Master of Science Degree Program in Geophysics

1. Admission to the Master of Science (M. S.) Program in Geophysics

The objective of the Master of Science (M.S.) degree program at the University of Oklahoma is to prepare the student for a successful professional career in geophysics. The requirements for the achievement of this goal are a broad, sound background in geology/geophysics, a demonstrated ability to design and carry out a research project, and the ability to express the results of this work clearly and logically. The structure of the M.S. degree program has been designed to accomplish these goals.

The M.S. program in Geophysics is structured to encourage students with strong science, math, or engineering backgrounds to apply by being flexible in terms of coursework required. Based on their background, the M.S. committee for such a student will require a set of courses that will allow them to achieve knowledge equivalent to the B. S. degree in Geophysics at the University of Oklahoma within one year. This plan must be agreed upon prior to admission and must be approved by the graduate affairs committee of the school.

2. Minimum Course Work Requirements for Degree

The M.S. degree in geophysics requires at least 26 hours of course work (not including deficiencies-assessed by the student’s advisor and/or M.S. Committee) and 4 hours of thesis research. At least 14 of the 26 hours must be in 5000- and 6000-level courses. To ensure breadth in the student’s program, the graduate course work must include:

Graduate credits must include the following:

1. Three credit hours in geology
2. Nine credit hours in geophysics*
3. Four credit hours in thesis (GPHY 5980)

*Three geophysics (GPHY) courses selected from: 4124 – Environmental and Geotechnical Geophysics II; 4874 – Seismic Exploration; 5003 – Rock Physics for Seismic Applications; 5102 – Advanced Field Geophysics; 5243 – Computational Geosciences; 5364 – Paleomagnetism; 5513 – Introduction to Seismic Processing; 5613 – Introduction to Seismic Stratigraphy; 5713 – Solid Earth Geophysics; 5723 – Tectonophysics; 5864 – Gravimetric and Magnetic Exploration; 6013 – Near-Surface Geophysical Imaging; 6174 – Advanced Seismic Exploration; 6523 – Advanced Seismic Processing; 6623 – Advanced Stratigraphy; 6874 – Applied Seismic Modeling or others approved by advisor.

3. Thesis Proposal

A proposal signed by the student’s M.S. Committee and Graduate Liaison must be on file, preferably by the end of the student’s second semester.

4. Annual Progress Report

It is the student’s responsibility to complete the annual Graduate Student Progress report, to secure the written approval of his/her M.S. committee, and to file the completed and approved report in April of each year of matriculation.

5. Colloquium and Thesis Defense

Each student must give a presentation concerning the results of his/her research in a colloquium open to students and faculty. The colloquium must take place during the regular fall or spring semesters. The student will also have a Defense of Thesis oral examination before graduation, supervised by the student’s M.S. Committee. The colloquium may immediately precede the thesis defense. A reading copy must be provided to all members of the committee and the Graduate College at least 14 days prior to the defense. The defense shall be announced at least one week in advance. The Coordinator of Administrative Student Services, Donna Mullins, will be notified in a timely manner and supplied with the time, date, and thesis title so that a notice may be published one week before the colloquium/defense. Students are strongly encouraged to present their work at national conferences and publish their thesis in peer-reviewed journals.