

**REQUIREMENTS FOR THE MASTER OF SCIENCE
MEWBOURNE COLLEGE OF EARTH AND ENERGY
THE UNIVERSITY OF OKLAHOMA**

| Academic Year |
|---------------------------------------------------------------------------------------------------------|
| For Students Entering the Oklahoma State System for Higher Education Summer 2024 through Spring 2025 |

| General Requirements | |
|----------------------------------------|----|
| Minimum Total Hours (Thesis) | 30 |
| Minimum Total Hours (Non-Thesis) | 36 |

| Program |
|----------------------------------------------------------------------------|
| Petroleum Engineering (standard) M765-Q512 Master of Science |

Minimum Total Hours (Thesis): 30
Minimum Total Hours (Non-Thesis): 36

Program Code: M765-Q512

- Students may apply only 3 credit hours of S/U graded courses (excluding thesis) toward a master's degree.

Thesis Option

The Thesis option requires one of the following: 1. Publish a paper in a refereed journal or conference proceeding. 2. Paper accepted for publication in a journal. 3. Oral presentation of a paper at a conference. 4. Oral presentation as part of the department graduate seminar. The student must be listed as first or second author and the topic must relate to the student's thesis. The Graduate College will not authorize a student to defend until the graduate liaison has confirmed the student has met this requirement.

| Code | Title | Credit Hours |
|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|--------------|
| Core Courses ¹ | | |
| P E 5353 | Advanced Drilling | 3 |
| P E 5523 | Advanced Production Engineering | 3 |
| P E 6573 | Advanced Reservoir Engineering | 3 |
| Applied Math | | |
| Choose one course from the following or other approved applied math course: | | 3 |
| MATH 4163 | Introduction to Partial Differential Equations (G) | |
| P E 5563 | Mathematical Simulation Models | |
| P E 5990 | Special Studies (Petroleum Inverse Problems) | |
| Thesis Research | | |
| P E 5980 | Research for Master's Thesis | 6 |
| Electives | | |
| Choose 12 hours of electives approved by the graduate liaison, including a maximum of 3 hours of special studies | | 12 |
| Total Credit Hours | | 30 |

Non-Thesis Option

| Code | Title | Credit Hours |
|-----------------------------------------------------------------------------|---------------------------------|--------------|
| Core Courses ¹ | | |
| P E 5353 | Advanced Drilling | 3 |
| P E 5523 | Advanced Production Engineering | 3 |
| P E 6573 | Advanced Reservoir Engineering | 3 |
| Applied Math | | |
| Choose one course from the following or other approved applied math course: | | 3 |

| | | |
|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-----------|
| MATH 4163 | Introduction to Partial Differential Equations (G) | |
| P E 5563 | Mathematical Simulation Models | |
| P E 5990 | Special Studies (Petroleum Inverse Problems) | |
| Electives | | |
| Choose 24 hours of electives approved by the graduate liaison, including a maximum of 3 hours of special studies | | 24 |
| Total Credit Hours | | 36 |

¹ With approval of the graduate liaison, other graduate-level coursework appropriate for the degree may substitute for Core Courses on the basis of undergraduate or professional background.

General Requirements for all Master's Degrees

The master's degree requires the equivalent of *at least* two semesters of satisfactory graduate work and additional work as may be prescribed for the degree.

All coursework applied to the master's degree must carry graduate credit.

Master's degree programs which require a thesis consist of *at least* 30 credit hours. All non-thesis master's degree programs require *at least* 30 credit hours.

Credit transferred from other institutions must meet specific criteria and is subject to certain limitations.

Courses completed through correspondence study may *not* be applied to the master's degree.

To qualify for a graduate degree, students must achieve an overall grade point average of 3.0 or higher in the degree program coursework and in all resident graduate coursework attempted. A student must also have at least a 3.0 in all coursework (including undergraduate coursework if any).

Additional information for master's degree students may be found in the Graduate College Bulletin.

More information in the catalog: (<http://ou-public.courseleaf.com/mewbourne-earth-energy/mewbourne-petroleum-geological-engineering/petroleum-engineering-standard-master-science/>).