



ALAMO  
COLLEGES

PALO ALTO COLLEGE

### Industrial Automation Associate Level I AAS Certificate

Career and Technical Education Degrees and Certificates

#1	<p>Industrial Automation Associate 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 get a D 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>Create 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 Associate Level I AAS Certificate Student Learning Outcome</p> <p>Maintain and repair power transmission systems involving gear, V-belt, and chain drives; describe positive displacement and centrifugal pumping systems and compressors; and identify symptoms, causes, and cures for mechanical problems. Demonstrate maintenance, repair, and overhaul procedures on common process pumps and compressors; and apply industrial safety standards.</p>
	<p>Courses in the degree plan that address this outcome</p> <p>IEIR 1343</p>
	<p>Assessment Measure for this Outcome</p> <p>The final exam in IEIR 1343 Industrial Equipment Maintenance</p>
	<p>Achievement Target for this Measure</p>



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	70% of the students will get a C or better on the IEIR 1343 Industrial Equipment Maintenance final
	Findings Spring 2010: 5 students took the exam and 5 students passed for 100% pass rate.
	Related Action Plans Create a test blue print for the final Monitor student pre-requisites. Offer tutoring. Reduced the amount of work so that students can focus on the quality of the assignment.
#3	Industrial Automation Associate Level I AAS Certificate Student Learning Outcome  Construct and analyze DC and AC circuits from simple to complex; perform test measurements; and utilize a multimeter and oscilloscope to differentiate between two AC signals with respect to voltage, current, and power.
	Courses in the degree plan that address this outcome  CETT 1409
	Assessment Measure for this Outcome  The final exam in the CETT 1409 DC-AC Circuits Course.
	Achievement Target for this Measure 70% of the students will get a C or better on the the DC-AC Circuits final
	Findings Fall 2009: 9 students took the exam and 7 students passed for 77.7% pass rate. Spring 2010: 3 students took the exam and 3 students passed for 100% pass rate.
	Related Action Plans Create a test blue print for the final Increase hands-on activity. Explore additional avenues for enhancing course. Reduced the amount of work so that students can focus on the quality of the assignment.