

# GEOLOGICAL ENGINEERING, MASTER OF SCIENCE

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

Program Code: M470

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

## Thesis Option

Code	Title	Credit Hours
<b>Core Courses</b>		
<i>Geological Engineering</i>		
Choose two of the following:		6
G E 5143		
G E 5243	Introduction to Rock Mechanics	
G E 6263	Advanced Rock Mechanics I	
<i>Applied Mathematics</i>		
Choose one of the following:		3
MATH 4163	Introduction to Partial Differential Equations	
ENGR 5723		
P E 5563	Mathematical Simulation Models	
AME 5763	Introduction to the Finite Element Method	
<i>Graduate Seminar</i>		
Choose 2 hours, or one credit hour from each of the following:		2
G E 5971		
G E 5990	Special Studies	
<b>Thesis Research</b>		
G E 5980	Research for Master's Thesis	4
<b>Electives</b>		
Choose 15 hours of approved electives with at least 9 hours in PGE		15
Total Credit Hours		30

## Non-Thesis Option

Code	Title	Credit Hours
<b>Core Courses</b>		
<i>Geological Engineering</i>		
Choose two of the following:		6
G E 5143		
G E 5243	Introduction to Rock Mechanics	
G E 6263	Advanced Rock Mechanics I	
<i>Applied Mathematics</i>		
Choose one of the following:		3
MATH 4163	Introduction to Partial Differential Equations	
ENGR 5723		
P E 5563	Mathematical Simulation Models	

AME 5763	Introduction to the Finite Element Method	
<i>Graduate Seminar</i>		
Choose 2 hours, or one credit hour from each of the following:		2
G E 5971		
G E 5990	Special Studies	
<b>Electives</b>		
Choose 25 hours of approved electives with at least 18 hours in PGE		25
Total Credit Hours		36

- Program effective SU05. Check sheet version 12/2014.

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).

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