### REQUIREMENTS FOR THE MASTER OF SCIENCE

**MEWBOURNE COLLEGE OF EARTH AND ENERGY**

**THE UNIVERSITY OF OKLAHOMA**

### GENERAL REQUIREMENTS

<table>
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<tr>
<th>Requirement</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Minimum Total Hours (Thesis)</td>
<td>30</td>
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<tr>
<td>Minimum Total Hours (Non-Thesis)</td>
<td>36</td>
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### REQUIRED COURSES

**CORE COURSES (11 hours):**

- **Geological Engineering** - two courses from the following:
  - GE 5143, Fluid Flow in Porous Media
  - GE 5243, Introduction to Rock Mechanics
  - GE 6263, Advanced Rock Mechanics I

- **Applied Mathematics** - one course from the following:
  - MATH 4163, Introduction to Partial Differential Equations
  - ENGR 5723, Engineering Analysis for Digital Computers
  - PE 5563, Mathematical Simulation Models
  - AME 5763, Introduction to Finite Element Methods

- **Graduate Seminar** - 2 hours, or one credit hour of each from:
  - GE 5971, Graduate Seminar
  - GE 5990, Special Studies

**THESIS RESEARCH (Thesis students only, 4 hours):**

- GE 5980, Research for Master's Thesis

**ELECTIVES (15-25 hours):**

**Thesis Students:**
15 hours of approved electives with at least 9 hours in PGE

**Non-thesis Students:**
25 hours of approved electives with at least 18 hours in PGE

**Note:**
Students may apply only 3 credit hours of S/U graded courses (excluding thesis hours) to the MS in Geological Engineering.

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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 32 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).

A student who has done satisfactory graduate work and has earned a 3.0 grade point average may file for master's candidacy.

Program effective SU05. check sheet version 12/2014