

ACADEMIC PLANNING SHEET

B.S.I.E. INDUSTRIAL ENGINEERING

COLORADO STATE UNIVERSITY – PUEBLO

2014-2015 CATALOG

DEPARTMENT CHAIR: Dr. Jane M. Fraser, Chair/Professor

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	Fall Semester		Spring Semester	
First Year	EN 101: Introduction to Engineering EN 103: Problem Solving for Engineers MATH 126: Calculus & Analytic Geometry I ENG 101: English Composition I General Education Courses	2 3 5 3 3	EN 107: Engineering Graphics MATH 224: Calculus & Analytic Geometry II PHYS 221/L: General Physics I/Lab ENG 102: English Composition II	2 5 5 3
	TOTAL SEMESTER HOURS	16	TOTAL SEMESTER HOURS	15
Second Year	EN 211: Engineering Mechanics I EN 231/L: Circuit Analysis/Lab EN 215: Intro to Industrial & Systems Engineering PHYS 222/L: General Physics II/Lab MATH 207: Matrix & Vector Algebra w/ App.	3 5 3 5 2	EN 212: Engineering Mechanics II EN 324/L: Materials Science & Engineering/Lab MATH 337: Differential Equations I COMR 103: Speaking & Listening General Education Courses	3 4 3 3 3
	TOTAL SEMESTER HOURS	18	TOTAL SEMESTER HOURS	16
Third Year	EN 321: Thermodynamics EN 365: Stochastics Systems Engineering EN 439: Time and Motion Studies EN 471: Operations Research Math/Science Electives	3 4 2 3 3	EN 343: Engineering Economy EN 420: Simulation Experiments EN 441: Engineering of Manufacturing Process EN 443: Quality Control and Reliability General Education Courses	3 4 4 3 3
	TOTAL SEMESTER HOURS	15	TOTAL SEMESTER HOURS	17
Fourth Year	EN 440: Safety Engineering EN 473/L: Computer Integrated Manufacturing/Lab EN 475: Facility Planning and Design EN 486: Senior Seminar General Education Courses	3 3 3 2 3	EN 430: Project Planning EN 477: Operations Planning and Control EN 488: Industrial Engineering Design Technical Elective General Education Courses	3 3 3 3 3
	TOTAL SEMESTER HOURS	14	TOTAL SEMESTER HOURS	15

DISCLAIMER: The Academic Planning Sheet is designed as a guide for students planning their course selections. The information on this page provides only a suggested schedule. Actual course selections should be made with the advice and consent of an academic advisor. While accurately portraying the information contained in the college catalog, this form is not considered a legal substitute for that document. Students should become familiar with the catalog in effect at the time in which they entered CSU-Pueblo.

General Education Requirements: 15 semester hours

- o *ENG 101: English Composition I* (3)
- o *ENG 102: English Composition II* (3)
- o Mathematics Course (3)
 - o *MATH 126: Calculus & Analytic Geometry I*
- o Humanities Courses (9)
 - o *COMR 103: Speaking and Listening*
- o History Course (3)
- o Social Sciences Courses (6)
- o Natural and Physical Sciences Courses (8) (2 courses with labs)
 - o *PHYS 221/L: General Physics I/Lab*
 - o *PHYS 222/L: General Physics II/Lab*

Course Completed elsewhere	CSU-Pueblo equivalent
(Ex: English 101)	(Ex: English 101)

Major Requirements:**Specific Requirements for the BSIE: 77 semester hours**

- o EN 101: Introduction to Engineering (2)
- o EN 103: Problem Solving for Engineers (3)
- o EN 107: Engineering Graphics (2)
- o EN 211: Engineering Mechanics I (3)
- o EN 212: Engineering Mechanics II (3)
- o EN 215: Intro to Industrial & Systems Engineering (3)
- o EN 231/L: Circuit Analysis/Lab (5)
- o EN 321: Thermodynamics (3)
- o EN 324/L: Materials Science and Engineering/Lab (4)
- o EN 343: Engineering Economy (3)

Institutional Graduation Requirements:

- o Total of 120 semester hours, minimum.
- o Complete a minimum of 40 semester hours in upper-division courses.
- o Overall cumulative grade point average of 2.00.
- o A minimum of 60 semester hours must be earned from a four year institution. Of these, a minimum of 30 semester hours of credit must be earned in residence.
- o Of the last 30 semester credits earned immediately preceding graduation, no more than 15 may be completed at other colleges or universities.
- o All other requirements as specified in the Catalog.

Additional Major Graduation Requirements:

- o Total of 126 semester hours, minimum.
- o Students are required to have earned a cumulative GPA of 2.000 or better in required EN courses.

Specific Requirements for the BSIE cont'd:

- o EN 365: Stochastic Systems Engineering (4)
- o EN 420: Simulation Experiments (4)
- o EN 430: Project Planning (3)
- o EN 439: Time and Motion Studies (2)
- o EN 440: Safety Engineering (3)
- o EN 441/L: Engineering of Manufacturing Process/Lab (4)
- o EN 443: Quality Control and Reliability (3)
- o EN 471: Operations Research (3)
- o EN 473/L: Computer Integrated Manufacturing/Lab (3)
- o EN 475: Facility Planning and Design (3)
- o EN 477: Operations Planning and Control (3)
- o EN 486: Senior Seminar (2)
- o EN 488: Industrial Engineering Design (3)
- o Technical Electives (3)
- o Math/Science Electives (3)

Technical Electives must be chosen from an approved list or have the approval of an Engineering advisor.

Other Required Courses:**Required Semester Hours: 49 semester hours**

- o *MATH 126: Calculus & Analytic Geometry I* (5)
- o MATH 207: Matrix & Vector Algebra with Applications (2)
- o MATH 224: Calculus & Analytic Geometry II (5)
- o MATH 337: Differential Equations I (3)
- o *PHYS 221/L: General Physics I/Lab* (5)
- o *PHYS 222/L: General Physics II/Lab* (5)
- o *ENG 101: English Composition I* (3)
- o *ENG 102: English Composition II* (3)
- o *COMR 103: Speaking and Listening* (3)
- o General Education Courses (15)

(Courses *italicized* meet General Education requirements)

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