

Bachelor of Science in Industrial Process Engineering Guidesheet

GENERAL ED REQUIREMENTS

A. Human Culture, Physical/Nat World

Course	Grade	Credit
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Natural Sciences**

CHEM A111		4
CHEM A112		4
PHYS A211		4
PHYS A212		4

History of Civilization: HIST A101 or A102

		3
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Two Social/Behavioral Sciences* (2 areas)

ECON A221/A222		3
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		3
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Three Humanities Courses* (at least 2 areas)

PHIL A325		3
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		3
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		3
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B. Intellectual and Practical Skills

ENGL A101**		3
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ENGL A102**		3
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COMM A201 or A241		3
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Mathematics**

MATH A141		4
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MATH A142		4
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C. Personal and Social Responsibility

American Political Institutions (API)

POLI A201, HIST A201 or A202		3
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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:**

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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 A201

MAJOR REQUIREMENTS

Core Courses**

Course	Grade	Credit
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ENCP A101		3
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ENCP A102		3
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ENCP A200		3
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ENCP A260		3
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ENCP A290		3
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ENCP A310		3
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ENCP A316		3
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ENCP A327		3
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ENCP A334		3
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ENCP A360		3
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ENCP A361		3
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ENCP A361L		1
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ENCP A371		3
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ENCP A380		3
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ENCP A421		3
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ELCT A221		3
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MATH A241		4
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MATH A242		4
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STAT A509		3
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Business Component

BADM A371		3
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BADM A494		3
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Technical Electives

		3-4
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		3-4
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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 A498		3
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ENCP A499		3
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*See next page for list of qualifying courses for listed categories

and for information on ICE events.

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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 (34)

FALL			SPRING		
ENCP A101	Introduction to Engineering I	3	ENCP A102	Introduction to Engineering II	3
CHEM A111	General Chemistry I & Lab	4	CHEM A112	General Chemistry II & Lab	4
ENGL A101	Critical Reading & Comp.	3	ENGL A102	Rhetoric & Composition	3
MATH A141	Calculus I	4	MATH A142	Calculus II	4
GEN ED	Humanities	3	ECON A221/222	Micro/Macro Economics	3
		17			17

SOPHOMORE (34)

FALL			SPRING		
ENCP A200	Statics	3	ENCP A290	Thermodynamics Fund.	3
ELCT A221	Circuits	3	ENCP A260	Intro. to Mechanics of Solids	3
MATH A241	Vector Calculus	4	MATH A242	Elem. Differential Equations	4
PHYS A211	Essentials of Physics I & lab	4	PHYS A212	Essentials of Physics II & lab	4
COMM A201/241	Public Speaking	3	STAT A509	Statistics for Engineers	3
		17			17

JUNIOR (31)

FALL			SPRING		
ENCP A361	Instrumentation, Meas, Stats	3	ENCP A334	Quality Control & Planning	3
ENCP A361L	Lab	1	ENCP A327	Design of Mech. Elements	3
ENCP A371	Engineering Materials	3	ENCP A310	Dynamics	3
ENCP A360	Fluids	3	GEN ED	History	3
BADM A371	Principles of Management	3	GEN ED	API	3
GEN ED	Humanities	3			15
		16			

SENIOR (30)

FALL			SPRING		
ENCP A380	Systems Engineering	3	ENCP A421	Engineering Economics	3
ENCP A498	Senior Capstone I	3	ENCP A499	Senior Capstone II	3
ENCP A316	Control Systems	3	PHIL A325	Engineering Ethics	3
TECH ELEC	Technical Elective	3	TECH ELEC	Technical Elective	3
GEN ED	Soc/Behav	3	BADM A494	Project Management	3
		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 2022

MATH 141 Placement Pre-/Co-Requisite Flowchart

