



ALAMO
COLLEGES

PALO ALTO COLLEGE

Industrial Automation Assistant Level I AAS Certificate

Career and Technical Education Degrees and Certificates

#1	<p>Industrial Automation Assistant Level I AAS Certificate Student Learning Outcome</p> <p>Identify fluid power symbols; demonstrate knowledge of basic fluid power theory; demonstrate knowledge of component operation; generate basic fluid power circuits; and demonstrate fluid power circuits using electrical and manual controls.</p>
	<p>Courses in the degree plan that address this outcome</p> <p>ELMT 1305</p>
	<p>Assessment Measure for this Outcome</p> <p>The final exam in ELMT 1305 Basic Fluid Power Course.</p>
	<p>Achievement Target for this Measure</p> <p>70 % of the students will achieve a C or better on the ELMT 1305 Basic Fluid Power final.</p>
	<p>Findings</p> <p>Spring 2008: 6 students took the exam and 6 students passed for 100% pass rate. Spring 2009: 8 students took the exam and 7 students passed for 87.5% pass rate. Fall 2009: 4 students took the exam and 4 students passed for 100% pass rate.</p>
	<p>Related Action Plans</p> <p>Develop a test blue print for the final Offer the course on a rotating semester basis for larger class sizes and better interaction among the students. Increase hands-on activity.</p>
#2	<p>Industrial Automation Assistant Level I AAS Certificate Student Learning Outcome</p> <p>Develop existing electromechanical systems to meet specific performance criteria; troubleshoot electromechanical systems; and compile documentation to meet industrial standards.</p>
	<p>Courses in the degree plan that address this outcome</p> <p>ELMT 2341</p>
	<p>Assessment Measure for this Outcome</p> <p>The final exam in the ELMT 2341 Electromechanical Systems Course.</p>
	<p>Achievement Target for this Measure</p>



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	70 % of the students will achieve a C or better on the ELMT 2341 Electromechanical Systems final.
	Findings Fall 2007: 9 students took the exam and 4 students passed for 44.4% pass rate. Spring 2009: 3 students took the exam and 3 students passed for 100% pass rate. Spring 2010: 4 students took the exam and 4 students passed for 100% pass rate.
	Related Action Plans Develop a test blue print for the final Offer the course on a rotating semester basis for larger class sizes and better interaction among the students. Increase hands-on activity. Reduced the amount of work so that students can focus on the quality of the assignment. Explore additional avenues for enhancing course.
#3	Industrial Automation Assistant Level I AAS Certificate Student Learning Outcome Develop ladder logic to utilize advanced PLC functions; compose a ladder logic program to demonstrate an advanced industrial control application; apply advanced programming techniques for specialized applications.
	Courses in the degree plan that address this outcome ELMT 2339
	Assessment Measure for this Outcome The final exam in the ELMT 2339 Advanced Programmable Logic Controllers Course.
	Achievement Target for this Measure 70 % of the students will achieve a C or better on the ELMT 2339 Advanced Programmable Logic Controllers final.
	Findings Spring 2007: 7 students took the exam and 5 students passed for 71.4% pass rate. Spring 2009: students took the exam and 7 students passed for 100% pass rate. Spring 2010: 4 students took the exam and 4 students passed for 100% pass rate
	Related Action Plans Develop a test blue print Offer the course on a rotating semester basis for larger class sizes and better interaction among the students. Increase hands-on activity. Reduced the amount of work so that students can focus on the quality of the assignment. Explore additional avenues for enhancing course.