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 Civil Engineering

Block articulation 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 majors. With this policy, transfer students with a qualifying associate degree (AA, AS, AB, or ADN) with a major in Engineering Science from Laramie County Community College (LCCC) will be able 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. Additional credits may be required to complete the Pre-Requisite block (Block 2). 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.

Computer Requirement: Many courses in Civil Engineering require students to have a laptop or tablet computer to bring to class, and to be able to download various software program (normally free). See www.uwyo.edu/civil/undergrad/laptop.html for more information.

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 Civil Engineering majors, this requirement is satisfied by completing CE 3210 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 *(11 courses required)*

Advanced Civil Engineering Standing/Gateway Courses:

All undergraduate students in Civil Engineering must fulfill the Gateway Requirement prior to enrolling in any upper-division (3000-5000 level) courses taught in the College of Engineering and Applied Science. To meet the Civil Engineering Gateway Requirement, the student must earn a minimum of 57 Quality Points from any combination of the following seven classes or their equivalent:

- CHEM 1020 - General Chemistry I
- PHYS 1210 or 1220 - Engineering Physics I or Engineering Physics II
- MATH 2200 - Calculus I
- MATH 2205 - Calculus II
- ES 2110 - Statics
- ES 2120 - Dynamics
- ES 2410 - Mechanics of Materials

UW Course	LCCC Equivalent	Credits
MATH 2200 Calculus I *(Gateway Course)*	MATH 2200 Calculus I	4
MATH 2205 Calculus II *(Gateway Course)*	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 *(Gateway Course)*	CHEM 1020 General Chemistry I	4
PHYS 1220 Engineering Physics II *(Gateway Course)*	PHYS 1320 College Physics II	4
ES 1060 Intro to Engineering (1cr)	ES 1060 Intro to Engineering (3cr)	1
ES 2110 Statics *(Gateway Course)*	ES 2110 Statics	3
ES 2120 Dynamics *(Gateway Course)*	ES 2120 Dynamics	3
ES 2210 Electric Circuit Analysis (3cr) *(Applies as a technical elective in the UW major)*	ES 2210 Electric Circuit Analysis (4cr)	3
ES 2410 Mechanics of Materials *(Gateway Course)*	ES 2410 Mechanics of Materials	3

Block 3: Required Non-Engineering Courses

These courses may be completed at LCCC or at UW. The scheduling of any of these courses should be decided with the assistance of the student's academic adviser.

UW Course	LCCC Equivalent *(not all courses offered at all campuses)*	Credits
Science elective: LIFE 1010 General Biology *Additional courses are listed in the UW catalog, but those courses are not required for the associate degree at LCCC*	BIOL 1010 General Biology	4
Math/Science/Technical/Professional Electives *Choose from approved list; at least 2 credits must be Math or Science*		9
STAT 2050 Intro to Statistics	STAT 2050 Intro to Statistics	4

Block 4: Civil Engineering Major

The baccalaureate degree in Civil Engineering is an ABET-accredited undergraduate degree offering by the College of Engineering. The curriculum begins with a basic education in the physical, engineering, mathematical and computer sciences. This foundation supports further development of engineering topics that prepare the engineer to address critical societal needs. The civil engineer must also be aware of the social, humanistic, and political aspects of their projects. Therefore, course work in the humanities and social sciences is required to better understand the social aspects of public works. During the last two years of their program, students may pursue several areas of civil engineering or, depending upon their interests, more specialized courses in one or more of the specific technical areas. All students must have a comprehensive design experience.

UW College of Engineering Requirements:

- A minimum of 129 credit hours is required.
- A minimum overall GPA of 2.000 is required; graduates must have an average GPA of 2.000 (C) in courses required for the major.
- Civil Engineering students must take a minimum of 32 credits in Mathematics and Science.
- No more than two upper division courses may be transferred and applied to the CE degree.
- Once the student matriculates at UW, all additional transfer courses must be approved by your adviser.
- No more than six (6) credits of upper division Civil Engineering coursework with a grade of D may apply to the program.

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

- Students must complete 42 hours of upper division (3000-level or above) coursework, 30 of which must be from UW.
- Students may not take a course for S/U credit to satisfy any requirement, unless the course is offered for S/U credit only.
- A grade of C or above is required for University Studies Program (USP) FY, C1, C2, and C3.
- 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	*Students should take this course at UW the summer AFTER completing their AS degree.*	3
ES 2330 Fluid Dynamics	*Students should take this course at UW the summer AFTER completing their AS degree.*	3
CE 1000 VISTA Studio I	*Students may request ES 1060 to substitute for this requirement after transferring*	1
CE 1010 Civil Engineering Tools		3
CE 2000 VISTA Studio II		3
CE 2070 Engineering Surveying		3
CE 3000 Vista Studio III		3
CE 3200 Structural Analysis I		3
CE 3210 Civil Engineering Materials	*Satisfies USP: C3; minimum grade: C*	4
CE 3300 Hydraulic Engineering		3
CE 3400 Intro Environmental Engineering		3
CE 3500 Transportation Engineering		4
CE 3600 Soil Mechanics I		4
CE 4010 Civil Engineering Design	*Must be taken at UW.*	3
CE 4900 Comprehensive Design Experience	*Must be taken at UW.*	3
Professional Development Electives *(Five courses/15 credits)*	One course must be Structural Design. The other courses must cover at least 3 of the following areas: Environmental, Geotechnical, Transportation, or Water Resources.	15

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

This block will include courses required to complete the AS degree at LCCC. The University of Wyoming requires a total of 129 credits for the Bachelor of Science with a major in Civil Engineering. This must consist of a minimum of 42 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.

ADDENDUM: Sample 4-Year Sequence by Term

First Fall Semester at LCCC

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	Physical Science	4	
ES 1060	Intro to Engineering	Major	3	*Students may request their adviser to substitute ES 1060 for CE 1000*

First Spring Semester at LCCC

Course	Title	Satisfies	Credits	Notes
General Education	Select Course	Human Society & the Individual	3	*Course must satisfy USP: V at UW*
General Education	Select Course	Written Communication	3	*Most students take ENGL 1010*
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	*Calculus I must be completed successfully before the student's second Fall term at LCCC.*

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	*Most students take COMM 2010*
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	
MATH 2310	Applied Differential Equations	Major	3	
PHYS 1320	College Physics II	Major	4	

OPTIONAL Second Summer (may be taken at LCCC or UW; will reduce the credits needed at UW after transferring)

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

* *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.

Block Transfer for LCCC graduates with an A.S. degree in Engineering Science transferring to UW's B.S. in Civil Engineering

First Fall Semester at UW

Course	Title	Satisfies	Credits	Notes
CE 1010	Civil Engineering Tools	Major	3	
CE 2000	VISTA Studio II	Major	3	
CE 2070	Engineering Surveying	Major	3	
CE 3200	Structural Analysis I	Major	3	
CE 3400	Intro Environmental Engineering	Major	3	

First Spring Semester at UW

Course	Title	Satisfies	Credits	Notes
CE 3300	Hydraulic Engineering	Major	3	
CE 3500	Transportation Engineering	Major	4	
CE 3600	Soil Mechanics I	Major	4	
CE 3000	Vista Studio III	Major	3	
	Professional Development Elective *or* Structural Elective	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
STAT 2050	Intro to Statistics	Major	4	May be taken at LCCC prior to transfer
CE 3210	Civil Engineering Materials	Major	4	*Satisfies USP: C3*
	MSTP Elective	Major	4	Math/Science/Technical/Professional Elective
	Professional Development Elective *or* Structural Elective	Major	4	
	Professional Development Elective	Major	3	

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

Course	Title	Satisfies	Credits	Notes
CE 4010	Civil Engineering Design		3	
CE 4900	Comprehensive Design Experience		3	
	Professional Development Elective		3	
	Professional Development Elective		3	
	MSTP Elective	Major	4	Math/Science/Technical/Professional Elective