

2021-2022 University of Wyoming College of Engineering Block Transfer for
Laramie County Community College students with an
earned Associate of Science degree in Engineering Science
UW Program: Bachelor of Science in Petroleum Engineering

This block transfer guide awards credit toward completion of the University of Wyoming's (UW) University Studies Program (USP) and specified pre-requisite courses for the College of Engineering major in Petroleum Engineering. With this policy, transfer students with a qualifying Associate of Science degree with a major in Engineering Science from Laramie County Community College (LCCC) will be eligible to apply to transfer into the specified bachelor's degree program, ready to complete the remainder of their program at UW, allowing them to potentially graduate from the university in two years (four semesters).

Students should complete a minimum of 60 credits through their associate degree coursework. Students should work closely with their academic adviser to plan their course of study to ensure that they complete the AS degree as quickly as possible. Students should be prepared to take classes during the summers.

Block 1: USP Requirements

Courses taken to satisfy General Education requirements at LCCC may not be specifically listed in this document, but they are considered essential to prepare the student for entry into the Bachelor of Science degree program at UW. Because of the quality of that foundation, students entering UW who have completed a qualifying AA, AS, AB, or ADN from LCCC receive credit toward completion of the majority of USP requirements.

Wyoming Community College (WYCC) students entering UW as of Fall 2001 who have completed an AA, AS, AB, or ADN degree from a WYCC are awarded the lower division general education requirements included in the USP, with the understanding that they have already successfully completed the statutory requirement for US/WY Government & Constitution requirement as part of the WYCC degree. All students must complete upper division writing (USP category C3) at UW.

All students must successfully complete:

USP: FYS – Students transferring with a qualifying earned associate degree earned after completing high school will have USP: FYS waived.

USP: V – All students must take a course that satisfies the statutory requirement for US/WY Government & Constitutions. Students should select a course at LCCC that will satisfy this requirement at both institutions.

USP: C3 – Communications 3, which is the upper division writing requirement. For Petroleum Engineering majors, this requirement is satisfied by completing PETE 4736 with a grade of C or higher.

For more information about USP, please refer to <https://www.uwyo.edu/usp/>.

Block 2: Pre-Transfer Prerequisite Courses

All ES and MATH courses must be completed with a grade of C- or better.

These courses are required for the AS degree and must be taken at LCCC prior to transferring to UW.

UW Course	LCCC Equivalent	Credits
MATH 2200 Calculus I	MATH 2200 Calculus I	4
MATH 2205 Calculus II	MATH 2205 Calculus II	4
MATH 2210 Calculus III	MATH 2210 Calculus III	4
MATH 2310 Applied Differential Equations	MATH 2310 Applied Differential Equations	3
CHEM 1020 General Chemistry I	CHEM 1020 General Chemistry I	4
PHYS 1220 Engineering Physics II	PHYS 1320 College Physics II	4
ES 2110 Statics	ES 2110 Statics	3
ES 2120 Dynamics	ES 2120 Dynamics	3
ES 2210 Electric Circuit Analysis (3cr)	ES 2210 Electric Circuit Analysis (4cr) <i>Course will satisfy one Technical Elective at UW</i>	3
ES 2410 Mechanics of Materials	ES 2410 Mechanics of Materials	3

Block 3: Required Non-Engineering Courses

These courses may be completed either UW or by transferring an equivalent course.

The scheduling of any of these courses should be decided with the assistance of the student's academic adviser.

UW Course	LCCC Equivalent	Credits
CHEM 1030 General Chemistry II	CHEM 1030 General Chemistry II	4
CHEM 2300 Intro to Organic Chemistry	Take at UW	4
GEOL 1100 Physical Geology	GEOL 1100 Physical Geology <i>May be taken at LCCC prior to transfer but is not required for the associate degree program.</i>	4
GEOL 4190 Petroleum Geology	Take at UW	3
Technical Electives (4 courses in addition to Electric Circuit Analysis, which will be taken at LCCC)	Take at UW <i>Courses should be chosen to ensure that student satisfies credit requirements and upper division requirements.</i>	12

This document reflects the UW curriculum as of 19 July 2021. Any changes to the UW curriculum or the LCCC course equivalencies will require this document to be updated.

Block Transfer for:
LCCC for students with an earned A.S. degree in Engineering Science
Transferring to the UW Bachelor of Science in Petroleum Engineering

Block 4: Petroleum Engineering Major

Petroleum Engineering is an ABET-accredited undergraduate degree offering by the College of Engineering. The curriculum is based upon sound preparation in fundamental sciences, mathematics, physics, chemistry, and geology. The essentials of engineering are added to this foundation: computer programming, statics, dynamics, materials science, hydraulics, and thermodynamics. To aid in developing individuals' social potential and broaden their educational background, an integrated program in humanities and social sciences is included in the curriculum.

UW College of Engineering Requirements:

- A minimum of 129 credit hours is required.
- Upper Division Credit: The Petroleum Engineering major requires a minimum of 48 hours of upper division or graduate-level coursework; 30 of these 48 credits must be earned "in residence" at UW. Elective courses should be selected to ensure that this requirement is met.
- A minimum overall GPA of 2.000 is required. Degree candidates must have an average GPA of 2.0 in Petroleum Engineering (PETE) courses attempted at UW that are applied toward graduation for the B.S. degree.
- Minimum Grade Requirements – a grade of C or better (*C- is not sufficient*):
 - USP designated courses: FYS, COM1, COM2, COM3
 - All Engineering Science (ES) courses
 - MATH courses that are prerequisites to ES & PETE courses
 - PETE 1060-Introduction to Petroleum
 - Engineering Problem Solving
 - PETE 2050-Fundamentals of Petroleum Engineering
 - PETE 4736-Petroleum Engineering Design (COM3)
- Approved electives: students must select from the approved list and have prior approval of their adviser and department head.
- Technical Elective Policy: The technical electives in the PETE curriculum can be used to complete a curriculum emphasis option or a minor. Technical Electives must be selected with the student's academic adviser's documented approval.
- Transfer credit limits: To graduate with a degree in Petroleum Engineering from UW, students must successfully complete at least 20 credit hours of required PETE courses at UW. Once a student has transferred to UW's Department of Petroleum Engineering, s/he may transfer no more than 9 additional credits from other institutions.
- Repeating courses: Students who fail a PETE class three times can no longer enroll in that class.
- Academic Suspension: Students who have been academically suspended from UW twice are no longer eligible to enroll in the Petroleum Engineering program and will be formally dismissed from the program.
- Any transfer of PETE courses requires explicit written approval from the Department.

University of Wyoming Requirements (see http://www.uwyo.edu/registrar/university_catalog/grad.html):

- Students may not take a course for S/U credit to satisfy any requirement, unless the course is offered for S/U credit only.
- University Studies Program (USP), Human Culture (H) and Physical & Natural World (PN) courses must be taken outside of the major subject but may be cross-listed with the major.
- No more than 4 semester hours of credit in physical activity courses can count toward the bachelor's degree.
- The UW Office of the Registrar provides final confirmation/approval of degree completion requirements prior to the awarding of any degree.

UW Course	Notes	Credits
ES 2310 Thermodynamics I	<i>Students should take this course at UW the summer AFTER completing their AS degree.</i>	3
ES 2330 Fluid Dynamics	<i>Students should take this course at UW the summer AFTER completing their AS degree.</i>	3
PETE 1060 Intro to PETE Problem Solving	<i>Students may request ES 1060 from LCCC to substitute for this requirement.</i>	1
PETE 2050 Fund of Petroleum Engineering	<i>Students should take this course at UW the summer AFTER completing their AS degree.</i>	3
PETE 2060 Intro Petroleum Computing		3
PETE 3025 Heat and Mass Transfer		3
PETE 3100 Rock & Fluids Lab		2
PETE 3255 Basic Drilling Engr		3
PETE 3015 Multicomponent Thermodynamics		3
PETE 3200 Reservoir Engineering		3
PETE 3265 Drilling Fluids Laboratory		3
PETE 3715 Production Engineering		3
PETE 3725 Well Bore OP		3
PETE 4320 Well Log Interpretation		3
PETE 4225 Well Testing		3
PETE 4340 Petroleum Economics		3
PETE 4736 Petroleum Engineering Design	<i>Satisfies USP: C3; minimum grade: C</i>	

Block 5: Credits to meet 129 credits minimum (credit type and number of credits needed will vary by student)

The University of Wyoming requires a total of 129 credits for the Bachelor of Science with a major in Petroleum Engineering. This must consist of a minimum of 48 upper division credits, 30 of which must be earned "in residence" at UW. College-level courses that were completed successfully at LCCC that are not specifically listed in this guide will also be transferred and counted toward the total credit required for the BS degree in accordance with UW transfer policy.

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ADDENDUM: Sample 4-Year Sequence by Term

This addendum is a sample plan of study; it is not intended to be used in place of academic advising.

First Fall Semester at LCCC (Assuming student must take MATH 1400 as a prerequisite course)

Course	Title	Satisfies	Credits	Notes
STRT 1000	Strategies for Success	Student Success	3	
MATH 1400*	College Algebra	Quantitative Literacy	3	
CHEM 1020	General Chemistry I	Natural Sciences	4	
ES 1060	Intro to Engineering	Major	3	<i>Students may request their adviser to substitute ES 1060 for PETE 1060 after transferring.</i>

First Spring Semester at LCCC

Course	Title	Satisfies	Credits	Notes
General Education	Select Course	Human Society & the Individual	3	<i>Course must satisfy USP: V at UW</i>
General Education	Select Course	Written Communication	3	<i>Most students take ENGL 1010</i>
MATH 1405*	Trigonometry	Quantitative Literacy	3	
BIOL 1010	General Biology	Natural Science	4	
General Education	Select Course	Creative Expression	3	

First Summer at LCCC (only necessary for students who have not yet taken Calculus)

Course	Title	Satisfies	Credits	Notes
MATH 2200*	Calculus I	Quantitative Literacy	4	<i>Calculus I must be completed successfully before the student's second Fall term at LCCC.</i>

Second Fall Semester at LCCC

Course	Title	Satisfies	Credits	Notes
ES 2110	Statics	Major	3	
ES 2210	Electric Circuit Analysis	Major	3	
MATH 2205	Calculus II	Major	4	
General Education	Select Course	Oral Communication	3	<i>Most students take COMM 1010</i>
General Education	Select Course	Human Cultures	3	

Second Spring at LCCC (students should graduate at the end of this term)

Course	Title	Satisfies	Credits	Notes
ES 2120	Dynamics	Major	3	
ES 2410	Mechanics of Materials	Major	3	
MATH 2210	Calculus III	Major	4	<i>Will count as a technical elective</i>
MATH 2310	Applied Differential Equations	Major	3	
PHYS 1320	College Physics II	Major	4	

RECOMMENDED Second Summer (Take at UW; if student does not take these courses in the summer between finishing at LCCC and starting at UW, will have to take the courses at UW at a later time.)

Course	Title	Satisfies	Credits	Notes
ES 2310	Thermodynamics	UW Program	3	Required for the major at UW
ES 2330	Fluid Dynamics	UW Program	3	Required for the major at UW
PETE 2050	Fundamentals of Petroleum Engr	UW Program	3	Required for the major at UW

* The Engineering program at LCCC may take longer than two years for students whose initial mathematics course is not MATH 2200 (Calculus I) due to the prerequisites of the mathematics courses. Students should enroll in the highest-level math course for which they qualify. Starting in a course above MATH 1400 will reduce the credit hours needed to complete this degree, and not require a summer semester. Students should work closely with their Advising Team.

See page 4 for the example course sequence at UW.

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First Fall Semester at UW

Course	Title	Satisfies	Credits	Notes
PETE 2060	Introduction to PETE Computing	Major	3	
PETE 3025	Heat and Mass Transfer	Major	3	
PETE 3100	Rock and Fluids Lab	Major	2	
PETE 3255	Basic Drilling Engineering	Major	3	
PETE 3015	Multicomponent Thermodynamics	Major	3	
GEOL 1100	Physical Geology	Major	4	

First Spring Semester at UW

Course	Title	Satisfies	Credits	Notes
PETE 3200	Reservoir Engineering	Major	3	
PETE 3265	Drilling Fluids Laboratory	Major	3	
PETE 3715	Production Engineering	Major	3	
PETE 3725	Well Bore Operations	Major	3	
PETE 4320	Well Log Interpretation	Major	3	

Second Fall Semester at UW

By the end of this term, students must contact the Office of the Registrar regarding degree completion/graduation.

Course	Title	Satisfies	Credits	Notes
PETE 4225	Well Test Analysis	Major	3	
PETE 4340	Petroleum Economics	Major	3	
CHEM 1030	General Chemistry II	Major	4	
PETE Tech Elec		Major		Must have PETE course prefix
PETE Tech Elec		Major		Must have GEOL course prefix

Second Spring at UW (students should graduate at the end of this term)

Course	Title	Satisfies	Credits	Notes
PETE 4736	Petroleum Engineering Design	Major	4	
GEOL 4190	Petroleum Geology	Major	3	
PETE Tech Elec		Major		Must have PETE course prefix
PETE Tech Elec		Major		<i>Speak with your adviser about course options</i>
CHEM 2300	Intro to Organic Chemistry	Major	4	