

Energy Resource Management & Development, BS

Fossil Fuels Concentration



University of Wyoming, 2015-16

Freshman Fall Semester			Hrs	Min Grade	Notes
		USP First-Year Seminar	3	C	FY
		USP US & Wyoming Constitutions	3	C	V; recommend ECON 1200 (Economics, Law, and Government).
ENGL	1010	College Composition and Rhetoric	3	C	C1
GEOL	1100	Physical Geology	4	C	PN
MATH	2200	Calculus I*	4	C	Q
Credit hours subtotal:			17		

Freshman Spring Semester			Hrs	Min Grade	Notes
ACCT	1010	Principles of Accounting I	3	C	
ERS	1300	Oil: Business, Culture, & Power	3	C	Cross listed with ECON 1300; offered spring semester.
ERS	2500	Communication Across Topics in Energy	3	C	C2; can substitute ENGL 2005 (Writing in Technology & the Sciences).
MATH	2205	Calculus II	4	C	
PHYS	1210	Engineering Physics I	4	C	PN
Credit hours subtotal:			17		

Sophomore Fall Semester			Hrs	Min Grade	Notes
CHEM	1020	General Chemistry I	4	C	
ECON	1020	Principles of Microeconomics	3	C	H
ES	1060	Introduction to Engineering Problem Solving	3	C	
MATH	2210	Calculus III	4	C	
PHIL	2345	Natural Resource Ethics	3	C	H
Credit hours subtotal:			17		

Sophomore Spring Semester			Hrs	Min Grade	Notes
CHEM	1030	General Chemistry II	4	C	
ES	2310	Thermodynamics I	3	C	
ES	2330	Fluid Dynamics	3	C	
MATH	2310	Applied Differential Equations I	3	C	
PETE	2050	Introduction to Petroleum Engineering	3	C	
Credit hours subtotal:			16		

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 *University Catalog* and consult with their academic advisor to plan accordingly.

University of Wyoming requirements:

Students must have a minimum cumulative GPA of 2.0 to graduate. • Students must complete 42 hours of upper division 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. • H and PN courses must be taken outside of the major subject, but can be cross-listed with the major.

Energy Resource Management and Development Program Notes:

This degree is a collaborative effort between the School of Energy Resources and the Colleges of Arts and Sciences, Agriculture and Natural Resources, Business, Engineering and Applied Science, and Law, as well as with the Haub School of Environment and Natural Resources. • Academic plans and course schedules may need to be altered if Math Placement scores require Math 0900, 0921, 0925, 1400, 1405, or 1450. • Students must earn a letter grade of C or better in each course and a cumulative gpa of 2.0 or better to graduate. • Students are strongly encouraged to complete an industry internship (a minimum gpa of 3.0 is typically required). Opportunities are also available for undergraduate research, a study abroad experience, or a summer field trip. Please consult with an academic advisor. • Students majoring in Energy Resource Management and Development can earn a double major by completing courses required for the Environment and Natural Resources program. Or students looking to create a focus for their coursework can add a minor to the program. Please consult with an academic advisor about these options.

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Junior Fall Semester			Hrs	Min Grade	Notes
MGT	3210	Management and Organization	3	C	
PETE	3255	Basic Drilling Engineering	3	C	
SOIL	3130	Environmental Quality	3	C	Offered fall semester.
STAT	2050	Fundamentals of Statistics	4	C	
		Upper Division Economics Elective **	3	C	
Credit hours subtotal:			16		

Junior Spring Semester			Hrs	Min Grade	Notes
FIN	3250	Corporate Finance	3	C	
PETE	3100	Rock and Fluids Lab	2	C	
PETE	3200	Reservoir Mechanics	3	C	Offered spring semester.
PETE	3265	Drilling Fluids Lab	3	C	
GEOL	4835	Applied/Exploration Geophysics	3	C	Can substitute GEOL 4190 (Petroleum Geology).
Credit hours subtotal:			14		

Junior Summer Semester			Hrs	Min Grade	Notes
		Practicum ***	3	S	
Credit hours subtotal:			3		

Senior Fall Semester			Hrs	Min Grade	Notes
ENR	4500	Risk Analysis	3	C	
ENR	4501	Risk Analysis Lab	1	C	Concurrent enrollment in ENR 4500 required.
ENR	4750	ENR Law and Policy	3	C	Permission of instructor required; offered fall semester.
REWM	4200	Reclamation of Drastically Disturbed Lands	3	C	Permission of instructor required; offered fall semester.
		Negotiation Elective ****	3	C	
		Upper Division Elective	3	C	Consult with an academic advisor for courses from an approved list.
Credit hours subtotal:			16		

Senior Spring Semester			Hrs	Min Grade	Notes
DSCI	4260	Project Management	3		
ERS	4900	Energy Resource Management Capstone	3	C3	
		Electives	6		Consult with an academic advisor for courses from an approved list.
Credit hours subtotal:			12		

TOTAL CREDIT HOURS: 128

Energy Resource Management and Development Program Notes con't:

* Requires MATH ACT \geq 27, MATH SAT \geq 600, Math Placement Exam \geq 5, or \geq C in MATH 1405 or 1450. (University Standard)

** **Upper Division Economics Elective.** Select one (1) from the following:

- AGEC 3750 Natural Resource Planning and Economics (3 hrs) (offered spring semester of odd years)
- AGEC 4600 Community Economic Analysis (3 hrs)
- AGEC 4720 Water Resource Economics (3 hrs)
- ECON 4420 Seminar: Economics for ENR (2-4 hrs)

*** **Practicum.** Complete any combination of courses below to equal three (3) credit hours:

- ENR 3700 Wyo Conservation Corps Practicum (1-2 hrs)
- ERS 4970 Internship (1-3 hrs)
- ERS 4960 Energy Field Studies (2 hrs)
- ERS 4975 Global Experience in Energy (2-4 hrs)
- ERS 4965 Undergraduate Research (1-3 hrs)

**** **Negotiation Elective.** Select one (1) from the following:

- AGEC/ENR 4550 Negotiation Analysis (3 hrs) (offered fall semester)
- AGEC/ENR 4450 Negotiation (3 hrs) (offered spring semester)