

PhD Course Requirements

Graduate students may enroll in the PhD program in four different tracks. The requirements for each degree track are as follows:

1. Students with a BS degree in Petroleum Engineering from an accredited institution

| Items | Course Description | Credits |
|-------------------------|---|-----------|
| Core courses | <i>At least three (3) courses from the following:</i> 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 courses | PETE 5355 - Mathematical Methods PETE 5090 - Research Methods | 3 3 |
| Seminar | PETE 5890 - Graduate Seminar | 6 |
| Electives | Graduate-approved elective courses (PETE or other), selected by the student with approval of the student's advisor. | 21 |
| Research | PETE 5980 - Dissertation Research | 30 |
| | TOTAL (minimum) | 72 |

2. Students with MS degree in Petroleum Engineering from UW

| Items | Course Description | Credits |
|---------------------|---|-----------|
| Transferable | Plan A MS courses, excluding thesis research | 26 |
| Core courses | PETE 5090 - Research Methods | 3 |
| Seminar | PETE 5890 - Graduate Seminar | 4 |
| Electives | Graduate-approved elective courses (PETE or other), selected by the student with approval of the student's advisor. | 9 |
| Research | PETE 5980 – Dissertation Research | 30 |
| | TOTAL (minimum) | 72 |

PhD Course Requirements

3. Students with MS degree in Petroleum Engineering from another accredited institution

| Items | Course Description | Credits |
|-------------------------|--|-----------|
| Transferable | Approved MS courses | 14 |
| Core courses | <i>At least four (4) courses from the following:</i> 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 PETE 5355 - Mathematical Methods | 12* |
| Required courses | PETE 5090 - Research Methods | 3 |
| Seminar | PETE 5890 - Graduate Seminar | 4 |
| Electives | Graduate-approved elective courses (PETE or other), selected by the student with approval of the student's advisor. | 9 |
| Research | PETE 5980 - Dissertation Research | 30 |
| | TOTAL (minimum) | 72 |

4. Students with MS degree in a geoscience from another accredited institution

| Items | Course Description | Credits |
|-----------------------------------|---|-----------|
| Transferable | Approved MS and non-degree graduate courses in geosciences | 12 |
| Core courses | <i>At least six (6) courses from the following:</i> 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 PETE 5355 - Mathematical Methods | 18* |
| Required courses | PETE 5090 - Research Methods | 3 |
| Required Undergrad Courses | <i>At least eight (8) undergraduate courses:</i> <i>Six (6) credits in advanced mathematics and</i> <i>18 credits in petroleum engineering, including:</i> PETE 3200 - Reservoir Engineering PETE 3715 - Production Engineering PETE 3255 - Basic Drilling Engineering | 6 18 |
| Seminar | PETE 5890 - Graduate Seminar | 4 |
| Electives | Graduate-approved elective courses (PETE or other), selected by the student with approval of the student's advisor. | 9 |
| Research | PETE 5980 – Dissertation Research | 30 |
| | TOTAL (minimum) | 88 |

*Some or all of these credit hours can be transferred by petition, provided they are non-degree credits.