

Bachelor of Science in Industrial Process Engineering Guidesheet

GENERAL ED REQUIREMENTS

A. Human Culture, Physical/Nat World

Course	Grade	Credit
Natural Sciences**		
CHEM 111		4
CHEM 112		4
PHYS 211		4
PHYS 212		4

History of Civilization: HIST 101 or 102		
		3

Two Social/Behavioral Sciences* (2 areas)		
ECON 221/222		3
		3

Three Humanities Courses* (at least 2 areas)		
PHIL 325		3
		3
		3

B. Intellectual and Practical Skills		
AFCI 101		1
ENGL 101**		3
ENGL 102**		3
COMM 201 or 241		3

Mathematics**		
MATH 141		4
MATH 142		4

C. Personal and Social Responsibility

American Political Institutions (API)		
POLI 201, HIST 201 or 202		3

Inter-Curricular Enrichment Program (ICE)*		
Two approved events in each semester of enrollment		
For more information, see ICE Program requirements		

Three Writing Intensive Courses*		
(At least one in major) List:		

One 3-Credit Non-Western World Studies Course*		
List Course:		

Satisfactory Completion of Writing Portfolio		
Submitted after 60 hrs, before applying for graduation		
or ENGL 201		

MAJOR REQUIREMENTS

Core Courses**

Course	Grade	Credit
ENCP 101		3
ENCP 102		3
ENCP 200		3
ENCP 260		3
ENCP 290		3
ENCP 310		3
ENCP 316		3
ENCP 327		3
ENCP 334		3
ENCP 360		3
ENCP 361		3
ENCP 371		3
ENCP 380		3
ENCP 421		3
ELCT 221		3
MATH 241		4
MATH 242		4
STAT 509		3

Business Component		
BADM 371		3
BADM 494		3

Technical Electives		
		3-4
		3-4

Any ENCP course (300 or higher not required by major), any CSCI course (145 to 562), any MATH course (518 to 554), any MGMT course (300 or higher not required by major), any BADM course (300 or higher not required by major), any CHEM course 300 or higher or departmental approved course.

Capstone**		
ENCP 498		3
ENCP 499		3

*See next page for list of qualifying courses for listed categories and for information on ICE events.

**Must earn a grade of C or better

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HUMANITIES COURSES

**bolded numbers indicate that course
also qualifies as a Non-Western**

Art History (ARTH): 105, 106, 206, 312, 335, **397**, 398

Communications (COMM): 351, 352, 353, **450**, 455, 462

English (ENGL): 281, 282, 283, 284, 285, 288, 289, 290, **291**, 295, 301, 362, **385**, 389, 390, 391, 392, 393, 394, 395, 401, 405, 407, 411, 412, 415, 416, 417, 419, 423, 424, 425, 426, 427, 428, 430, 431, **435**, 449, 474, 491, 494

Foreign Languages, Literatures & Culture:

(FREN): 302, **303**, 305, **306**, 307, **388**, 397, 398, 399

(GERM): 303, 305, 395, 397, 398, 399

(SPAN): **303**, 308, 319, **320**, **321**, 340, **380**, **388**, **397**, 399, **426**, **488**, 498

History (HIST): All history courses. **NOTE:** If HIST 101 or HIST 102 is used towards History of Civilization requirement, the same course cannot count for the Humanities requirement. Also, if HIST 201 or HIST 202 is used towards the American Political Institutions requirement, the same course cannot count for the Humanities requirement

Honors (HONS): 101

Humanities (HUMA): 107, 201, 202, 211, 301

Music (MUSC): 173, **175**, 371, 372, 374, 393

Philosophy (PHIL): 102, 211, 302, 303, 304, 311, 312, 350, 390, 399

Religion (RELG): 101, **103**, 301, 302, 390, 399

Theater (THEA): 161, 361, 362

SOCIAL AND BEHAVIORAL SCIENCES COURSES

Any of the following disciplines:

Psychology (PSYC)

Sociology (SOCY) (see below for non-western courses)

Anthropology (ANTH) (see below for non-western courses)

Political Science (POLI) (see below for non-western courses)

Geography (GEOG) (see below for non-western courses)

Honors (HONS): 101

NON-WESTERN qualifying courses

Art History (ARTH): 397

Anthropology (ANTH): 102, 315, 352, 490

Communications (COMM): 450

English (ENGL): 291, 385, 435

Foreign Languages, Literatures & Culture:

(FREN): 303, 306, 388

(SPAN): 303, 320, 321, 380, 388, 397, 426, 488

Geography (GEOG): 102

History (HIST): 345, 346, 347, 361, 362, 366, 423, 447, 492

Music (MUSC): 175

Political Science (POLI): 101, 103, 330, 344, 487, 488, 492

Religion (RELG): 103

Sociology (SOCY): 310

CRITICAL INQUIRY

Freshman must take Critical Inquiry (AFCI 101) in their first semester of enrollment at USC Aiken. Student in degree programs which require more than 16 credit hours in the first semester of enrollment may complete Critical Inquiry during their second academic semester.

INTER-CURRICULAR ENRICHMENT (ICE)

Undergraduate students will attend at least 2 ICE events per academic semester up to a total of 16 over their 4-year college career. Freshman Convocation will constitute the first ICE event for entering freshman.

Transfer students will complete 2 ICE events for each academic semester remaining before graduation.

Part-time students will complete 2 ICE events for every 15 hours of completed course credit.

Students participating in **Study Abroad** programs may earn 2 ICE events while overseas by participating in pre-approved inter-curricular academic events.

INDUSTRIAL PROCESS ENGINEERING CURRICULUM SHEET

FRESHMAN (35)

FALL			SPRING		
ENCP 101	Introduction to Engineering I	3	ENCP 102	Introduction to Engineering II	3
CHEM 111	General Chemistry I & Lab	4	CHEM 112	General Chemistry II & Lab	4
ENGL 101	Critical Reading & Comp.	3	ENGL 102	Rhetoric & Composition	3
MATH 141	Calculus I	4	MATH 142	Calculus II	4
AFCI 101	Critical Inquiry	1	ECON 221/222	Micro/Macro Economics	3
ELECTIVE	Humanities	<u>3</u>			
		18			<u>17</u>

SOPHOMORE (34)

FALL			SPRING		
ENCP 200	Statics	3	ENCP 290	Thermodynamics Fund.	3
ELCT 221	Circuits	3	ENCP 260	Intro. to Mechanics of Solids	3
MATH 241	Vector Calculus	4	MATH 242	Elem. Differential Equations	4
PHYS 211	Essentials of Physics I & lab	4	PHYS 212	Essentials of Physics II & lab	4
COMM 201/241	Public Speaking	<u>3</u>	STAT 509	Statistics for Engineers	<u>3</u>
		17			17

JUNIOR (30)

FALL			SPRING		
ENCP 361	Instrumentation, Meas, Stats	3	ENCP 334	Quality Control & Planning	3
ENCP 371	Engineering Materials	3	ENCP 327	Design of Mech. Elements	3
ENCP 360	Fluids	3	ENCP 310	Dynamics	3
BADM 371	Principles of Management	3	ELECTIVE	History	3
ELECTIVE	Humanities	<u>3</u>	ELECTIVE	API	<u>3</u>
		15			15

SENIOR (30)

FALL			SPRING		
ENCP 380	Systems Engineering	3	ENCP 421	Engineering Economics	3
ENCP 498	Senior Capstone I	3	ENCP 499	Senior Capstone II	3
ENCP 316	Control Systems	3	PHIL 325	Engineering Ethics	3
TECH ELEC	Technical Elective	3	TECH ELEC	Technical Elective	3
ELECTIVE	Soc/Behav	<u>3</u>	BADM 494	Project Management	<u>3</u>
		15			15

ADDITIONAL REQUIREMENTS

Three Writing Intensive Courses (at least one in major)
 One 3-Credit Non-Western World Studies Course
 Satisfactory Completion of Writing Portfolio (or ENGL 201)

TECHNICAL ELECTIVES

Any ENCP course (300 or higher not required by major), any CSCI course (145 to 562), any MATH course (518 to 554), any MGMT course (300 or higher not required by major), any BADM course (300 or higher not required by major), any CHEM course 300 or higher or departmental approved course

Industrial Process Engineering Curriculum 2018

MATH 141 Placement Pre-/Co-Requisite Flowchart

