MS Course Requirements

Graduate students with a BS degree from an accredited program may pursue their MS degree using one of two options. The requirements for each degree option are as follows:

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

Items	Course Description	Credits
Core Courses	*At least three courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	9
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. Suggested Elective Courses.	12
Thesis	PETE 5960 - Thesis Research	4
	TOTAL	**30**

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

Items	Course Description	Credits
Core Courses	*At least three courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	9
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. Suggested Elective Courses.	14
Creative Component	PETE 5970 – Research Report	2
	TOTAL	**30**

MS Course Requirements

3. Plan A: Thesis Research Option for Chemical & Mechanical Engineering Majors

Items	Course Description	Credits
Core Courses	*At least four graduate courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	12
Required Course	PETE 5355 - Mathematical Methods	3
Required Undergraduate Courses	*At least three undergraduate courses from the following:* PETE 3200 - Reservoir Engineering PETE 3715 - Production Engineering PETE 3255 - Basic Drilling Engineering	9
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. GEOL 4190 is to be included in the electives. Suggested Elective Courses.	10
Thesis	PETE 5960 - Thesis Research	4
	TOTAL	**40**

4. Plan B: Course Work Option for Chemical & Mechanical Engineering Majors

Items	Course Description	Credits
Core Courses	*At least four graduate courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	12
Required Course	PETE 5355 - Mathematical Methods	3
Required Undergraduate Courses	*At least three undergraduate courses from the following:* PETE 3200 - Reservoir Engineering PETE 3715 - Production Engineering PETE 3255 - Basic Drilling Engineering	9
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. GEOL 4190 is to be included in the electives. Suggested Elective Courses.	12
Creative Component	PETE 5970 – Design Report	2
	TOTAL	**40**

MS Course Requirements

5. Plan A: Thesis Research Option for Dual Degree Program - MBA/MS in Petroleum Engineering for Students with a BS in Petroleum Engineering

Items	Course Description	Credits
Core courses	*At least three courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	9
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. MBA graduate-approved elective courses as follows: MBAM 5XXX, MBAM 5301, and MBAM 5305	3 9
Thesis	PETE 5960 - Thesis Research	4
	TOTAL	**30**

6. Plan B: Course Work Option for Dual Degree Program - MBA/MS in Petroleum Engineering for Students with a BS in Petroleum Engineering

Items	Course Description	Credits
Core courses	*At least three courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	9
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. MBA graduate-approved elective courses as follows: MBAM 5XXX, MBAM 5301, and MBAM 5305	5 9
Creative Component	PETE 5970 – Research Report	2
	TOTAL	**30**

MS Course Requirements

7. Plan A: Thesis Research Option for Dual Degree Program - MBA/MS in Petroleum Engineering for Students with a BS in Chemical or Mechanical Engineering

Items	Course Description	Credits
Core courses	*At least four graduate courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	12
Required Course	PETE 5355 - Mathematical Methods	3
Required Undergraduate Courses	*At least three undergraduate courses from the following:* PETE 3200 - Reservoir Engineering PETE 3715 - Production Engineering PETE 3255 - Basic Drilling Engineering	9
Seminar	PETE 5890 - Graduate Seminar	2
Electives	Approved elective: GEOL 4190 MBA graduate-approved elective courses as follows: MBAM 5XXX, MBAM 5301, and MBAM 5305	3 9
Thesis	PETE 5960 - Thesis Research	4
	TOTAL	**42**

8. Plan B: Course Work Option for Dual Degree Program - MBA/MS in Petroleum Engineering for Students with a BS in Petroleum Chemical or Mechanical Engineering

Items	Course Description	Credits
Core courses	*At least four graduate courses from the following:* PETE 5010 - Transport Phenomena PETE 5020 - Thermodynamics PETE 5060 - Flow through Porous Media PETE 5080 - Interfacial Phenomena PETE 5310 - Fundamentals of Enhanced Oil Recovery PETE 5350 - Advanced Reservoir Engineering	12
Required Course	PETE 5355 - Mathematical Methods	3
Required Undergraduate Courses	*At least three undergraduate courses from the following:* PETE 3200 - Reservoir Engineering PETE 3715 - Production Engineering PETE 3255 - Basic Drilling Engineering	9
Seminar	PETE 5890 - Graduate Seminar	2
Electives	Approved elective: GEOL 4190 MBA graduate-approved elective courses as follows: MBAM 5XXX, MBAM 5301, and MBAM 5305	3 9
Creative Component	PETE 5970 – Design Report	3
	TOTAL	**42**