# **Bachelor of Applied Science in Energy Systems Engineering Energy Transportation and Storage Option**

2024-2025

Term 1 (Fall)	Prerequisites			
3.0 CHEM 104	CHEM 30 or CHEM 100 (65%)			
3.0 ENGG 100	No prereq required			
3.0 PHYS 109	MATH B/C 30 or MATH 102			
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 123	No prereq required			
3.0 ENGL 100	No prereq required			
3.0 MATH 111	MATH 110			
3.0 ENGG 140	MATH 110 (concurrent enrolment allowed)			
Term 3 (Fall)				
3.0 ENEL 280	MATH 111			
3.0 ENGG 141	ENGG 140 and MATH 111 (MATH 111 may be taken concurrently)			
	GEOL 102 concurrent enrollment			
3.0 ENER 201	allowed			
3.0 GEOL 102	No prereq required			
3.0 MATH 217	MATH 111 and MATH 122			
Term 4 (Winter, Spring/Su				
3.0 ENER 203	MATH 217 may be taken			
3.0 ENIN 233	concurrently 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 ENEV 223	ENGG 123			
3.0 ENEV 261	ENGG 141and PHYS 109 OR PHYS			
	119 and 45 credit hours			
3.0 ENGG 303	STAT 289 and ECON 201			
3.0 ENER 301	ENER 201 ENER 203 CS 110, MATH 111, MATH122, STAT			
3.0 ENGG 330	289			
Term 6 (Spring/Summer)				
3.0 BUS 260 3.0 Social Science/Hum E	ENGL 100 or ACAD 100			
3.0 Social Science/Hum E	15 credit hours or ECON 100 or			
	15 credit hours or ECON 100 or			
3.0 ECON 201	Pre-Cal 20			
3.0 ECON 201 3.0 ENIN 253	Pre-Cal 20 PHYS 109 or PHYS 119			
	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253			
3.0 ENIN 253     3.0 ENIN 350	Pre-Cal 20 PHYS 109 or PHYS 119			
3.0 ENIN 253	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently)			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471   3.0 ENER 473	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471   3.0 ENER 473   3.0 ENER 475	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 470   3.0 ENER 471   3.0 ENER 475   3.0 Approved Elective	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 470   3.0 ENER 471   3.0 ENER 475   3.0 Approved Elective   3.0 Approved Elective	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471   3.0 ENER 475   3.0 Approved Elective   3.0 Approved Elective   Term 9 (Winter)	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENIR 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471   3.0 ENER 475   3.0 Approved Elective   3.0 Approved Elective   3.0 ENGG 401	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours ENER 371 One of ENEL 400, ENEV 400, ENIN 400, ENPE 400, ENSE 400 or ENER 400			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENIR 305   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471   3.0 ENER 475   3.0 Approved Elective   3.0 ENGG 401   3.0 ENER 409	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours ENER 371 One of ENEL 400, ENEV 400, ENIN 400, ENPE 400, ENSE 400 or ENER 400 ENER 400			
3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENIR 305   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471   3.0 ENER 475   3.0 ENER 475   3.0 Approved Elective   3.0 ENGG 401   3.0 ENER 409   3.0 ENER 477	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours ENER 371 One of ENEL 400, ENEV 400, ENIN 400, ENPE 400, ENSE 400 or ENER 400			
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3.0 ENIN 253   3.0 ENIN 350   Term 7 (Winter)   3.0 ENIN 355   3.0 ENIR 305   3.0 ENER 305   3.0 ENER 371   3.0 ENER 373   3.0 GEOL 270   Term 8 (Fall)   1.0 ENER 400   3.0 ENER 471   3.0 ENER 475   3.0 ENER 475   3.0 Approved Elective   3.0 ENGG 401   3.0 ENER 409   3.0 ENER 477	Pre-Cal 20 PHYS 109 or PHYS 119 CHEM 104 and ENIN 253 (ENIN 253 may be taken concurrently) ENEV 261 and ENIN 350 ENGG 140/ENGG 141 ENER 201 and ENIN 355 co-requisite Completion of 60 program credit hours GEOL 102 Completion of all required 200,300 ENER courses and completion of 99 credit hours ENER 305, CS 110 Completion of 60 program credit hours ENER 371 One of ENEL 400, ENEV 400, ENIN 400, ENPE 400, ENSE 400 or ENER 400 ENER 400			

## **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 maybe 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 and ENER 301)	ENER 492 (ENIN 355)		

## **Approved electives - Sustainable Energy**

ENER 351 (ENER 305, ENIN 253, ENIN 355)	ENER 455 (ENER 305, PHYS 119)
ENER 451 (ENER 305, ENEL 280)	ENER 457 (ENER 305, PHYS 119)
ENER 453 (ENER 305, ENIN 355)	

**Choose one Social Science/Humanities 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** 

Revised Oct 5, 2023

# Bachelor of Applied Science in Energy Systems Engineering Energy Transportation and Storage Option 2024-2025

#### FOLLOW PROGRAM SHEET IN SEQUENCE TO AVOID DELAYED GRADUATION

**Important Information** 

Selection of a Major: application deadlines are April 1st, August 1st and December 1st.

Eligibility: Students admitted to first year with a major of ENGE apply to the major of their choice with a minimum of 8 of the 10 required courses in Year 1 which include ENGG 100, ENGG 123, ENGG 140 and ENGL 100.

Selection of Major form is available on the faculty website: https://www.uregina.ca/engineering/students/forms/index.html

ECON 100 as a Social Science/Humanities Elective. Students may use ECON 100 as a humanities elective if the course is taken before ECON 201.

Transfer Credit for ENGL LV 100 may be used as a Social Science/Humanities Elective.

Credit received for STAT 100 and STAT 200 prior to joining the Faculty of Engineering will be accepted as three credit hours for STAT 289.

STAT 289 is available for students in their major; general engineering students cannot register in STAT 289