 students enrolled).

Co-Listed
Courses: MKT 5762 - **Course Not Found**

Course Reviewer
Comments

jpnfd (10/12/23 3:27 pm): Added co-listed course MKT 5762

jpnfd (10/18/23 1:26 pm): Semesters previously taught dates and enrollment numbers updated. Spring 2022 (8 students enrolled) Spring 2023 (12 students enrolled). Course is to be co-listed ask MKT 5762. Copy of form emailed to BIT chair. On 10/18/23 email received from BIT chair stating BIT department approves of co-list with Math 5762.

jpnfd (10/18/23 4:02 pm): Social Sciences DSCC Chair approved form via email 10/18/23

Key: 5004

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/02/23 1:01 pm

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

File: 1903.12

Last approved: 02/08/21 6:01 am

Last edit: 10/02/23 3:59 pm

Changes proposed by: lipked

Programs
referencing this
course

[MT ENG-BS: Metallurgical Engineering BS](#)

Other Courses
referencing this
course

In The Prerequisites:

[MET ENG 3225 : Extractive Metallurgy Laboratory](#)

[MET ENG 5480 : Refining Of Metals](#)

Requested
Effective Change
Date

[Summer 2024](#) ~~Fall 2021~~

Department

Materials Science & Engineering

Discipline

Metallurgical Engineering (MET ENG)

Course Number

3220

Title

Introduction To Extractive Metallurgy

Abbreviated
Course Title

Intro Extractive Met

Catalog
Description

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

In Workflow

1. [RMATSENG Chair](#)
2. [CCC Secretary](#)
3. [Engineering DSCC Chair](#)
4. [Pending CCC Agenda post](#)
5. [CCC Meeting Agenda](#)
6. Campus Curricula Committee Chair
7. FS Meeting Agenda
8. Faculty Senate Chair
9. Registrar
10. CAT entry
11. Peoplesoft

Approval Path

1. 10/02/23 1:21 pm
Michael Moats
(moatsm):
Approved for
RMATSENG Chair
2. 10/02/23 4:03 pm
Jennifer
Pohlsander
(jpnfd): Approved
for CCC Secretary
3. 10/11/23 1:24 pm
Mark Fitch
(mfitch):
Approved for
Engineering DSCC
Chair

Prerequisites

A grade of "C" or better in either Chem 1320 or Met Eng 1210. ~~Preceded or accompanied by Met Eng 3330 or Cer Eng 3230 or Chem Eng 2110.~~

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:

Course instructor indicates that Chem 1320 is a better reflection of what is needed to be successful in the course, and that from Cer Eng 3230 (thermodynamics) and its equivalents are unnecessary prerequisites.

Semesters

previously

offered as an
experimental
course

Co-Listed

Courses:

Course Reviewer **jpnfd (10/02/23 3:59 pm):** Updated Effective date.

Comments

4. 11/20/23 2:24 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

History

1. Nov 3, 2014 by
smiller (1903.1)

2. May 6, 2016 by
smiller (1903.4)

3. Apr 3, 2017 by
smiller (1903.6)

4. Feb 8, 2021 by
smiller (1903.10)

Key: 1903

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 1:43 pm

Viewing: **MIN ENG 1912 : Principles Of Mining Engineering**

File: 874.4

Last approved: 10/05/23 3:14 pm

Last edit: 10/06/23 1:43 pm

Changes proposed by: caseysc

Programs referencing this course

[FR ENG-UN: Foundational Engineering and Computing](#)
[MI ENG-BS: Mining Engineering BS](#)

Other Courses referencing this course

In The Prerequisites:

[MIN ENG 2914 : Surface Mine Design](#)
[MIN ENG 2924 : Underground Mine Design](#)
[MIN ENG 3912 : Materials Handling In Mines](#)

Requested Effective Change Date **Fall 2024** ~~08/14/2017~~

Department Mining and Explosives Engineering

Discipline Mining Engineering (MIN ENG)

Course Number 1912

Title Principles Of Mining Engineering

Abbreviated Course Title Principles Of Min Engr

Catalog Description

Principles and definitions related to mining engineering including one or more field trips to familiarize the student with current mining practices.

Prerequisites

- In Workflow
1. MINEXP ENG Chair

2. CCC Secretary

3. Engineering DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/05/23 5:33 pm Kwame Awuah-Offei (kwamea): Rollback to Initiator

2. 10/06/23 2:41 pm Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG Chair

3. 10/24/23 1:45 pm Jennifer Pohlsander (jpnfd): Approved

Field Trip
Statement

Credit Hours	LEC: <u>1</u> 2	LAB: <u>1</u> 0	IND: 0	RSD: 0
Total: 2				
Required for Majors	Yes			
Elective for Majors	No			

Justification for
change:

This course is changing to 1 hour lecture and 1 lab; to combine MIN ENG 2126 lab into Min Eng 1912. Min Eng 2126 will be deactivated and removed from the Mining curriculum in FS 2024. FS 2024 Mining Engineering BS degree change form also submitted.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **kabp3 (10/05/23 5:33 pm):** Rollback: Make these changes as part of DC form.
Comments

for CCC Secretary
4. 11/10/23 11:54
am
Mark Fitch
(mfitch):
Approved for
Engineering DSCC
Chair
5. 11/20/23 2:24 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Jun 26, 2017 by
lahne (874.1)
2. Oct 5, 2023 by
jpnfd (874.3)

Key: 874

[Preview Bridge](#)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/24/23 11:25 am

Viewing: **MIN ENG 2126 : Introduction To Mining Safety**

File: 2520.4

Last approved: 10/10/23 3:57 pm

Last edit: 10/24/23 11:25 am

Changes proposed by: caseysc

Programs referencing this course	FR ENG-UN: Foundational Engineering and Computing
Other Courses referencing this course	In The Prerequisites: EXP ENG 5612 : Principles of Explosives Engineering MIN ENG 2925 : Surveying For Mineral Engineers MIN ENG 3002 : Mine Rescue MIN ENG 4122 : Advanced Mine Health and Safety MIN ENG 5612 : Principles of Explosives Engineering

Requested Effective Change Date [Fall 2024](#) ~~08/14/2017~~

Department Mining and Explosives Engineering

Discipline Mining Engineering (MIN ENG)

Course Number 2126

Title Introduction To Mining Safety

Abbreviated Course Title Intro To Mining Safety

Catalog Description	Safety aspects of mining in accordance with the MSHA Training Program required for
---------------------	--

- In Workflow
1. MINEXP ENG Chair

2. CCC Secretary

3. Engineering DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/11/23 9:39 am Kwame Awuah-Offei (kwamea): Rollback to Initiator

2. 10/24/23 11:28 am Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG Chair

3. 10/24/23 1:45 pm Jennifer

all new miners. Subjects include self-rescue and respiratory protection, ground control, hazard recognition, mine gases, and legal aspects associated with mining.

Prerequisites

Field Trip Statement

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

Required for Yes
Majors

Elective for No
Majors

Justification for change:

Combining with MIN ENG 1912 with curriculum changes for FS 2024 curriculum updates.

Semesters
previously
offered as an
experimental
course

Slightly modified course description and checked required for majors.

Co-Listed
Courses:

Course Reviewer **kabp3 (10/11/23 9:39 am):** Rollback: Let's hold on to this before we deactivate it.
Comments

Pohlsander
(jpnfd): Approved
for CCC Secretary

4. 11/10/23 11:54
am

Mark Fitch
(mfitch):

Approved for
Engineering DSCC
Chair

5. 11/20/23 2:25 pm
Jennifer

Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Jun 26, 2017 by
cifarellit (2520.1)
2. Oct 10, 2023 by
jpnfd (2520.3)

Key: 2520

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 1:44 pm

Viewing: **MIN ENG 2925 : Surveying For Mineral Engineers**

File: 1534.8

Last approved: 10/05/23 3:16 pm

Last edit: 10/06/23 1:44 pm

Changes proposed by: caseysc

In Workflow

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

Approval Path

- 1. 10/05/23 5:33 pm
Kwame Awuah-Offei (kwamea): Rollback to Initiator
- 2. 10/06/23 2:41 pm
Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG Chair
- 3. 10/24/23 1:45 pm
Jennifer Pohlsander (jpnfd): Approved

Programs referencing this course

[MI ENG-BS: Mining Engineering BS](#)

Requested Effective Change Date

[Fall 2024](#) ~~Fall 18~~ ~~Prereq Attribute Update~~

Department

Mining and Explosives Engineering

Discipline

Mining Engineering (MIN ENG)

Course Number

2925

Title

Surveying For Mineral Engineers

Abbreviated Course Title

Survey For Mineral Engrs

Catalog Description

Principles of surface and underground survey practice utilizing total station, engineer's level and GPS. Traversing and details, note taking and computations, balancing surveys and error analysis, staking-out new points, and map construction with AutoCAD.

Prerequisites

Preceded or accompanied by Min Eng [1912](#) ~~2126~~.

Field Trip Statement

Credit Hours	LEC: 0	LAB: 2	IND: 0	RSD: 0
Total: 2				
Required for Majors	Yes			
Elective for Majors	No			

Justification for
change:

Min Eng 2126 is being deactivated in FS 2024, and we are adding MIN ENG 1912 as new prerequisite for this course. FS 2024 Mining Engineering BS degree change form also submitted.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

kabp3 (10/05/23 5:33 pm): Rollback: Make these changes as part of DC form.

for CCC Secretary

4. 11/10/23 11:54 am
Mark Fitch
(mfitch):
Approved for
Engineering DSCC
Chair

5. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Jun 26, 2017 by cifarellit (1534.1)
2. Mar 5, 2018 by cifarellit (1534.4)
3. Oct 5, 2023 by jpnfd (1534.7)

Course Change Request

Date Submitted: 10/06/23 1:53 pm

Viewing: **MIN ENG 3912 : Materials Handling In Mines**

File: 1412.2

Last approved: 10/05/23 4:06 pm

Last edit: 10/06/23 1:53 pm

Changes proposed by: caseysc

Programs
referencing this
course [MI ENG-BS: Mining Engineering BS](#)

Other Courses
referencing this
course In The Prerequisites:
[MIN ENG 5212 : Aggregates and Quarrying](#)
[MIN ENG 5933 : Surface Mining Methods](#)

Requested
Effective Change
Date Fall ~~2014~~ 2024

Department Mining and Explosives Engineering

Discipline Mining Engineering (MIN ENG)

Course Number 3912

Title
Materials Handling In Mines

Abbreviated
Course Title Mtrls Handling In Mines

Catalog
Description
Mining applications of material transport and handling. Truck haulage and haulroads. Conveyors: belt, armored, and others; feeders; bins and bunkers; material stockpiling and homogenization; rail transport; water transport; slurry transport; mine hoists and hoisting.

Prerequisites
Min Eng 1912.

In Workflow

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

Approval Path

1. 10/05/23 5:33 pm
Kwame Awuah-
Offei (kwamea):
Rollback to
Initiator
2. 10/06/23 2:42 pm
Kwame Awuah-
Offei (kwamea):
Approved for
MINEXP ENG
Chair
3. 10/24/23 1:45 pm
Jennifer
Pohlsander
(jpnfd): Approved

Field Trip
Statement

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

Total: 2 ~~3~~

Required for Yes ~~No~~
Majors

Elective for No
Majors

Justification for
change:

Due to curriculum changes for FS 2024, removing 1 hour lab from MIN ENG 3912 and making a 2 hour lecture course only. This 1 hour reduction assists in allowing for the addition of an additional 3 hour technical elective to the curriculum. FS 2024 Mining Engineering BS degree change form also submitted.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **kabp3 (10/05/23 5:33 pm):** Rollback: Make these changes as part of DC form.
Comments

for CCC Secretary
4. 11/10/23 11:54
am
Mark Fitch
(mfitch):
Approved for
Engineering DSCC
Chair
5. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Oct 5, 2023 by
jpnfd (1412.1)

Key: 1412

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 2:29 pm

Viewing: **MIN ENG 3913 : Mineral Identification and Exploration**

File: 41.12

Last approved: 10/05/23 4:06 pm

Last edit: 10/06/23 2:29 pm

Changes proposed by: caseysc

Programs referencing this course

[GE ENG-BS: Geological Engineering BS](#)
[GEOL-MI: Geology Minor](#)
[MI ENG-BS: Mining Engineering BS](#)
[MI ENG-MI: Mining Engineering Minor](#)

Other Courses referencing this course

In The Prerequisites:

[MIN ENG 5932 : Underground Mining Methods](#)

Requested Effective Change Date

Fall 2024

~~Fall 18~~ Prereq

Attribute Update

Department Mining and Explosives Engineering

Discipline Mining Engineering (MIN ENG)

Course Number 3913

Title Mineral Identification and Exploration

Abbreviated Mineral ID and Explor

Course Title

Catalog Description

Characterization of mineral deposits. Ore body definition. Mineral Exploration techniques. Sample methods, errors and mitigation. Rock Identification and application of Geological Sciences. Hands-on lab to understand geologic concepts.

Prerequisites

- In Workflow
1. MINEXP ENG Chair

2. CCC Secretary

3. Engineering DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/06/23 2:43 pm
Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG Chair

2. 10/24/23 1:46 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 11/10/23 11:54 am
Mark Fitch (mfitch):

Either both Chem 1310 and Chem 1319 or Chem 1351. ~~1351; either Geo-Eng 1150 or Geology 1110.~~

Field Trip Statement

Credit Hours	LEC: 2	LAB: 1	IND: 0	RSD: 0
Total: 3				
Required for Majors	Yes			
Elective for Majors	No			

Justification for change:

removed Geo Eng 1150/Geology 1110 prerequisite requirement. FS 2024 Mining Engineering BS degree change form also submitted.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

Approved for
Engineering DSCC
Chair
4. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Apr 25, 2014 by
lahne (41.1)
2. Jun 26, 2017 by
cifarellit (41.3)
3. Mar 5, 2018 by
cifarellit (41.7)
4. Oct 5, 2023 by
jpnfd (41.11)

Course Change Request

Date Submitted: 10/06/23 1:54 pm

Viewing: **MIN ENG 4097 : Capstone Design Project**

File: 1128.11

Last approved: 10/05/23 4:06 pm

Last edit: 10/06/23 1:54 pm

Changes proposed by: caseysc

Programs
referencing this
course

[MI ENG-BS: Mining Engineering BS](#)

Requested	Fall 2024 Fall 18 Prereq
Effective Change Date	Attribute Update
Department	Mining and Explosives Engineering
Discipline	Mining Engineering (MIN ENG)
Course Number	4097
Title	Capstone Design Project
Abbreviated Course Title	Capstone Design Project

Catalog
Description

Capstone project with written and oral presentations. Includes mine design and optimization, production plan, equipment and flowsheet design based on geology, resources/reserves, geotechnics, hydrology and hydro-geology. Project also incorporates markets, environmental and permitting, mine-mill organization, support facilities, economic and risk analyses.

Prerequisites

Min Eng 4096.

Field Trip
Statement

In Workflow

1. MINEXP ENG
Chair

2. CCC Secretary

3. Engineering DSCC
Chair

4. Pending CCC
Agenda post

5. CCC Meeting
Agenda

6. Campus Curricula
Committee Chair

7. FS Meeting
Agenda

8. Faculty Senate
Chair

9. Registrar

10. CAT entry

11. Peoplesoft

Approval Path

1. 10/05/23 5:34 pm
Kwame Awuah-
Offei (kwamea):
Rollback to
Initiator

2. 10/06/23 2:44 pm
Kwame Awuah-
Offei (kwamea):
Approved for
MINEXP ENG
Chair

3. 10/24/23 1:46 pm
Jennifer
Pohlsander
(jpnfd): Approved

Credit Hours	LEC: 1	LAB: <u>2</u> 3	IND: 0	RSD: 0
Total: <u>3</u> 4				
Required for Majors	Yes			
Elective for Majors	No			

Justification for change:

Due to curriculum changes for FS 2024, we are dropping 1 hour of lab. MIN ENG 4097 now 1 hour lecture and 2 hours lab for a total of 3 hours. This 1 hour reduction assists in allowing for the addition of an additional 3 hour technical elective to the curriculum. FS 2024 Mining Engineering BS degree change form also submitted.

Semesters previously offered as an experimental course

Co-Listed Courses:

Course Reviewer

Comments **kabp3 (10/05/23 5:34 pm):** Rollback: Make these changes as part of DC form.

for CCC Secretary

4. 11/10/23 11:54 am
Mark Fitch (mfitch):
Approved for Engineering DSCC Chair

5. 11/20/23 2:25 pm
Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post

History

1. Apr 25, 2014 by lahne (1128.1)
2. Feb 9, 2015 by cifarellit (1128.3)
3. Jun 26, 2017 by cifarellit (1128.7)
4. Oct 5, 2023 by jpnfd (1128.10)

Key: 1128

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 2:41 pm

Viewing: **MIN ENG 5522 : Ore Reserve Analysis and Geostatistics**

File: 1344.9

Last approved: 10/05/23 4:07 pm

Last edit: 11/17/23 11:57 am

Changes proposed by: caseysc

Programs referencing this course

[MINEPRO-CT: Mining Project Evaluation CT](#)
[GEOL-MI: Geology Minor](#)
[MI ENG-BS: Mining Engineering BS](#)

Other Courses referencing this course

In The Prerequisites:

[MIN ENG 4096 : Computer Aided Mine Design](#)

Requested Effective Change Date ~~Fall 18 Prereq~~ [Fall 2024 Attribute Update](#)

Department Mining and Explosives Engineering

Discipline Mining Engineering (MIN ENG)

Course Number 5522

Title Ore Reserve Analysis and Geostatistics

Abbreviated Course Title Ore Rsr Anly & Geostat

Catalog Description

Principles of geostatistics, theory of spatially correlated random variables, variance and co-variances and their application on the evaluation of mineral resources, ore reserve estimation, strategic exploration, and production planning. Real case studies from mining industry will be presented.

- In Workflow
1. MINEXP ENG Chair

2. CCC Secretary

3. Engineering DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/05/23 5:34 pm Kwame Awuah-Offei (kwamea): Rollback to Initiator

2. 10/06/23 2:36 pm Kwame Awuah-Offei (kwamea): Rollback to Initiator

3. 10/06/23 4:42 pm Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG

Prerequisites

~~Math 3304~~; Stat 3113 or Stat 3115.

Field Trip

Statement

Credit Hours

LEC: 2

LAB: 1

IND: 0

RSD: 0

Total: 3

Required for

Yes

Majors

Elective for

No

Majors

Justification for
change:

Dropped prerequisite of Math 3304. FS 2024 Mining Engineering BS degree change form also submitted. MinE 5522 Ore Reserve Analysis and Geostatistics relies mainly on the statistics knowledge of students. Differential equations has no bearing on student success in this course. Based on the experience of the two instructors who have taught the course since 2014, diff eq skills have no bearing on student success and everything comes down to the skills they learn in statistics.

Semesters

previously

offered as an

experimental

course

Co-Listed

Courses:

Chair

4. 10/24/23 1:46 pm

Jennifer

Pohlsander

(jpnfd): Approved

for CCC Secretary

5. 11/17/23 6:08 pm

Mark Fitch

(mfitch):

Approved for

Engineering DSCC

Chair

6. 11/20/23 2:25 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

History

1. Mar 5, 2018 by

cifarellit (1344.1)

2. Oct 5, 2023 by

jpnfd (1344.8)

Course Reviewer

kabp3 (10/05/23 5:34 pm): Rollback: Make these changes as part of DC form.

Comments

kabp3 (10/06/23 2:36 pm): Rollback: Per your request

jpnfd (11/17/23 11:57 am): Additional information added to justification per department chair email 11/17/23.

Key: 1344

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 2:41 pm

Viewing: **MIN ENG 5612 : Principles of Explosives Engineering**

File: 408.8

Last approved: 10/05/23 4:20 pm

Last edit: 10/06/23 2:41 pm

Changes proposed by: caseysc

Programs referencing this course	GE ENG-BS: Geological Engineering BS AGGMGMT-CT: Aggregates Management CT EXP EN-MI: Explosives Engineering Minor EXP EN-MS: Explosives Engineering MS MI ENG-BS: Mining Engineering BS
Other Courses referencing this course	<u>In The Catalog Description:</u> EXP ENG 5612 : Principles of Explosives Engineering <u>In The Prerequisites:</u> EXP ENG 5622 : Blasting Design And Technology EXP ENG 6412 : Environmental Controls For Blasting MIN ENG 5622 : Blasting Design And Technology MIN ENG 6622 : Environmental Controls For Blasting

Requested Effective Change Date	Fall 2024 Fall 18 Prereq Attribute Update
Department	Mining and Explosives Engineering
Discipline	Mining Engineering (MIN ENG)
Course Number	5612
Title	Principles of Explosives Engineering
Abbreviated Course Title	Prin Of Explosives Engr

Catalog

- In Workflow
1. MINEXP ENG Chair
 2. CCC Secretary
 3. Engineering DSCC Chair
 4. Pending CCC Agenda post
 5. CCC Meeting Agenda
 6. Campus Curricula Committee Chair
 7. FS Meeting Agenda
 8. Faculty Senate Chair
 9. Registrar
 10. CAT entry
 11. Peoplesoft

- Approval Path
1. 10/05/23 5:34 pm
Kwame Awuah-Offei (kwamea): Rollback to Initiator
 2. 10/06/23 2:34 pm
Kwame Awuah-Offei (kwamea): Rollback to Initiator
 3. 10/06/23 4:43 pm
Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG

Description

Theory and application of explosives in the mining industry; explosives, initiating systems, characteristics of explosive reactions and rock breakage, fundamentals of blast design, drilling and blasting, regulatory and safety considerations.

Prerequisites

Min Eng 1912; ~~2126~~; successful background check.

Field Trip

Statement

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

Total: 3

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

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

Justification for change:

Change prerequisite to MIN ENG 1912, from MIN ENG 2126. Change due to MIN ENG 2126 being deactivated in FS 2024. FS 2024 Mining Engineering BS degree change form also submitted.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses: EXP ENG 5612 - Principles of Explosives Engineering

Course Reviewer	kabp3 (10/05/23 5:34 pm): Rollback: Make these changes as part of DC form.
Comments	kabp3 (10/06/23 2:34 pm): Rollback: Per your requests.

Chair

4. 10/24/23 1:46 pm
Jennifer
Pohlsander
(jpnfd): Approved
for CCC Secretary
5. 11/10/23 11:54
am
Mark Fitch
(mfitch):
Approved for
Engineering DSCC
Chair
6. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Sep 16, 2017 by
cifarellit (408.1)
2. Oct 5, 2023 by
jpnfd (408.4)

Key: 408

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 2:45 pm

Viewing: **MIN ENG 5823 : Rock Mechanics**

File: 590.7

Last approved: 10/05/23 4:08 pm

Last edit: 11/17/23 11:59 am

Changes proposed by: caseysc

Programs referencing this course	<u>GE ENG-BS: Geological Engineering BS</u> <u>GEOL-MI: Geology Minor</u> <u>MI ENG-BS: Mining Engineering BS</u>
Other Courses referencing this course	<u>In The Prerequisites:</u> <u>MIN ENG 5822 : Strata Control</u> <u>MIN ENG 5933 : Surface Mining Methods</u> <u>MIN ENG 6842 : Advanced Rock Mechanics</u> <u>MIN ENG 6843 : Dynamic Rock Mechanics</u>

Requested [Fall 2024](#) ~~Fall 18 Prereq~~
Effective Change ~~Attribute Update~~
Date

Department Mining and Explosives Engineering
Discipline Mining Engineering (MIN ENG)
Course Number 5823
Title
Rock Mechanics
Abbreviated Rock Mechanics
Course Title

Catalog
Description

Applications of the fundamental principles of mechanics to engineering problems of equilibrium, strength and stiffness of rock materials. Review of in-situ stresses, laboratory and field instrumentation, rock and rockmass properties. Ground Control; pillar design, roof span design, rock reinforcement, surface subsidence, slope

In Workflow

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

Approval Path

1. 10/06/23 4:42 pm
Kwame Awuah-
Offei (kwamea):
Approved for
MINEXP ENG
Chair
2. 10/24/23 1:46 pm
Jennifer
Pohlsander
(jpnfd): Approved
for CCC Secretary
3. 11/17/23 6:08 pm
Mark Fitch
(mfitch):
Approved for

stability, and violent failure.

Prerequisites

~~Physics 2135~~; Civ Eng 2210 and 2210; Geology 3310. Field trip required.

Field Trip

Statement

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

Required for
Majors Yes

Elective for
Majors No

Justification for change:

Removal of Physics 2135 from prerequisites. FS 2024 Mining Engineering BS degree change form also submitted. Min Eng 5823 Rock Mechanics relies on skills and knowledge students gain from Mechanics of Materials and Structural Geology. Concepts taught in Physics 2135, which mainly teaches electricity and magnetism, are of no relevance to student learning in Rock Mechanics. Previously, the course was added as a prerequisite because an ABET PEV complained about why Physics 2135 was not a prerequisite for any course in the mining engineering curriculum. Why the current faculty believe Physics 2135 is relevant to mining engineering, Rock Mechanics is not the right course to require it as a prerequisite.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/09/23 8:24 am)**: Updated prerequisite format.
Comments **jpnfd (11/17/23 11:59 am)**: Additional information added to justification per department chair email 11/17/23.

Engineering DSCC
Chair

4. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Mar 5, 2018 by
cifarellit (590.1)
2. Oct 5, 2023 by
jpnfd (590.6)

Course Change Request

Date Submitted: 10/06/23 2:26 pm

Viewing: **MIN ENG 5912 : Mine Power and Drainage**

File: 1696.8

Last approved: 10/05/23 4:08 pm

Last edit: 10/09/23 9:38 am

Changes proposed by: caseysc

Programs referencing this course	<u>GE ENG-BS: Geological Engineering BS</u> <u>MI ENG-BS: Mining Engineering BS</u>
Other Courses referencing this course	<u>In The Prerequisites:</u> <u>MIN ENG 5322 : Coal Mining Methods</u>

Requested [Fall 2024](#) ~~Fall 18 Prereq~~
Effective Change ~~Attribute Update~~
Date

Department Mining and Explosives Engineering
Discipline Mining Engineering (MIN ENG)
Course Number 5912
Title Mine Power and Drainage
Abbreviated Mine Power and Drainage
Course Title

Catalog Description	Engineering principles of mine power distribution and application and mine dewatering. Basics of electrical circuits, AC/DC power, transformers, electric meters, power distribution, and power management. Hydraulic power systems. Compressed air in mines. Mine dewatering. Controlling water inflow. Dewatering wells. Water pumping and pumping systems.
Prerequisites	

In Workflow

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

Approval Path

1. 10/06/23 2:44 pm
Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG Chair
2. 10/24/23 1:46 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 11/10/23 11:55 am
Mark Fitch (mfitch):

Physics 2135 ~~Mech-Eng-2527~~ and one of the following Civ Eng 3330 ~~3330~~; or Nuc Eng 3221.

Field Trip Statement

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

Total: 3

Required for
Majors Yes

Elective for
Majors No

Justification for change:

Removed Mech 2527 and replaced with Physics 2135. Physics 2135 course material preferred as prerequisite for MIN ENG 5912. FS 2024 Mining Engineering BS degree change form also submitted. added ";" after Civ Eng 3330 in the Prerequisites.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/09/23 7:33 am):** Form clean up/ formatting.
Comments

Approved for
Engineering DSCC
Chair

4. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Mar 5, 2018 by
cifarellit (1696.1)
2. Oct 5, 2023 by
jpnfd (1696.7)

Key: 1696

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 2:31 pm

Viewing: **MIN ENG 5932 : Underground Mining Methods**

File: 2264.6

Last approved: 10/05/23 4:09 pm

Last edit: 11/17/23 12:02 pm

Changes proposed by: caseysc

Programs referencing this course	MI ENG-BS: Mining Engineering BS MI ENG-MI: Mining Engineering Minor
Other Courses referencing this course	In The Prerequisites: MIN ENG 4096 : Computer Aided Mine Design

Requested Effective Change Date
[Fall 2024](#) ~~Fall 18 Prereq~~
~~Attribute Update~~

Department Mining and Explosives Engineering
Discipline Mining Engineering (MIN ENG)
Course Number 5932
Title Underground Mining Methods
Abbreviated Underground Mining Mth
Course Title

Catalog Description	Principles of planning, constructing, and operating economically viable underground mines. Cost effective mining methods: room-and-pillar, sublevel open stoping, VCR, shrinkage, sublevel caving, cut-and-fill, block caving, longwall. Selection of equipment for underground mining operations. Optimization of mine performance. Field trip Required.
Prerequisites	

In Workflow

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

Approval Path

1. 10/06/23 2:44 pm
Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG Chair
2. 10/24/23 1:46 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 11/17/23 6:08 pm
Mark Fitch (mfitch): Approved for

Preceded or accompanied by Min Eng 1912. ~~3913~~.

Field Trip
Statement

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

Total: 3

Required for Yes
Majors

Elective for No
Majors

Justification for
change:

Removed Min Eng 3913 as prerequisite and replaced with MIN ENG 1912. FS 2024 Mining Engineering BS degree change form also submitted. Student success in Min Eng 5932 Underground Mining Methods is not that dependent on student knowledge of exploration techniques. In reviewing the curriculum with the instructors, the faculty in mining engineering believe student do not need knowledge in exploration techniques to learn underground mining methods.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (11/17/23 12:02 pm):** Additional information added to justification per
Comments department chair email 11/17/23.

Engineering DSCC
Chair
4. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Mar 5, 2018 by
cifarellit (2264.1)
2. Oct 5, 2023 by
jpnfd (2264.5)

Key: 2264

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/06/23 2:36 pm

Viewing: **MIN ENG 5933 : Surface Mining Methods**

File: 2265.5

Last approved: 10/05/23 4:09 pm

Last edit: 11/17/23 12:04 pm

Changes proposed by: caseysc

Programs referencing this course	MI ENG-BS: Mining Engineering BS MI ENG-MI: Mining Engineering Minor
Other Courses referencing this course	In The Prerequisites: MIN ENG 4096 : Computer Aided Mine Design MIN ENG 5742 : Environmental Aspects of Mining MIN ENG 6936 : Surface Mine Design

Requested Effective Change Date	Fall 2018 <u>2024</u>
Department	Mining and Explosives Engineering
Discipline	Mining Engineering (MIN ENG)
Course Number	5933
Title	Surface Mining Methods
Abbreviated Course Title	Surface Mining Methods

Catalog Description	Principles of planning, constructing, and operating economically viable surface mines. Cost effective mining methods: placer mining, strip mining, open pit mining, quarrying. Selection of equipment for surface mining operations. Optimization of mine performance. Field trip required.
Prerequisites	

- In Workflow
1. MINEXP ENG Chair
 2. CCC Secretary
 3. Engineering DSCC Chair
 4. Pending CCC Agenda post
 5. CCC Meeting Agenda
 6. Campus Curricula Committee Chair
 7. FS Meeting Agenda
 8. Faculty Senate Chair
 9. Registrar
 10. CAT entry
 11. Peoplesoft

- Approval Path
1. 10/06/23 4:43 pm
Kwame Awuah-Offei (kwamea): Approved for MINEXP ENG Chair
 2. 10/24/23 1:46 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
 3. 11/17/23 6:08 pm
Mark Fitch (mfitch): Approved for

Min Eng 3912. ~~3912; Min Eng 3512; preceded or accompanied by Min Eng 5823.~~

Field Trip
Statement

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

Total: 3

Required for Yes
Majors

Elective for No
Majors

Justification for
change:

Removed MIN ENG 3512 as a prerequisite and removed MIN ENG 5823 as preceded by or corequisite to MIN ENG 5933. This change is to remove a possible bottle neck in the curriculum for students. FS 2024 Mining Engineering BS degree change form also submitted. Student success in Min Eng 5933 Surface Mining Methods is not that dependent on student knowledge of material handling techniques (Min Eng 3912) or mining economics (Min Eng 3512). In reviewing the curriculum with the instructors, the faculty in mining engineering believe student do not need knowledge in economics and material handling to do well in surface mining. Rock Mechanics (Min Eng 5823) has historically been a co-requisite to surface mining because of the effect of slope stability on surface mine planning. However, because slope stability analysis has always been at the very end of Rock Mechanics, instructors in Surface Mining have always found a way to introduce the specific aspects required to understand surface mining methods into the class. Thus, the mining engineering faculty do not believe continuing to require Rock Mechanics as a prerequisite is efficient.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (11/17/23 12:04 pm):** Additional information added to justification per
Comments department chair email 11/17/23.

Engineering DSCC
Chair
4. 11/20/23 2:25 pm
Jennifer
Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Mar 5, 2018 by
cifarellit (2265.1)
2. Oct 5, 2023 by
jpnfd (2265.4)

Course Change Request

A deleted record cannot be edited

Course Deactivation Proposal

Date Submitted: 10/17/23 8:28 am

Viewing: **MKT 3105 : Marketing and Strategy Essentials**

File: 2132.1

Last edit: 10/17/23 11:54 am

Changes proposed by: cecq8z

Requested	<u>Fall 2024</u> 07/01/2024
Effective Change	
Date	
Department	Business and Information Technology
Discipline	Marketing (MKT)
Course Number	3105
Title	Marketing and Strategy Essentials
Abbreviated	Marketing Essentials
Course Title	

Catalog				
Description	This course is an introduction to the essentials of marketing and strategy for running a business. It is designed for students planning to enter the MBA program who need this area and for non-business students who want some business background. Credit in this course cannot be applied to any major or minor in Business, IS&T, or Economics.			
Prerequisites	Bachelor Degree.			
Field Trip				
Statement				
Credit Hours	LEC: 1.5	LAB: 0	IND: 0	RSD: 0
Total: 1.5				

- In Workflow
1. RBUSADMN Chair

2. CCC Secretary

3. Social Sciences DSCC Chair

4. Pending CCC Agenda post

5. CCC Meeting Agenda

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/17/23 11:22 am
Cassie Elrod (cassa): Approved for RBUSADMN Chair

2. 10/17/23 3:04 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 10/17/23 3:18 pm
Cecil Eng Huang Chua (cchua):

Required for
Majors

No

Elective for
Majors

No

Justification for
change:

No one to teach course. Culling course as part of overall departmental course
cleanup.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Approved for
Social Sciences
DSCC Chair

4. 11/20/23 2:25 pm

Jennifer

Pohlsander

(jpnfd): Approved
for Pending CCC
Agenda post

Course Reviewer **jpnfd (10/17/23 11:54 am):** Updated term to Fall 2024.
Comments

Key: 2132

[Preview Bridge](#)

Course Change Request

New Course Proposal

Date Submitted: 11/10/23 8:16 am

Viewing: **MUSIC 1001 : Special Topics**

File: 5008

Last edit: 11/10/23 8:16 am

Changes proposed by: cht3m

Requested	Fall 2024
Effective Change Date	
Department	Arts, Languages, & Philosophy
Discipline	Music (MUSIC)
Course Number	1001
Title	Special Topics
Abbreviated Course Title	Special Topics
Topics Titles	

Catalog Description	Music 1001 is the introductory level for newly proposed music courses appropriate for first-year students and others with no special background in music.			
Prerequisites				
Field Trip Statement				
Credit Hours	LEC: 0	LAB: 0	IND: 0	RSD: 0
Total: 0				
Required for Majors	No			
Elective for	No			

- In Workflow
- 1. RPHILOSO Chair
 - 2. CCC Secretary
 - 3. Arts & Humanities DSCC Chair
 - 4. Pending CCC Agenda post
 - 5. CCC Meeting Agenda
 - 6. Campus Curricula Committee Chair
 - 7. FS Meeting Agenda
 - 8. Faculty Senate Chair
 - 9. Registrar
 - 10. CAT entry
 - 11. Peoplesoft

- Approval Path
- 1. 11/10/23 8:25 am
Irina Ivliyeva (ivliyeva):
Approved for RPHILOSO Chair
 - 2. 11/14/23 7:25 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
 - 3. 11/14/23 8:44 am
Petra Dewitt (dewittp):
Approved for Arts & Humanities

Majors

Justification for
new course:

ALP does not currently have a 1001 level shell for the newly proposed Music courses.

Semesters
previously
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer
Comments

DSCC Chair

4. 11/20/23 2:25 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

Key: 5008

[Preview Bridge](#)

Course Change Request

Date Submitted: 10/23/23 12:56 pm

Viewing: **TCH COM 3570 : Writing in the Sciences**

File: 4247.2

Last approved: 10/19/15 3:34 am

Last edit: 10/23/23 1:49 pm

Changes proposed by: kswenson

Programs
referencing this
course

[ENGL TC-BS: English & Technical Communication BS](#)
[SCITEC-CTU: UCT - Science, Technology, and Society](#)

Requested [Fall 2024](#) ~~01/12/2016~~
Effective Change
Date

Department English and Technical Communication
Discipline Technical Communication (TCH COM)
Course Number 3570

Title
Writing in the Sciences

Abbreviated Writing in the Sciences
Course Title

Catalog
Description

This course focuses on conventions of writing in science by studying science as a cultural and rhetorical domain. Through analyzing and writing scientific discourse, students will learn the challenges and methods of conveying scientific knowledge to the public. ~~This course is designed to teach students how to write effectively in the sciences. Writing assignments include short reports, proposals, and a major project such as a research or analytical report or a procedures/instructions manual. Emphasis is placed on clarity, conciseness, organization, format, style, and tone.~~

Prerequisites

English 1120 or equivalent.

- In Workflow
1. **REGLISH Chair**

2. **CCC Secretary**

3. **Arts & Humanities DSCC Chair**

4. **Pending CCC Agenda post**

5. **CCC Meeting Agenda**

6. Campus Curricula Committee Chair

7. FS Meeting Agenda

8. Faculty Senate Chair

9. Registrar

10. CAT entry

11. Peoplesoft

- Approval Path
1. 10/23/23 12:58 pm
Kristine Swenson (kswenson):
Approved for REGLISH Chair

2. 10/24/23 4:12 pm
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary

3. 10/25/23 8:42 am
Petra Dewitt (dewittp):
Approved for Arts

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
change:

Updating the course to make it current.

Semesters
previously FS15, SP15
offered as an
experimental
course

Co-Listed
Courses:

Course Reviewer **jpnfd (10/23/23 1:49 pm):** Updated term to Fall 2024.
Comments

& Humanities

DSCC Chair

4. 11/20/23 2:25 pm

Jennifer

Pohlsander

(jpnfd): Approved

for Pending CCC

Agenda post

History

1. Oct 19, 2015 by

Kristine Swenson

(kswenson)

Key: 4247

[Preview Bridge](#)

Program Change Request

A deleted record cannot be edited

Program Deactivation Proposal

Date Submitted: 10/17/23 8:29 am

Viewing: **BUSAPPS-MI : Business Applications and Software Development Minor**

File: 255.27

Last approved: 06/10/21 4:07 pm

Last edit: 10/17/23 10:22 am

Changes proposed by: cecq8z

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

Start Term

Fall 2024 ~~2024~~

Program Code

BUSAPPS-MI

Department

Business and Information Technology

Title

Business Applications and Software Development Minor

Program Requirements and Description

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

Approval Path

- 1. 10/17/23 9:56 am
Cassie Elrod (cassa): Approved for RINFSCTE Chair
- 2. 10/17/23 10:22 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
- 3. 10/17/23 12:05 pm
Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
- 4. 11/20/23 2:24 pm
Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post

History

- 1. Mar 21, 2018 by barryf
- 2. Apr 19, 2018 by ershenb
- 3. Apr 19, 2018 by ershenb
- 4. May 2, 2019 by Zou Cui (tracyzou)
- 5. Feb 3, 2021 by Cecil Eng Huang Chua (cchua)
- 6. Jun 10, 2021 by

Minor in Business Applications and Software Development

The Minor requires 15 credit hours, as follows:

Required Courses:		6
IS&T 3420	Introduction to Data Science and Management	
IS&T 5680	Digital Media Development and Interactive Design	
And three courses from the following list:		9
IS&T 1552	Implementing Information Systems: Data Perspective	
or IS&T 1562	Java and Data Structures	
IS&T 3131	Computing Internals and Operating Systems	
IS&T 3423	Database Management	
IS&T 3443	Database Applications in Business	
ERP 5240	Enterprise Application Development and Software Security	
IS&T 5520	Data Science and Machine Learning with Python	

Justification for request

Low enrollment

Supporting Documents

Course Reviewer Comments

jpnfd (10/17/23 10:22 am): DC forms Must have Fall effective date. Updated to Fall 2024.

Program Change Request

Date Submitted: 10/04/23 12:23 pm

Viewing: **CP ENG-BS : Computer Engineering BS**

File: 153.87

Last approved: 06/07/23 8:42 am

Last edit: 10/12/23 7:23 am

Changes proposed by: stanleyj

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

Start Term

Fall 2024 ~~2023~~

Program Code

CP ENG-BS

Department

Electrical and Computer Engineering

Title

Computer Engineering BS

Program Requirements and Description

In Workflow

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

Approval Path

1. 09/22/23 10:38 am
Jonathan Kimball (kimballjw):
Approved for RELECENG Chair
2. 09/27/23 8:18 am
Jennifer Pohlsander (jpnfd): Rollback to Initiator
3. 09/28/23 9:29 am
Jonathan Kimball (kimballjw):
Approved for RELECENG Chair
4. 10/04/23 11:10 am
Jennifer Pohlsander (jpnfd): Rollback to RELECENG Chair for CCC Secretary
5. 10/04/23 11:54 am
Jennifer Pohlsander (jpnfd): Rollback to Initiator
6. 10/05/23 10:42 am
Jonathan Kimball (kimballjw):
Approved for RELECENG Chair
7. 10/11/23 10:03 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
8. 10/12/23 3:46 pm
Mark Fitch (mfitch):
Approved for Engineering DSCC Chair

9. 11/20/23 2:24 pm
Jennifer Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Aug 6, 2014 by
R.Joe Stanley
(stanleyj)
2. Aug 13, 2014 by
pantaleoa
3. Sep 21, 2015 by
kleb6b
4. Apr 25, 2016 by
R.Joe Stanley
(stanleyj)
5. Dec 1, 2016 by
R.Joe Stanley
(stanleyj)
6. Sep 19, 2017 by
R.Joe Stanley
(stanleyj)
7. Jun 18, 2018 by
R.Joe Stanley
(stanleyj)
8. Nov 2, 2018 by
R.Joe Stanley
(stanleyj)
9. May 2, 2019 by
R.Joe Stanley
(stanleyj)
10. May 14, 2019 by
ershenb
11. Mar 3, 2020 by
R.Joe Stanley
(stanleyj)
12. May 2, 2022 by
R.Joe Stanley
(stanleyj)
13. Sep 26, 2022 by
R.Joe Stanley
(stanleyj)
14. Jun 7, 2023 by
R.Joe Stanley
(stanleyj)

Bachelor of Science Computer Engineering¹

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

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

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

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

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

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

Free Electives Footnote:

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 ²	1	COMP SCI 1500	3
MATH 1214 or 1211 ^{3,21}	4	MATH 1215 ³	4
CHEM 1310	4	PHYSICS 1135 ^{3,4}	4
CHEM 1319	1	ECON 1100 or 1200	3
HISTORY 1200 , or 1300 , or 1310 , or POL SCI 1200	3	Elective-Hum or Soc (any level) ⁵	3
ENGLISH 1120	3		
	16		17
Sophomore Year			
First Semester	Credits	Second Semester	Credits
ELEC ENG 2100 ^{3,6,7}	3	COMP ENG 2210 ^{3,6,8}	3
ELEC ENG 2101 ^{3,6}	1	COMP ENG 2211 ^{3,6}	1
MATH 2222 ³	4	ELEC ENG 2120 ^{3,7,9}	3
COMP SCI 1570 ³	3	MATH 3304 ³	3
COMP SCI 1580 ³	1	COMP SCI 1200 ³	3
PHYSICS 2135 ^{3,4}	4	COMP SCI 1575	3
	16		16
Junior Year			
First Semester	Credits	Second Semester	Credits
COMP ENG 3110 ^{3,8}	3	COMP ENG Elective A ^{3,14}	3
COMP ENG 3150 ^{3,6,8}	3	ELEC ENG 3410 ^{3,6,9}	3
COMP ENG 3151 ^{3,6,8}	1	COMP SCI 3800 or 2500 ³	3
ELEC ENG 2200 ^{3,6,7}	3	STAT 3117 ¹²	3
ELEC ENG 2201 ^{3,6,7}	1	Communication Elective ¹³	3
Mathematics Elective ¹⁰	3		

SP&M S 1185 ¹³	3		
	17		15
Senior Year			
First Semester	Credits	Second Semester	Credits
COMP ENG 5410 ³	3	COMP ENG Elective D ^{3,15,16}	3
COMP ENG Elective C ^{3,19}	3	COMP ENG Elective E ^{3,15,16}	3
COMP ENG 4096 ^{3,17}	1	COMP ENG 4097 ^{3,17}	3
Elective-Hum or Soc (any level) ⁵	3	Professional Development Elective ²⁰	3
Engineering Science Elective ¹¹	3	Free Elective ¹⁸	3
COMP ENG Elective B ^{3,14}	3		
	16		15
Total Credits: 128			

1

The minimum number of hours required for a degree in Computer Engineering is 128.

2

Students that transfer to Missouri S&T after their freshman year are not required to enroll in Foundational Engineering and Computing Seminars.

3

A minimum grade of "C" must be attained in [MATH 1214](#) or [MATH 1211](#), [MATH 1215](#), [MATH 2222](#), and [MATH 3304](#), [PHYSICS 1135](#) and [PHYSICS 2135](#) (or their equivalents), [COMP SCI 1570](#), [COMP SCI 1580](#), [COMP SCI 1575](#), [COMP SCI 1200](#), [COMP SCI 2500](#) or [COMP SCI 3800](#), [COMP ENG 2210](#), [COMP ENG 2211](#), [COMP ENG 3150](#), [COMP ENG 3151](#), [COMP ENG 3110](#), [COMP ENG 5410](#), [COMP ENG 4096](#), and [ELEC ENG 2100](#), [ELEC ENG 2101](#), [ELEC ENG 2120](#), [ELEC ENG 2200](#), [ELEC ENG 2201](#), and [ELEC ENG 3410](#) and the COMP ENG electives A, B, C, D and E. Also, students may not enroll in other courses that use these courses as prerequisites until the minimum grade of "C" is attained.

4

Students may take [PHYSICS 1111](#) and [PHYSICS 1119](#) in place of [PHYSICS 1135](#). Students may take [PHYSICS 2111](#) and [PHYSICS 2119](#) in place of [PHYSICS 2135](#).

5

All electives must be approved by the student's advisor. Students must comply with the general education requirements with respect to selection and depth of study. These requirements are specified in the current catalog.

6

Students who drop a lecture course prior to the deadline to drop a class must also drop the corequisite lab course.

7

Students must earn a passing grade on the ELEC ENG Advancement Exam I (associated with [ELEC ENG 2100](#)) before they enroll in [ELEC ENG 2120](#) or [ELEC ENG 2200](#) and [ELEC ENG 2201](#).

8

Students must earn a passing grade on the COMP ENG Advancement Exam (associated with [COMP ENG 2210](#)) before they enroll in any course with [COMP ENG 2210](#) and [COMP ENG 2211](#) as prerequisites.

9

Students must earn a passing grade on the ELEC ENG Advancement Exam II (associated with [ELEC ENG 2120](#)) before they enroll in [ELEC ENG 3410](#).

10

Students must take one of the following courses:

[MATH 3108](#), [MATH 3109](#), [MATH 5302](#), [MATH 5603](#), [MATH 5105](#), [MATH 5106](#), [MATH 5107](#), [MATH 5108](#), [MATH 4209](#), [MATH 4211](#), [MATH 5215](#), [MATH 5222](#), [MATH 5325](#), [MATH 4530](#), [MATH 5737](#), [MATH 5351](#), [MATH 5154](#), [MATH 4096](#), [MATH 5483](#), [MATH 5585](#), [STAT 5644](#), [STAT 5346](#), [STAT 5353](#).

11

Students must take one of [MECH ENG 2340](#), [MECH ENG 2519](#), [MECH ENG 2527](#), [PHYSICS 2311](#), [PHYSICS 2401](#), [CHEM 2210](#), [BIO SCI 2213](#), [BIO SCI 2223](#), [CIV ENG 2200](#), [MECH ENG 2350](#), [PHYSICS 2305](#), [PHYSICS 4311](#), [CER ENG 4240](#), or [NUC ENG 3205](#).

12

Students may replace [STAT 3117](#) with [STAT 3115](#) or [STAT 5643](#).

13

Student must take [ENGLISH 3560](#) or [ENGLISH 1160](#). Students may replace [SP&M S 1185](#) with the ROTC sequence of [MIL ARMY 4250](#) and [MIL ARMY 4500](#) or [MIL AIR 4110](#) and [MIL AIR 4120](#).

14

Comp Eng Senior Electives A and B, respectively, must be selected from 4xxx or 5xxx courses in Comp Eng, except Comp Eng 4000, 4099, 4096, 4097, 5000, and 5099. The two courses selected for electives A and B, respectively, should be from two different Comp Eng emphasis areas. The emphasis areas, with course number options, are as follows:

Integrated Circuits and Logic Design: 42xx/52xx

- Computational Intelligence 53xx
- Computer Architecture and Embedded Systems: 41xx/51xx, 45xx/55xx, 46xx/56xx
- Networking, Security, and Reliability: 44xx/54xx, except Comp Eng 5410
- Students admitted to the Accelerated BS/MS program must satisfy Comp Eng Electives A and B with 5000 or 6000-level courses with a minimum grade of B.
- 15
- Comp Eng Senior Electives D and E must be selected from an approved list that contains most 3xxx, 4xxx and 5xxx courses in science, mathematics, and engineering except required courses in Comp Eng, Elec Eng, and Comp Sci and except COMP SCI 3610 and COMP SCI 5600.
- 16
- COMP ENG Electives D and E cannot include more than three hours of Comp Eng/Elec Eng 3002, Comp Eng/Elec Eng/Comp Sci 4000 or 4099.
- 17
- Students pursuing dual degrees in COMP ENG and ELEC ENG may take either [COMP ENG 4096](#) or [ELEC ENG 4096](#) and [COMP ENG 4097](#) or [ELEC ENG 4097](#). Students may not receive credit for both [COMP ENG 4096](#) and [ELEC ENG 4096](#) or [COMP ENG 4097](#) and [ELEC ENG 4097](#) in the same degree program.
- 18
- Students are required to take at least three credit hours. [ELEC ENG 2800](#) level, [ELEC ENG 4096](#), [ELEC ENG 4097](#), [COMP ENG 4096](#) and [COMP ENG 4097](#) may not be used for free electives. No more than one credit hour of [COMP ENG 3002](#) or [ELEC ENG 3002](#) may be applied to the BS degree for free electives.
- 19
- Comp Eng Senior Elective C must be selected from 3xxx, 4xxx or 5xxx courses in Comp Eng, Elec Eng, or Comp Sci, except Comp Eng/Elec Eng/Comp Sci 3000, 4000, 4096, 4097, 4099, 5000, and 5099 and Comp Sci 4010, 3610 and 5600.
- 20
- Students must take one of the following courses: [BUS 5980](#), [ECON 4430](#), [ECON 5337](#), [ENG MGT 2310](#), [ENG MGT 3320](#), [ENG MGT 4110](#), [ENG MGT 5514](#), [PHILOS 3225](#).
- 21
- The course combination [MATH 1210](#) and [MATH 1211](#) may be taken in place of [MATH 1214](#).

An accelerated BS/MS program is optional.

Emphasis Areas for Computer Engineering

A declared emphasis area is not required. Note: A student may choose to obtain a Computer Engineering degree without ~~The following emphasis areas identify courses from which a~~ formal emphasis or may choose to obtain a Computer Engineering degree with ~~student may opt to develop a~~ declared emphasis in one or more of the emphasis areas of computer engineering. ~~specific-emphasis:~~ A major change request is required to add the emphasis area option to the degree program.

Emphasis areas that may be declared, include: Integrated Circuits and Logic Design, Computer Architecture and Embedded Systems, and Networking, Security, and Dependability. Note that Computational Intelligence is also a Computer Engineering emphasis area but is focused in the graduate program.

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

For students who seek a Computer Engineering degree with a declared emphasis, courses in the declared emphasis area will be applied to COMP ENG Electives A, C, and D in the degree requirements. ~~It is not required that students obtain an emphasis specialty within computer engineering.~~For students who choose to have multiple emphasis areas, the additional courses will apply to COMP ENG Electives B ~~Computational Intelligence Computer Architecture and E and free elective requirements.~~ Students should seek guidance from their advisors on emphasis areas and on courses that are relevant to more ~~Embedded Systems Integrated Circuits and Logic Design Networking, Security, and Dependability Accelerated BS/MS Program Option for EE and CpE MajorsElectrical engineering or computer engineering undergraduates in ECE at Missouri S&T may opt to apply for an accelerated BS/MS ECE program where a student can achieve both degrees faster than~~ one emphasis area. Students may have an emphasis area or emphasis areas listed on their transcript by completing three three-credit-hour courses ~~in computer engineering from if pursuing the designated lists.~~ For a single emphasis area, this requirement will ~~degrees separately. The degrees may be satisfied by completing BS-EE and MS-EE, BS-CpE and MS-CpE, BS-EE and MS-CpE, or BS-CpE and MS-EE. The benefits of the relevant 4XXX-level or above course for Elective A and 3XXX-level or above courses for Electives C and D from the designated emphasis area course list, program for admitted students are:~~ For a second emphasis area, this requirement will be satisfied by completing the relevant 4XXX-level or above course for Elective B, a 3XXX-level or above course for Electives E, and a 3XXX-level or above course for the free elective from the designated second emphasis area course list. Courses not on the emphasis area list, including experimental courses (5001) require departmental approval to apply toward the designated emphasis area.

Highly Recommended		
COMP-ENG-5420	Introduction to Network Security	3
COMP-ENG-5430	Wireless Networks	3

Suggested		
COMP-ENG-5510	Fault-Tolerant Digital Systems	3
Highly Recommended		
COMP-ENG-2210	Introduction to Digital Logic	3
COMP-ENG-5210	Introduction To VLSI Design	3
COMP-ENG-5220	Digital System Modeling	3
Suggested		
ELEC-ENG-3100	Electronics-I	3
COMP-ENG-5410	Principles of Computer Architecture	3
COMP-ENG-5151	Digital Systems Design Laboratory	3
COMP-ENG-5120	Digital Computer Design	3
COMP-ENG-5130	Advanced Microcomputer System Design	3
COMP-ENG-5510	Fault-Tolerant Digital Systems	3
Highly Recommended		
COMP-ENG-5410	Principles of Computer Architecture	3
COMP-ENG-5120	Digital Computer Design	3
COMP-ENG-5151	Digital Systems Design Laboratory	3
COMP-ENG-5160	Embedded Processor System Design	3
COMP-ENG-5170	Real-Time Systems	3
Suggested		
COMP-ENG-5610	Real-Time Digital Signal Processing	3
COMP-ENG-5130	Advanced Microcomputer System Design	3
ELEC-ENG-3100	Electronics-I	3
COMP-SCI-3100	Software Engineering-I	3
Highly Recommended		
COMP-ENG-5310	Computational Intelligence	3
Suggested		
ELEC-ENG-5330	Fuzzy Logic Control	3
COMP-ENG-5450	Digital Image Processing	3
COMP-ENG-5460	Machine Vision	3

Computer Engineering Course List Designations:

<u>Integrated Circuits and Logic Design</u>	<u>9</u>
<u>COMP-ENG-42XX and COMP-ENG-52XX Courses</u>	
<u>Computer Architecture and Embedded Systems</u>	<u>9</u>
<u>COMP-ENG-41XX, COMP-ENG-51XX, COMP-ENG-45XX, COMP-ENG-55XX, COMP-ENG-46XX, and COMP-ENG-56XX Courses</u>	
<u>Networking, Security, and Dependability</u>	<u>9</u>
<u>COMP-ENG-44XX and COMP-ENG-54XX Courses, Except COMP-ENG-5410</u>	
<u>Computational Intelligence</u>	<u>9</u>
<u>COMP-ENG-53XX Courses</u>	

Accelerated BS/MS Program Option for EE and CpE Majors

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

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

To be eligible for the accelerated BS/MS ECE program, an EE or CpE undergraduate must be at or beyond the junior level with a minimum of 60 credit hours and must have completed 18 credit hours of EE and/or CpE courses at Missouri S&T with at least a 3.50 GPA in the ECE courses. To be admitted, the student must complete the program application and must have the recommendation of an ECE faculty member who agrees to serve as the graduate thesis advisor. No other MS degree requirements are changed. The MS degree must be for the thesis option. The program may be combined with existing honors research and emphasis area options. Admitted students will have both undergraduate and graduate records in the Registrar's Office.

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

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

Justification for request

Seeking to offer Computer Engineering undergraduate students additional options through the CpE BS program, the CpE faculty approved for students to declare 1 (or 2) CpE emphasis areas by successfully completing three 3 credit hour CpE courses from the emphasis area course list. The designated emphasis area would appear on the student's transcript with the CpE BS degree. The formal description of the Emphasis Area declaration for the CpE BS program is given in the edited program.

In the adoption of the 4 digit course numbering system at Missouri S&T, course number ranges were designated for each emphasis area, as listed in the edited program and below as a reference.

Computer Engineering Course List Designations:

Integrated Circuits and Logic Design: 42xx/52xx

Computer Architecture and Embedded Systems: 41xx/51xx, 45xx/55xx, 46xx/56xx

Networking, Security, and Dependability: 44xx/54xx, except Comp Eng 5410

Computational Intelligence: 53xx

Note that the course number designations have not been previously updated in the CpE BS program because undergraduate students have not been able to formally declare an emphasis area. The previous courses listed for each emphasis area are just recommendations, with no binding impact on the requirements for the CpE BS degree program. Also note that there are currently two CpE 5001 courses that are expected to be assigned permanent course numbers in the

Computational Intelligence emphasis area, increasing the course options in this emphasis area.

The CpE faculty unanimously approved the CpE Emphasis Area declaration option for the CpE BS degree program on Sept. 5, 2023, and the ECE faculty unanimously approved the CpE Emphasis Area declaration option on Sept. 21, 2023.

Supporting Documents

Course Reviewer Comments

jpnfd (09/27/23 8:18 am): Rollback: Rollback to department to list emphasis area updates on form.

jpnfd (09/27/23 12:41 pm): Edited spacing.

jpnfd (10/04/23 11:10 am): Rollback: MDHE approval needed for emphasis area deletion (Computational Intelligence) & emphasis area title change(Networking, Security, and Reliability). Once received, please attach approval documents to DC form and resubmit. See email 10/4/23.

jpnfd (10/04/23 11:54 am): Rollback: updates

jpnfd (10/09/23 4:16 pm): Corrected formatting/ typos.

jpnfd (10/10/23 7:43 am): Updated emphasis area course listing format.

jpnfd (10/10/23 8:06 am): Updated formatting.

jpnfd (10/10/23 8:31 am): Corrected capitalization.

jpnfd (10/11/23 10:03 am): Emphasis area Computational Intelligence will not be deleted. Emphasis area Networking, Security, and Dependability was listed as Networking, Security, and Reliability, but it was corrected to the previously approved titled of Networking, Security, and Dependability. No changes were made to emphasis area titles.

jpnfd (10/12/23 7:23 am): Added commas and added "and" in emphasis area paragraph.

Program Change Request

A deleted record cannot be edited

Program Deactivation Proposal

Date Submitted: 10/17/23 8:30 am

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

File: 40.14

Last approved: 06/10/21 4:07 pm

Last edit: 10/17/23 11:28 am

Changes proposed by: cecq8z

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

Start Term

Fall 2024 ~~2024~~

Program Code

E&S COM-MI

Department

Business and Information Technology

Title

Electronic & Social Commerce Minor

Program Requirements and Description

In Workflow

- 1. RBUSADMN Chair
- 2. CCC Secretary
- 3. Social Sciences DSCC Chair
- 4. Pending CCC Agenda post
- 5. CCC Meeting Agenda
- 6. Campus Curricula Committee Chair
- 7. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar

Approval Path

- 1. 10/17/23 11:26 am
Cassie Elrod (cassa): Approved for RBUSADMN Chair
- 2. 10/17/23 11:29 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
- 3. 10/17/23 12:05 pm
Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
- 4. 11/20/23 2:24 pm
Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post

History

1. Aug 5, 2014 by pantaleoa
2. Jun 17, 2015 by pantaleoa
3. Jul 14, 2015 by pantaleoa
4. Oct 28, 2020 by Marita Raper (tibbettsmg)
5. Jun 10, 2021 by Cecil Eng Huang Chua (cchua)

Minor in Electronic and Social Commerce

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

IS&T 4641	Digital Commerce and IoT Analytics	3
BUS 1414	The Inclusive Workplace	3
Three courses from the following list:		9
IS&T 5251	Management and Leadership of Technological Innovation	
IS&T 5335	Fundamentals of Mobile Technology for Business	
IS&T 5652	Advanced Web Development	
IS&T 5168	Law and Ethics in E-Commerce	
IS&T 5885	Human-Computer Interaction and User Experience	
IS&T 5886	Prototyping Human-Computer Interactions	
MKT 5310	Digital Marketing and Promotions	
MKT 4580	Marketing Strategy	

Justification for request

Low enrollment

Supporting Documents

Course Reviewer Comments

jpnfd (10/17/23 11:28 am): Updated term to Fall 2024.

Key: 40

Program Change Request

A deleted record cannot be edited

Program Deactivation Proposal

Date Submitted: 10/17/23 8:31 am

Viewing: **HCI-MI : Human-Computer Interaction and User Experience Minor**

File: 238.11

Last approved: 02/27/18 10:03 am

Last edit: 10/17/23 11:16 am

Changes proposed by: cecq8z

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

Start Term

Fall 2024 ~~05/28/2018~~

Program Code

HCI-MI

Department

Business and Information Technology

Title

Human-Computer Interaction and User Experience Minor

Program Requirements and Description

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

Approval Path

- 1. 08/29/20 11:19 am
siauk: Approved for RINFSCTE Chair
- 2. 08/31/20 11:21 am
Marita Raper (tibbettsmg): Approved for CCC Secretary
- 3. 08/31/20 11:25 am
Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
- 4. 09/15/20 12:11 pm
Marita Raper (tibbettsmg): Approved for Pending CCC Agenda post
- 5. 10/07/20 10:09 am
Marita Raper (tibbettsmg): Rollback to Initiator
- 6. 10/17/23 11:09 am
Cassie Elrod (cassa): Approved for RINFSCTE Chair
- 7. 10/17/23 11:17 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
- 8. 10/17/23 12:05 pm
Cecil Eng Huang

Chua (cchua):
Approved for Social
Sciences DSCC
Chair
9. 11/20/23 2:24 pm
Jennifer Pohlsander
(jpnfd): Approved
for Pending CCC
Agenda post

History

1. Mar 17, 2015 by
barryf
2. Jul 28, 2015 by
kleb6b
3. Jul 29, 2015 by
pantaleoa
4. May 16, 2016 by
pantaleoa
5. Feb 27, 2018 by
barryf

Minor in Human-Computer Interaction and User Experience

The minor in human-computer interaction and user experience requires the following 15 hours of coursework:

PSYCH 1101	General Psychology	3
IS&T 4654	Introduction to Web Design and Digital Media Studies	3
IS&T 5680	Digital Media Development and Interactive Design	3
IS&T 5885	Human-Computer Interaction and User Experience	3
And two of the following		6
IS&T 4680	Course IS&T 4680 Not Found	
IS&T 5886	Prototyping Human-Computer Interactions	
IS&T 5887	Human-Computer Interaction Evaluation	
IS&T 5168	Law and Ethics in E-Commerce	

Justification for request

Updated to reflect course renumbering.

Low enrollment

Supporting Documents

Course Reviewer Comments

tibbettsmg (10/07/20 10:09 am): Rollback: rollback from CCC meeting. also change term to FS21.

jpnfd (10/17/23 11:16 am): Updated effective date to Fall 2024.

Program Change Request

Date Submitted: 10/06/23 5:34 pm

Viewing: **MI ENG-BS : Mining Engineering BS**

File: 95.34

Last approved: 10/05/23 4:17 pm

Last edit: 10/06/23 5:34 pm

Changes proposed by: caseysc

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

Start Term

Fall 2024 ~~2022~~

Program Code

MI ENG-BS

Department

Mining and Explosives Engineering

Title

Mining Engineering BS

Program Requirements and Description

In Workflow

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

Approval Path

1. 10/06/23 4:50 pm
Kwame Awuah-Offei (kwamea):
Rollback to Initiator
2. 10/09/23 11:45 am
Kwame Awuah-Offei (kwamea):
Approved for
MINEXP ENG Chair
3. 10/24/23 1:45 pm
Jennifer Pohlsander (jpnfd): Approved
for CCC Secretary
4. 11/10/23 11:54 am
Mark Fitch (mfitch):
Approved for
Engineering DSCC Chair
5. 11/20/23 2:24 pm
Jennifer Pohlsander (jpnfd): Approved
for Pending CCC
Agenda post

History

1. Apr 28, 2014 by
Kwame Awuah-Offei (kwamea)
2. Jan 30, 2015 by
Tina Alobaidan (cifarellit)
3. Jun 28, 2017 by
Tina Alobaidan

- (cifarellit)
4. Mar 21, 2018 by Tina Alobaidan (cifarellit)
 5. Jul 6, 2020 by ershenb
 6. Nov 1, 2021 by Stephen Casey (caseysc)
 7. Jun 14, 2022 by Kwame Awuah-Offei (kwamea)
 8. Oct 5, 2023 by Jennifer Pohlsander (jpnfd)

Bachelor of Science Mining Engineering

The Mining Engineering program at Missouri S&T is characterized by its focus on the scientific basics of engineering and its innovative application to the extraction of (critical) minerals to meet societal needs. Indeed, the underlying theme of this educational program is the application of basic science to engineering practice by solving engineering ~~engineering~~ problems related to mineral extraction. These problems include the safe and sustainable extraction of minerals to power green energy. The necessary interrelations among the various topics, the engineering disciplines, and the other professions as they naturally come together in the solution of real-world ~~real-world~~ problems are emphasized as research, analysis, synthesis, and design are presented and discussed through classroom and laboratory instruction.

Incoming students who state the Mining Engineering preference are required to complete MIN ENG 1912 during ~~MIN-ENG-2126 during~~ the first or second semester on campus.

For the Bachelor of Science degree in Mining Engineering a minimum of 128 credit hours is required. These requirements are in addition required, although completion of an emphasis area may require up to credit received for algebra, trigonometry, and basic ROTC courses. 432 credits. These requirements are in addition to credit received for algebra, trigonometry, and basic ROTC courses. A student must maintain at least two grade points per credit hour for all courses taken in the student's major department, and an average of at least two grade points per credit hour must be maintained in Mining Engineering.

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, two economics courses, one humanities course, ENGLISH 1120 and either ENGLISH 1160, ENGLISH 3560 or TCH COM 1600. The history course is to be selected from HISTORY 1200 , HISTORY 1300 , HISTORY 1310 , or POL SCI 1200 . The economics courses must be either ECON 1100 or ECON 1200, and ECON 3512 . The humanities course must meet requirements as specified under "Engineering Degree Requirements" published in the current undergraduate catalog.
2. The remaining three credit hours must meet requirements as specified under "Engineering Degree Requirements" published in the current undergraduate catalog. Foreign language courses can be considered to be one of these courses. (Students may receive humanities credit for foreign language courses in their native tongue only if the course is at the 4000 or 5000 level.)
3. Special topics, special problems courses and honors seminars are allowed only by petition to and approval by the student's department chairman.

Freshman Year			
First Semester	Credits	Second Semester	Credits
<u>MATH 1214</u> or <u>1211</u>	4	<u>MATH 1215</u>	4
<u>CHEM 1310</u>	4	<u>PHYSICS 1135</u>	4
<u>CHEM 1319</u>	1	<u>MECH ENG 1720</u>	3
<u>CHEM 1100</u>	1	MIN-ENG-1912	2
MIN-ENG-2126	4	<u>GEO ENG 1150</u>	3
<u>MIN ENG 1912</u>	<u>2</u>	<u>HISTORY 1200</u>	<u>3</u>
<u>FR ENG 1100</u>	1		

HISTORY 1200, or 1300, or 1310, or POL SCI 1200	3		
ENGLISH 1120	3		
	16		17
Sophomore Year			
First Semester	Credits	Second Semester	Credits
MIN ENG 2925	2	MIN ENG 2412	3
MIN ENG 3912	2	MATH 3304	3
MATH 2222	4	MECH ENG 2527	3
MIN ENG 3913	3	MECH ENG 2350	2
CIV ENG 2200	3	PHYSICS 2135	4
ECON 1100 or 1200	3		
	17		15
Junior Year			
First Semester	Credits	Second Semester	Credits
STAT 3113 or 3115	3	MIN ENG 4512	3
NUC ENG 3221 or CIV ENG 3330	3	MIN ENG 5522	3
MIN ENG 5932	3	MIN ENG 5823	3
CIV ENG 2210	3	MIN ENG 5933	3
ECON 3512	3	ENGLISH 1600 , or 1160 , or 3560	3
GEOLOGY 3310	3		
	18		15
Senior Year			
First Semester	Credits	Second Semester	Credits
MIN ENG 5612	3	MIN ENG 5742	3
MIN ENG 5912	3	MIN ENG 4097	3
MIN ENG 4096	3	Technical Elective ^{1,2,3,4,5,6}	3
H/SS Elective	3	H/SS Elective	3
MIN ENG 5113	3	Technical Elective^{1,2,3,4,5,6}	3
	15		15
Total Credits: 128			

1

Explosives Engineering Emphasis: [MIN ENG 5622](#) (Blasting Tech) and [MIN ENG 5823](#) (Rock Mechanics) or [MIN ENG 5922](#) (Tunneling/Construction) have to be taken as Technical Electives.

2

Quarrying Emphasis: Two of [CIV ENG 3116](#) (Construction Materials); [MIN ENG 5212](#) (Aggregate and Quarrying); and [MIN ENG 5412](#) (Aggregate Materials) have to be taken as Technical Electives.

3

Coal Emphasis: Two of [MIN ENG 5322](#) (Coal Mine Development and Production), [MIN ENG 4414](#) (Mine Plant Management) or an approved substitute course must be taken as Technical Electives.

4

Mining and the Environment Emphasis: [GEO ENG 5235](#) (Environmental Geological Engineering) and [GEO ENG 5233](#) (Risk Assessment in Environmental Studies), or approved substitute courses have to be taken as Technical Electives.

5

Mining Health and Safety Emphasis: [MIN ENG 3002](#) (Mine Rescue), [ENG MGT 4330](#) (Human Factors), or other approved substitute courses must be taken as Technical Electives.

6

Sustainable Development Emphasis: [POL SCI 3310](#) (Public Policy Analysis), [ECON 4440](#) (Environmental and Natural Resource Economics), or other approved substitute courses must be taken as Technical Electives.

Graduating Mining Engineers Examination

Mining engineering students must complete the Fundamentals of Engineering Examination prior to graduation as a senior assessment requirement. A passing grade is not required to earn a B.S. degree in mining engineering; however it is the first step toward becoming a registered professional engineer. This requirement is part of the Missouri S&T assessment process.

Mining Health and Safety Emphasis

Junior and Senior Years		
MIN ENG 3002	Mine Rescue (or approved substitute course in lieu of Technical Elective.)	3
ENG MGT 4330	Human Factors (or approved substitute course in lieu of Technical Elective.)	3

Sustainable Development Emphasis

Junior and Senior Years		
POL SCI 3300	Principles Of Public Policy (or approved substitute course in lieu of Technical Elective.)	3
ECON 4440	Environmental And Natural Resource Economics (or approved substitute course in lieu of Technical Elective.)	3

Quarrying Engineering Emphasis

Senior Year		
CIV ENG 3116	Construction Materials, Properties And Testing (in lieu of Technical Elective.)	3
MIN ENG 5212	Aggregates and Quarrying	3

Explosives Engineering Emphasis

Junior and Senior Years		
Choose one of the following courses in lieu of Technical Elective in Junior Year:		
A three-credit hour explosives engineering (EXP ENG) course		
EXP ENG 5922	Tunneling & Underground Construction Techniques	3
GEO ENG 5471	Rock Engineering	
In lieu of Technical Elective in Senior Year:		
EXP ENG 5622	Blasting Design And Technology	

Coal Emphasis

Junior and Senior Years		
MIN ENG 5322	Coal Mining Methods	3
MIN ENG 4414	Mine Plant Management (or approved substitute course in lieu of Technical Elective.)	2

Mining and the Environment Emphasis

Junior and Senior Years		
ENV ENG 5640	Environmental Law And Regulations	3
GEO ENG 5233	Risk Assessment In Environmental Studies (or approved substitute course in lieu of Technical Elective.)	3

Justification for request

Changes were made to add additional technical elective to curriculum. Course change forms effective for FS 2024 in support of this curriculum/degree change are attached to this document, these change request have also been submitted through course leaf.

Supporting Documents

Course Reviewer Comments

kabp3 (10/06/23 4:50 pm): Rollback: Delete the language that says "...although completion of an emphasis area may require up to 132 credits."

Program Change Request

A deleted record cannot be edited

Program Deactivation Proposal

Date Submitted: 10/17/23 8:30 am

Viewing: **MOBLB&T-MI : Mobile Business & Digital Transformation**

File: 101.20

Last approved: 06/10/21 4:08 pm

Last edit: 10/17/23 11:30 am

Changes proposed by: cecq8z

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

Start Term

Fall 2024 ~~2024~~

Program Code

MOBLB&T-MI

Department

Business and Information Technology

Title

Mobile Business & Digital Transformation

Program Requirements and Description

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

Approval Path

- 1. 10/17/23 11:12 am
Cassie Elrod (cassa): Approved for RINFSCTE Chair
- 2. 10/17/23 11:31 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
- 3. 10/17/23 12:05 pm
Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
- 4. 11/20/23 2:25 pm
Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post

History

- 1. Aug 5, 2014 by pantaleoa
- 2. Jun 17, 2015 by pantaleoa
- 3. Jul 14, 2015 by pantaleoa
- 4. Jun 10, 2021 by Cecil Eng Huang Chua (cchua)

Minor in Mobile Business and Digital Transformation

The minor in mobile business and technology requires the following15 hours of coursework:

Two or three of the following courses must be taken:		9
IS&T 4641	Digital Commerce and IoT Analytics	
IS&T 4654	Introduction to Web Design and Digital Media Studies (Two or three of the following courses must be taken:)	
IS&T 5335	Fundamentals of Mobile Technology for Business	
ERP 5240	Enterprise Application Development and Software Security	
Two or three of the following courses must be taken:		6
BUS 1414	The Inclusive Workplace	
IS&T 3333	Data Networks and Information Security	
IS&T 5652	Advanced Web Development	
IS&T 5886	Prototyping Human-Computer Interactions	
ERP 4610	Customer Relationship Management in ERP Environment	
ERP 5310	Supply Chain Management Systems in an ERP Environment	
ERP 5210	Performance Dashboard, Scorecard and Data Visualization	
MKT 5310	Digital Marketing and Promotions	
IS&T 5680	Digital Media Development and Interactive Design	

Justification for request

Low enrollment

Supporting Documents

Course Reviewer Comments

jpnfd (10/17/23 11:30 am): Updated term to Fall 2024

Program Change Request

A deleted record cannot be edited

Program Deactivation Proposal

Date Submitted: 10/18/23 3:35 pm

Viewing: **PRE MBA-MI : Pre MBA Minor**

File: 122.11

Last approved: 04/06/22 12:33 pm

Last edit: 10/20/23 6:25 am

Changes proposed by: cecq8z

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

Start Term

Fall 2024 ~~2022~~

Program Code

PRE MBA-MI

Department

Business and Information Technology

Title

Pre MBA Minor

Program Requirements and Description

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

Approval Path

1. 10/19/23 1:02 pm
Cassie Elrod (cassa): Approved for RINFSCTE Chair
2. 10/20/23 6:27 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/20/23 7:24 am
Cecil Eng Huang Chua (cchua): Approved for Social Sciences DSCC Chair
4. 11/20/23 2:25 pm
Jennifer Pohlsander (jpnfd): Approved for Pending CCC Agenda post

History

1. Jul 23, 2014 by barryf
2. Jul 14, 2015 by pantaleoa
3. Jul 15, 2015 by pantaleoa
4. Apr 6, 2022 by Cecil Eng Huang Chua (cchua)

Pre MBA Minor

The minor in pre MBA will prepare students to enter an accredited MBA program at Missouri S&T or elsewhere. This minor requires the following 36 hours of coursework:

PSYCH 1101	General Psychology	3
ECON 1300/STAT 1111	Business And Economic Statistics I	3
or STAT 1115	Statistics For The Social Sciences I	
or STAT 3111	Statistical Tools For Decision Making	
or STAT 3113	Applied Engineering Statistics	
or STAT 3115	Engineering Statistics	
or STAT 3117	Introduction To Probability And Statistics	
ECON 1100	Principles Of Microeconomics	3
ECON 1200	Principles Of Macroeconomics	3
BUS 1110	Introduction to Management and Entrepreneurship	3
BUS 1210	Financial Accounting	3
BUS 3220	Managerial Accounting	3
BUS 2910	Business Law	3
BUS 5360	Business Operations	3
MKT 3110	Marketing	3
FINANCE 2150	Corporate Finance I	3
IS&T 1750	Introduction to Management Information Systems	3

Justification for request

Insufficient resources to support.

Supporting Documents

Course Reviewer Comments

jpnfd (10/20/23 6:25 am): Updated term to Fall 2024.

Program Change Request

Date Submitted: 10/12/23 1:42 pm

Viewing: **SCITEC-CTU : UCT - Science, Technology, and Society**

File: 375.7

Last approved: 08/03/21 3:01 pm

Last edit: 10/16/23 9:51 am

Changes proposed by: dewittp

Catalog Pages Using this Program
[History](#)

Start Term

Fall 2024 ~~2024~~

Program Code

SCITEC-CTU

Department

History and Political Science

Title

UCT - Science, Technology, and Society

Program Requirements and Description

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. FS Meeting Agenda
- 8. Faculty Senate Chair
- 9. Registrar

Approval Path

- 1. 10/12/23 1:36 pm
Shannon Fogg
(sfogg): Rollback to Initiator
- 2. 10/12/23 1:53 pm
Shannon Fogg
(sfogg): Approved for RHISTORY Chair
- 3. 10/16/23 9:58 am
Jennifer Pohlsander
(jpnfd): Approved for CCC Secretary
- 4. 10/16/23 10:55 am
Petra Dewitt
(dewittp): Approved for Arts & Humanities DSCC Chair
- 5. 11/20/23 2:25 pm
Jennifer Pohlsander
(jpnfd): Approved for Pending CCC Agenda post

History

- 1. Mar 4, 2021 by
Petra Dewitt
(dewittp)
- 2. Aug 3, 2021 by
Crystal Wilson
(wilsoncry)

Science, Technology, and Society

The undergraduate certificate in Science, Technology, and Society (STS) is designed to provide students with background in the understanding of the field of science, technology, and society. Students who complete this certificate will understand more fully how integrated the perspectives of humanities and the social sciences are in shaping the technological world. Students will learn the valuable quality of knowing how their work is shaped by, and in turn shapes, social values and contexts in an increasingly interconnected world.

REQUIREMENTS:

3 credit hours from		
HISTORY 2510	History of Technology	3
HISTORY 3530	History of Science	3
HISTORY 4580	Issues in Science, Technology and Society	3
or PHILOS 4580	Issues in Science, Technology and Society	
POL SCI 4320	The Politics of Innovation	3
9 credit hours from (as approved by certificate advisor)		
BIO SCI 1163	Biotechnology in Film	3
BIO SCI 2263	Ecology	3
BIO SCI 2372	Issues in Public Health	3
ECON 4540	Energy Economics	3
ECON 4820	Labor Economics	3
ENGLISH 2243	Science Fiction	3
ENG MGT 4330	Human Factors	3
or PSYCH 4710	Human Factors	
ENV ENG 5640	Environmental Law And Regulations	3
GEO ENG 1175	Geological Engineering in Popular Media	3
HISTORY 2510	History of Technology	3
HISTORY 3510	Twentieth Century Technology And Society	3
HISTORY 3530	History of Science	3
HISTORY 3443	The American Military Experience	3
HISTORY 4470	American Environmental History	3
HISTORY 4550	Architecture, Technology and Society; 1750 to Present	3
HISTORY 4551	Chicago: Architecture, Technology, Culture	3
IS&T 5885	Human-Computer Interaction and User Experience	3
PHILOS 3223	Bioethics	3
PHILOS 3225	Engineering Ethics	3
PHILOS 4320	Minds And Machines	3
PHILOS 4345	Philosophy Of Science	3
PHILOS 4350	Environmental Ethics	3
POL SCI 3300	Principles Of Public Policy	3
POL SCI 4320	The Politics of Innovation	3
PSYCH 4602	Organizational Psychology	3
PSYCH 4700	Industrial Psychology	3
PSYCH 4720	Psychology of Social Technology	3

TCH COM 3570	Writing in the Sciences	3
TCH COM 5610	History of Technical Communication	3

Justification for request

Supporting Documents

Course Reviewer Comments

sfogg (10/12/23 1:36 pm): Rollback: I can't figure out how to change the 6 hours to 9 hours in the 2nd list of courses. When I click on edit, it highlights everything and I can't make the change.

jpnfd (10/16/23 9:51 am): Added Philos 4580 to course list, co-listed with History 4580.

Key: 375

Course Change Request

New Experimental Course Proposal

Date Submitted: 10/26/23 11:28 am

Viewing: **TCH COM 5001.005 : Advanced Web-Based Communication**

File: 5006

Last edit: 10/30/23 7:14 am

Changes proposed by: wrightmd

Requested	Fall 2024
Effective Change Date	
Department	English and Technical Communication
Discipline	Technical Communication (TCH COM)
Course Number	5001
Topic ID	005
Experimental Title	Advanced Web-Based Communication
Experimental Abbreviated Course Title	TCH COM 5001
Instructors	Michael David Wright

Experimental Catalog Description	This course builds upon TCH COM 5560, in which students learn HTML, CSS, and writing for the web. Here, students will learn additional, more advanced, programs such as JavaScript and Python.
Prerequisites	TCH COM 5560.
Field Trip Statement	

In Workflow

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

Approval Path

1. 10/26/23 11:58 am
Kristine Swenson (kswenson): Approved for RENGLISH Chair
2. 10/30/23 7:14 am
Jennifer Pohlsander (jpnfd): Approved for CCC Secretary
3. 10/30/23 8:52 am
Petra Dewitt (dewittp): Approved for Arts & Humanities DSCC Chair
4. 11/20/23 2:25 pm
Jennifer Pohlsander

Credit Hours
Total: 3

LEC: 3

LAB: 0

IND: 0

RSD: 0

(jpnfd): Approved
for Pending CCC
Agenda post

Justification for
new course:

Many of our graduates and current students have expressed a desire for more coding skills that will allow them to communicate more complex information via the web.

Semester(s)
previously taught

N/A

Co-Listed
Courses:

Course Reviewer
Comments

jpnfd (10/30/23 7:14 am): Updated prerequisite format.

Key: 5006

[Preview Bridge](#)