

# Bachelor of Applied Science in Energy Systems Engineering Sustainable Energy Engineering Option 2023-2024

Term 1 (Fall)		Prerequisites
3.0 CHEM 104		CHEM 30 or CHEM 100 (65%)
3.0 ENGG 123		No prereq required
3.0 ENGG 140		MATH 110 concurrent
3.0 MATH 110		MATH B/C 30 (65%)
3.0 MATH 122		MATH B/C 30
Term 2 (Winter)		
3.0 CS 110		MATH B/C 30
3.0 ENGG 100		No prereq required
3.0 ENGL 100		No prereq required
3.0 MATH 111		MATH 110
3.0 PHYS 119		ENGG 140
Term 3 (Fall)		
3.0 ENEL 280		MATH 111
3.0 ENGG 141		ENGG 140 and MATH 111 (may take MATH 111 concurrently)
3.0 ENER 201		Geology 102 co-requisite
3.0 GEOL 102		No prereq required
3.0 MATH 217		MATH 111 and MATH 122
Term 4 (Winter, Spring/Summer)		
3.0 ENER 203		15 credits or ECON 100
3.0 ENIN 233		MATH 217
3.0 CHEM 105		CHEM 104
3.0 MATH 213		MATH 111 and MATH 122
3.0 STAT 289		MATH 111
Term 5 (Fall)		
3.0 Social Science/Hum		
3.0 ENEV 261		ENGG 141 and PHYS 119 and 45 credit hours
3.0 ENGG 303		STAT 289 and ECON 201
3.0 ENER 301		ENER 201 and ENER 203
3.0 ENGG 330		CS 110, MATH 111, MATH 122 STAT 289
Term 6 (Spring/Summer)		
3.0 BUS 260		ENGL 100
3.0 ENEV 223		ENGG 123
3.0 ECON 201		15 credit hours or ECON 100 or Pre-Cal 20
3.0 ENIN 253		PHYS 119
3.0 ENIN 350		CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently)
Term 7 (Winter)		
3.0 ENIN 355		ENEV 261 and ENIN 350
3.0 ENER 305		ENGG 140/141
3.0 ENER 371		ENER 301 ENIN 355 co-requisite
3.0 ENER 351		ENIN 253, ENER 305 co-requisite and ENIN 355 co-requisite
3.0 GEOL 270		GEOL 102
Term 8 (Fall)		
1.0 ENER 400		Completion of all required 200,300 ENER courses and completion of 99 credit hours
3.0 ENER 451		ENER 305 and ENEL 280
3.0 ENER 453		ENER 305 and ENIN 355
3.0 ENER 455		ENER 305 and PHYS 119
3.0 Approved Elective		
3.0 Approved Elective		
Term 9 (Winter)		
3.0 ENGG 401		One of ENEL 400, ENEV 400, ENIN 400, ENPE 400, ENSE 400 or ENER 400
3.0 ENER 409		ENER 400
3.0 ENER 457		ENER 305 and PHYS 119
3.0 Approved elective		
3.0 Approved elective		
136.0		Total

## 5 Electives are required

Prerequisites are in brackets

Choose four approved electives from the lists below and one humanities/social science elective

### Approved electives - Petroleum

ENER 331 (ENER 301)	ENER 480 (ENER 431 may be taken concurrently) and ENGG 330
ENER 333 (ENER 301 ENEV 261 concurrent enrollment for both)	ENER 481 (ENER 301 may be taken concurrently)
ENER 431 (ENER 331)	ENER 483 (ENER 435)
ENER 433 (ENER 201 and ENER 333 - ENER 333 may be taken concurrently)	ENER 484 (ENER 433 may be taken concurrently)
ENER 435 (ENER 301 and ENEV 261)	ENER 485 (ENER 331, ENER 433 and ENGG 303)
ENER 437 (ENER 301 and ENER 333 - ENER 333 may be taken concurrently)	ENER 490 (ENER 301 or ENEV 320 or ENEV 223)
ENER 380 (ENIN 355)	ENER 491 (ENER 301 and ENIN 355)
ENER 381 ( ENGG 141, ENER 301)	ENER 492 (ENIN 355)

### Approved electives – Energy Transportation & Storage

ENER 373 (completion of 60 program credit hours)	ENER 475 (ENER 371)
ENER 471 ENER 305, CS 110)	ENER 477 (Completion of 60 program credit hours)
ENER 473 (Completion of 60 program credit hours)	

### Choose One Humanities/Social Science elective From the Faculty of Arts

**Total credit hours 136 (46 courses)**

### Non coop or internship term sequencing

Fall	Winter	Spring	Fall	Winter	Spring
1	2		3	4	6
Fall	Winter	Spring	Fall	Winter	
5	7		8	9	

**Courses subject to change**

**FOLLOW PROGRAM SHEET IN SEQUENCE TO AVOID DELAYING GRADUATION**

Created June 28, 2022