

# Engineering, AS

## (leading to UW Petroleum Engineering, BS)



Northwest College

### FRESHMAN YEAR

Fall Semester				Hrs	Spring Semester				Hrs
MATH	2200	Calculus I *		5	MATH	2205	Calculus II *		5
CHEM	1020	General Chemistry I		5	CHEM	1030	General Chemistry II		4
ES	1000	Orientation to Engineering *		1	ENGL	1010	English I: Introduction to Composition		3
ES	1060	Introduction to Engineering Computing (fall only)		3	ES	2110	Statics *		3
<b>TOTAL</b>				<b><u>14</u></b>	<b>TOTAL</b>				<b><u>15</u></b>

### SUMMER SEMESTER/S

							Human Condition Electives		6
							Creativity Elective		3
<b>TOTAL</b>								<b><u>9</u></b>	

### SOPHOMORE YEAR

Fall Semester				Hrs	Spring Semester				Hrs
CHEM	2320	Organic Chemistry I		4	CO/M	2010	Public Speaking		3
ES	2120	Dynamics * (fall only)		3	ES	2310	Thermodynamics (spring only)		3
ES	2410	Mechanics of Materials (fall only)		3	ES	2330	Fluid Dynamics/Mechanics		3
MATH	2210	Calculus III * (fall only)		4	MATH	2310	Applied Differential Equations I * (spring only)		3
PHYS	1320	College Physics II (fall only)		4	POLS	1000	American and Wyoming Government		3
<b>TOTAL</b>				<b><u>18</u></b>	<b>TOTAL</b>				<b><u>15</u></b>
<b>TOTAL NWC AS DEGREE HOURS</b>								<b><u>71</u></b>	

Successful completion of the 2+2 plan requires that a student remain continuously enrolled and graduate with the associate's degree from his or her respective community college. • This is a guide for course work in the major; actual course sequence may vary by student. Please refer to the online student degree evaluation. • Not all courses are offered every semester and some electives may have prerequisites. Students should review the course descriptions in the catalogs of their respective institutions and consult with their academic advisor to plan accordingly. • Academic plans and course schedules may need to be altered if ACT or Math Placement scores require a student to take pre-college courses (e.g., MATH 0900, 0921, or 0925) before taking required math or English courses.

#### Northwest College requirements:

To complete an AS degree, a minimum of 60 credit hours is required, although individual programs may have additional requirements. • Students must successfully complete core courses (denoted with an \*) with a C- or better to meet program requirements.

#### University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 48 hours of upper division (3000-level or above) coursework, 30 of which must be from the University of Wyoming. • Courses must be taken for a letter grade unless offered only for S/U. • The USP Communication 3 (C3) requirement must be completed with a grade of C or better.

#### UW College of Engineering and Applied Science requirements:

Students must have a minimum cumulative GPA of 2.0 in all engineering courses for graduation. • A grade of C or higher is required for all prerequisite courses. Students must also achieve a grade of C or better in all required mathematics courses.

# Petroleum Engineering, BS



University of Wyoming

## SUMMER SEMESTER

PETE	2050	Fundamentals of Petroleum Engineering	3
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**TOTAL**      **3**

## JUNIOR YEAR

<b>Fall Semester</b>				<b>Hrs</b>	<b>Spring Semester</b>				<b>Hrs</b>
GEOL	1100	Physical Geology (fall only)	4	PETE	3100	Rock and Fluids Lab		2	
PETE	3025	Heat & Mass Transfer	3	PETE	3200	Reservoir Engineering		3	
PETE	2060	Intro to Petroleum Engineering Computing	3	PETE	3265	Drilling Fluids Laboratory		3	
PETE	3015	Multicomponent Thermodynamics	3	PETE	3715	Production Engineering		3	
PETE	3255	Basic Drilling Engineering	3	PETE	3725	Well Bore Operations		3	
				PETE	4320	Well Log Interpretation		3	
<b>TOTAL</b>				<b><u>16</u></b>	<b>TOTAL</b>				<b><u>17</u></b>

## SENIOR YEAR

<b>Fall Semester</b>				<b>Hrs</b>	<b>Spring Semester</b>				<b>Hrs</b>
PETE	4225	Well Test Analysis	3	GEOL	4190	Petroleum Geology		3	
PETE	4340	Petroleum Economics	3	PETE	4736	Petroleum Engineering Design	C3	4	
		Technical Electives <sup>1</sup>	9			Technical Electives <sup>1</sup>		9	
<b>TOTAL</b>				<b><u>15</u></b>	<b>TOTAL</b>				<b><u>16</u></b>
<b>TOTAL UW HOURS</b>								<b><u>64</u></b>	
<b>TOTAL UW BS HOURS</b>								<b><u>135</u></b>	

### UW Petroleum Engineering Program Notes:

Petroleum Engineering requires 48 hours of upper division credit (3000-level or above) to graduate from the program. • In addition, Petroleum Engineering degree candidates must have a GPA of 2.0 in Petroleum Engineering courses attempted at UW that are applied toward graduation for the BS degree from the department.

<sup>1</sup> **Technical Electives** must be selected with an advisor's approval. • The technical electives in the Petroleum Engineering curriculum can be used to take a concentration or a minor. • Additional information about concentrations/minors and available courses can be found in the Petroleum Engineering Academic Advising Guide, a current copy of which can be found at <http://www.uwo.edu/petroleum/undergraduate/advising%20information/> • Students may choose to take one (1) of the required technical electives at NWC. • The options at NWC are: ES 2070 (Engineering Surveying), ES 2210 (Electrical Circuit Theory), or GEOL 1200 (Historical Geology).

### Transfer Credit Limit:

To graduate with a degree in Petroleum Engineering from UW, students must successfully complete at least 20 hours of required PETE courses from the University of Wyoming. • Once a student has transferred to Petroleum Engineering, s/he may take no more than 9 additional transfer credits at other institutions.