

CHICO STATE UNIVERSITY
ASSESSMENT SUMMARY UPDATE

PROGRAM: B.S. Mechatronic Engineering

Year of review	Student Learning Outcome	Describe assessment activity done this year for this SLO	Findings	Based on the results or evidence, what action was taken regarding program improvements?
2016-2017	SLO a: <i>An ability to apply knowledge of mathematics, science, and engineering</i>	Assessment was conducted in MECH 340. The student demonstrates competency by achieving 60% correct or better in three exams.	84% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO b1: An ability to design experiments to evaluate the performance of a mechatronic system or component with respect to specifications	Assessment was conducted in MECA 440B. This is a direct pass/fail assessment of individual writing of design test plan.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO b2: An ability to conduct experiments, as well as analyze and interpret data	Assessment was conducted in MECA 380. The student achieves competency by achieving C- or better grade on lab report assignment.	96% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO c: An ability to design a mechatronic system, component, or process to meet desired needs	Assessment was conducted in MECA 486. The student demonstrates proficiency with an average grade of C+ or better in three design projects.	46% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO d: An ability to function effectively as members of multidisciplinary teams	Assessment was conducted in MECA 440A. The student is graded by faculty advisor on individual performance in the group project.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO e1: An ability to define engineering problems	Assessment was conducted in MECA 440A. This is a pass/fail evaluation of problem definition in design report.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.

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	SLO e2: An ability to solve engineering problems	Assessment was conducted in MECA 482. This is based on the grade of an in-class exam.	78% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO f: An understanding of professional ethical responsibility	Assessment was done in CIVL 495.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO g1: An ability to communicate technical matters effectively in oral form	Assessment was conducted in MECA 440A. This is a pass/fail assessment of performance in design reviews.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO g2: An ability to communicate technical matters effectively in written form	Assessment was conducted in MECH 340. The student demonstrates competency by a score of 60% or better in written design report.	97% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO g3: An ability to communicate technical matters effectively in graphical form	Assessment was conducted in MECH 340. The student demonstrates competency by a score of 60% or better for drawings in design report.	97% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO h: The broad education necessary to understand the impact of engineering solutions in a global and societal context	Assessment was done in CIVL 495.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO i: A recognition of the need for, and an ability to engage in, life-long learning	Assessment was done in CIVL 495.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO j: A knowledge of contemporary issues	Assessment was done in CIVL 495.	100% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.
	SLO k: An ability to use the techniques, skills, and modern mechatronic engineering tools necessary for engineering practice	Assessment was conducted in MECA 380. The student demonstrates competency by achieving an average grade of C- or better in LabVIEW assignments in reports.	96% pass rate.	No actions taken, the assessment result did not warrant major actions for program improvement.

