

MS in Geology Curriculum Mapping

Program Introduction

We offer a Master of Science in Geology, which began in Fall 2000. The program aims to provide students with a thorough knowledge of fundamental geologic principles rooted in field- and/or laboratory-based experiences. The M.S. degree requires 30 units of which 21 must be at graduate level (500 level). The 9-12 core units include general advanced concepts and research methods (GEOL 500 – 4 units), graduate seminar (GEOL 590 – 2 units), and thesis research (GEOL 598 – 3-6 units). Students must take 18-21 units from elective geology and/or related fields “focus” courses (can include up to 6 units of 400 level courses), which are approved on the required study plans prior to completing 9 total graduate units. A public, oral thesis defense is required.

Student Learning Outcomes (SLOs)

A graduate of the MS in Geology program should be able to:

- Develop a hypothesis, collect, test, and analyze data, and summarize results.
- Communicate geological concepts to peers and/or public both orally and written.

Degree SLOs are completed at various levels as students:

- Take advanced courses within their discipline.
- Attend and interacting in research seminars at CSUF and other local institutions and professional societies.
- Present research at regional and international professional conferences.
- Conduct independent research that includes:
 - a) writing a research proposal;
 - b) production of a written thesis that describes the problem, methodology, and results of the student’s research.
 - c) dissemination of the results through publication in peer-reviewed journals and/or presentations at regional and/or international conferences.
 - d) a public oral defense of the thesis.

Curriculum Map: I=Introduced; D=Developed; P=Practiced at a high level

	Develop a hypothesis, collect, test and analyze data, and summarize results	Communicate geological concepts to peers and/or public both orally and written
Geol 500	I	I
Geol/Rel. Fields 4xx-5xx Electives	D/P	D/P
Geol 590	D	D
Geol 598	P	P
Thesis Defense	P	P