

Service Learning (SL): Under the advisement of a faculty mentor, students will have the opportunity to form teams that will work with and for an approved community not-for-profit organization — or client — to solve practical engineering problems. For example, a team composed of both lower and upper division students might work together to design, develop, implement and test an information system to serve the needs of a local non-profit service organization. Students will develop skills to create organizational structures within the team; a communications structure with their client organization; and a strategic plan, mission statement and work plan to guide the activities of the team. Interacting closely and continuously with the client, students will learn about the needs of the organization, delineate project objectives, formulate work plans, conduct design activities, implement resulting solutions, and monitor and assess program effectiveness. Students' performance and contribution to the team effort will be formally assessed through regular written reports and panel interviews.

In addition to obtaining practical experience that complements their formal course work, students will gain experience in working in teams, organizing and writing reports and proposals, interacting with clients, performing and evaluating basic engineering designs, and formally evaluating outcomes. Because teams and team activities will extend across multiple semesters and years, clients will be assured of continuity of technical support and ongoing attention to their needs. Students electing to enroll in the UC Merced Service Learning initiative may earn up to two credits per semester for participation, depending on their leadership position within the team for that semester. Not more than a total of 10 service learning credits may be used to fulfill the degree requirement, including up to 6 units that may be counted as general education units. Engineering fundamentals, major area upper division courses, and technical electives requirements are specific to each major. These are presented in the following section on majors.