

MS Course Requirements for Unconventional Resources (UR) Concentration

1. Plan A: Thesis Research Option for Students with a BS degree in Petroleum Engineering

Items	Course Description	Credits
Core Courses	Select at least 5 courses from the following: PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5300 - Reservoir Simulation PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering PETE 5810 - Unconventional Gas Production PETE 5215 - Rock Mechanics PETE 5800 - Shale Reservoir Development	15
Required Course	PETE 5355 - Mathematical Methods	3
Seminar	PETE 5890 - Graduate Seminar	2
Electives	Graduate-approved elective courses (PETE or other), selected by the student, with approval of the student's advisor.	6
Thesis	PETE 5960 - Thesis Research in UR	4
	TOTAL	30

2. Plan B: Course Work Option for Students with a BS degree in Petroleum Engineering

Items	Course Description	Credits
Core Courses	Select at least 6 courses from the following: PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5300 - Reservoir Simulation PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering PETE 5810 - Unconventional Gas Production PETE 5215 - Rock Mechanics PETE 5800 - Shale Reservoir Development	18
Required Course	PETE 5355 - Mathematical Methods	3
Seminar	PETE 5890 - Graduate Seminar	1
Electives	Graduate-approved elective courses (PETE or other), selected by the student, with approval of the student's advisor.	6
Creative Component	PETE 5970 – Project Evaluation Report in UR	2
	TOTAL	30