The purpose of the USC Viterbi School of Engineering Master of Science program in Petroleum Engineering is to produce graduates who are broadly educated as well as highly adaptable. The program prepares students for careers in the oil and gas industries where subsurface resources recovery involves the technology of economically developing and producing subterranean reservoirs of oil, gas, steam, and hot water and designing underground waste disposal facilities. This technology relies on basic concepts of physics, chemistry, mathematics, geology, fluid mechanics, thermodynamics, and economics. The learning objectives for the Master of Science degree program in Petroleum Engineering are:

- Upon completion of the USC Master of Science degree program in Petroleum Engineering, students will be able to obtain employment in organizations that have at their core functions the exploration, discovery, drilling, completion and production of subsurface resources.
- Upon completion of the USC Master of Science degree program in Petroleum Engineering, students will be able to engage in continuous personal and professional development through life-long learning.
- Upon completion of the USC Master of Science degree program in Petroleum Engineering, students will be able to assume leadership roles in their employment organization and related professional societies.