

Program Change Request

Date Submitted: 11/02/17 6:19 pm

Viewing: **INEGBS : Industrial Engineering, Bachelor of Science in Industrial Engineering**

Last approved: 05/30/17 4:26 pm

Last edit: 11/03/17 5:40 pm

Changes proposed by: cassady

Catalog Pages Using
this Program

[Industrial Engineering B.S.I.E.](#)
[Industrial Engineering \(INEG\)](#)

Submitter: User ID: crsleaf1 Phone: 575-3157

Program Status Active

Academic Level Undergraduate

Type of proposal Major/Field of Study

Select a reason for this modification

Making Minor Changes to an Existing Degree (e.g. changing 15 or fewer hours, changing admission/graduation requirements, adding Focused Study)

Are you adding a concentration? No

Are you adding a track? No

Are you adding a focused study? No

Effective Catalog Year Fall 2018

College/School Code College of Engineering(ENGR)

Department Code Department of Industrial Engineering(INEG)

Program Code INEGBS

Degree Bachelor of Science in Industrial Engineering

CIP Code
14.3501 - Industrial Engineering.

Program Title
Industrial Engineering, Bachelor of Science in Industrial Engineering

Program Delivery

Method

On Campus

Is this program interdisciplinary?

No

Does this proposal impact any courses from another College/School?

No

In Workflow

1. ENGR Dean Initial
2. Director of Program Assessment and Review
3. Registrar Initial
4. INEG Chair
5. ENGR Curriculum Committee
6. ENGR Faculty
7. ENGR Dean
8. Global Campus
9. Provost Review
10. University Course and Program Committee
11. Faculty Senate
12. Provost Final
13. Provost's Office-- Notification of Approval
14. Registrar Final
15. Catalog Editor Final

Approval Path

1. 11/01/17 3:14 pm Norman Dennis (ndennis): Approved for ENGR Dean Initial
2. 11/02/17 8:41 am Alice Griffin (agriffin): Rollback to Initiator
3. 11/03/17 8:24 am Norman Dennis (ndennis): Approved for ENGR Dean Initial
4. 11/03/17 2:55 pm Alice Griffin (agriffin): Approved for Director of Program Assessment and Review
5. 11/03/17 5:40 pm Lisa Kulczak

<p>What are the total hours needed to complete the program?</p>	<p>126</p>	<p>(lkulcza): Approved for Registrar Initial 6. 11/06/17 11:26 am Ed Pohl (epohl): Approved for INEG</p>
<p>Program Requirements and Description</p>		<p>Chair 7. 11/07/17 2:07 pm</p>
<p>Requirements</p>		<p>Manuel Rossetti (rossetti): Approved for ENGR Curriculum Committee 8. 11/08/17 9:02 am</p>
<p>The total graduation requirement in industrial engineering is 126 128 hours. For further information please visit the departmental website.</p>		<p>Norman Dennis (ndennis): Approved for ENGR Faculty</p>
<p>Technical Electives</p>		<p>9. 11/08/17 9:11 am</p>
<p>The purpose of technical electives is to provide students with the opportunity to expand their education within a particular area of interest. The approved list of technical electives is available in the industrial engineering department. At least 12 hours must be selected from INEG courses.</p>		<p>Norman Dennis (ndennis): Approved for ENGR Dean</p>
<p>Humanities/Social Science Electives</p>		<p>10. 11/08/17 1:13 pm</p>
<p>Although any elective included on the approved University Core humanities/social science list may be selected, PSYC 2003 General Psychology (ACTS Equivalency = PSYC 1103) (Sp, Su, Fa) PSYC 2003 General Psychology (ACTS Equivalency = PSYC 1103) (Sp, Su, Fa) is recommended for industrial engineers.</p>		<p>Kiersten Bible (kbible): Approved for Global Campus</p>
<p>Science Electives</p>		<p>11. 11/10/17 10:41 am</p>
<p>The approved list of science electives is available in the industrial engineering departmental office.</p>		<p>Terry Martin (tmartin): Approved for Provost Review</p>

History

1. Aug 15, 2014 by Leepfrog Administrator (clhelp)
2. Mar 13, 2015 by tellenbe
3. Apr 3, 2015 by tellenbe
4. May 16, 2016 by tellenbe
5. Mar 1, 2017 by Manuel Rossetti (rossetti)
6. May 30, 2017 by Charlie Alison (calison)

8-Semester Plan

Industrial Engineering B.S.I.E.

Eight-Semester Degree Program

The following section contains the list of courses required for the Bachelor of Science in Industrial Engineering degree and a suggested sequence. Not all courses are offered every semester, so students who deviate from the suggested sequence must pay careful attention to course scheduling and course prerequisites. Students wishing to follow the eight-semester degree plan should see the [Eight-Semester Degree Policy](#) in the Academic Regulations chapter for university requirements of the program.

At least 12 hours of technical electives must be selected from INEG courses.

First Year	Units
	FallSpring
MATH 2554 Calculus I (ACTS Equivalency = MATH 2405) (Sp, Su, Fa)	4
CHEM 1103 University Chemistry I (ACTS Equivalency = CHEM 1414 Lecture) (Su, Fa)	3
PHYS 2054 University Physics I (ACTS Equivalency = PHYS 2034) (Sp, Su, Fa)	4
GNEG 1111 Introduction to Engineering I (Sp, Fa)	1
ENGL 1013 Composition I (ACTS Equivalency = ENGL 1013) (Sp, Su, Fa)	3
MATH 2564 Calculus II (ACTS Equivalency = MATH 2505) (Sp, Su, Fa)	4
Freshman Science Elective ^{1,5}	4
Select one of the following:	3
HIST 2003 History of the American People to 1877 (ACTS Equivalency = HIST 2113) (Sp, Su, Fa)	
HIST 2013 History of the American People, 1877 to Present (ACTS Equivalency = HIST 2123) (Sp, Su, Fa)	
PLSC 2003 American National Government (ACTS Equivalency = PLSC 2003) (Sp, Su, Fa)	
GNEG 1121 Introduction to Engineering II (Sp, Fa)	1
ENGL 1023 Composition II (ACTS Equivalency = ENGL 1023) (Sp, Su, Fa)	3
Year Total:	15 15

Second Year	Units
	FallSpring
INEG 2001 Industrial Engineering Seminar (Fa)	1
INEG 2103 Introduction to Industrial Engineering (Fa)	3
INEG 2313 Applied Probability and Statistics for Engineers I (Sp, Fa)	3
INEG 2413 Engineering Economic Analysis (Sp, Fa)	3
MATH 2574 Calculus III (ACTS Equivalency = MATH 2603) (Sp, Su, Fa)	4
Science Requirement ^{1,2}	3
INEG 2403 Industrial Cost Analysis (Sp)	3
INEG 2333 Applied Probability and Statistics for Engineers II (Sp, Fa)	3
MATH 2584 Elementary Differential Equations (Sp, Su, Fa)	4
MEEG 2303 Introduction to Materials (Sp, Fa)	3
CSCE 2004 Programming Foundations I (Sp, Fa)	4
Year Total:	17 17

Third Year	Units
	FallSpring
INEG 3623 Simulation (Fa)	3
INEG 3713 Methods and Standards (Sp, Fa)	3 -
MEEG 2003 Statics (Sp, Su, Fa)	3 -
ELEG 3903 Electric Circuits and Machines (Sp, Fa)	3
Fine Arts (from University/State Core List)	3
Technical Electives ³	3
INEG 3714 Work Methods and Ergonomics Course INEG 3714 Work Methods and Ergonomics Not Found	4
INEG 3613 Introduction to Operations Research (Sp)	3
INEG 3723 Ergonomics (Sp, Fa)	- 3
INEG 3513 Manufacturing Processes (Sp)	3
Selection one option from the following:	3
ECON 2143 Basic Economics: Theory and Practice (Sp, Su, Fa)	

ECON 2013 Principles of Macroeconomics (ACTS Equivalency = ECON 2103) (Sp, Su, Fa)	
& ECON 2023 Principles of Microeconomics (ACTS Equivalency = ECON 2203) (Sp, Su, Fa)	
Technical Elective	3
MEEG 2003 Statics (Sp, Su, Fa)	3
Year Total:	16 15

	Fourth Year	Units
		FallSpring
INEG 4433 Systems Engineering and Management (Fa)		3
INEG 4553 Production Planning and Control (Fa)		3
Two Technical Electives ³		6
Social Science (from University/State Core List) ⁴		3
INEG 4911 Industrial Engineering Capstone Experience I (Fa)		1
INEG 4923 Industrial Engineering Capstone Experience II (Sp)		3
Two Technical Electives ³		6
Humanities (from University/State Core List) ⁴		3
Social Science (from University/State Core List) ⁴		3
Year Total:		16 15

Total Units in Sequence: 126

¹[CHEM 1123/CHEM 1121L](#) University Chemistry II or [PHYS 2074](#) University Physics II

²If the student selected [CHEM 1123/CHEM 1121L](#) as their freshman science elective then this course must be [PHYS 2074](#) University Physics II; otherwise see the approved list of IE science electives.

³The purpose of technical electives is to provide students with the opportunity to expand their education along lines of particular interest to them. The approved list of technical electives is available in the industrial engineering department. At least 12 hours must be selected from INEG courses.

⁴Although any elective included on the humanities/social science list may be selected, [PSYC 2003](#) General Psychology is recommended for industrial engineers.

⁵The approved list of science electives is available in the industrial engineering departmental office.

Are Similar Programs available in the area?

No

Estimated Student Demand for Program 250

Scheduled Program Review Date 2020-2021

Program Goals and Objectives

Program Goals and Objectives

NA

Learning Outcomes

Learning Outcomes

NA

Description and justification of the request

Description of specific change	Justification for this change
Combined INEG 3713 and INEG 3723 into a new course, INEG 3714. We moved MEEG 2003 to the sixth-semester to balance hours.	The merger of the two courses reduced overlap in the curriculum, renders the curriculum more closely aligned with faculty expertise, and shortens a long pre-requisite chain.

Upload attachments

Reviewer Comments

Alice Griffin (agriffin) (11/02/17 8:41 am): Rollback: Please review course change for INEG 3713. The course number was not changed to 3714. Thus, the total hours are not reflecting correctly in the program change. Please make the course change, insert the hours into the course in the eight semester plan and resubmit program change.

Norman Dennis (ndennis) (11/03/17 8:24 am): Removed second occurrence of INEG 3714 from third year. new course INEG 3714 is in workflow.

Alice Griffin (agriffin) (11/03/17 2:53 pm): Changed language in the program requirements from 128 to 126 hours with permission from college.

Alice Griffin (agriffin) (11/03/17 2:54 pm): Inserted four hours into the eight semester plan for INEG 3714 so that hours would total 126.

Lisa Kulczak (lkulcza) (11/03/17 5:40 pm): Course "not found" currently in approval process for fall 2018.

Key: 493