## PLO ASSESSMENT 4-YEAR TIMELINE REPORT

**PLO** 

**ECC - INDUSTRY AND TECHNOLOGY DIVISION** 

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2013-14 (Fall 2013)	El Camino: PLOs (IND) - Computer Aided Design/Drafting	PLO #1 Creating and Interpreting Engineering Drawings	Upon completion of the Computer Aided/Design Drafting program, the student will be able to utilize CADD software to create and interpret engineering drawings at an industry entry skill level.
2013-14 (Spring 2014)	El Camino: PLOs (IND) - Construction Technology	PLO #1 Safely Operating Industry Tools	Upon successful completion of the courses in this program, students will be able to identify and safely operate tools commonly used in the construction and/or cabinetmaking industry.
2013-14 (Spring 2014)	El Camino: PLOs (IND) - Cosmetology	PLO #1 Licensure Exam	Upon completion of the El Camino College Cosmetology program, students will pass the written portion of the California State Board of Cosmetology Licensure Examination with a score of 70% or higher.
2013-14 (Spring 2014)	El Camino: PLOs (IND) - Environmental Technology	PLO #1 Understanding Environmental Challenges	The successful student will gain an appreciable understanding of the factors that have led to the environmental challenges we face today. The student will gain the necessary skills to discern, analyze data from various sources, and be able to formulate knowledgeable opinions that can lead to multiple solutions with varying criteria sets.
2013-14 (Spring 2014)	El Camino: PLOs (IND) - Nutrition and Foods	PLO #1 Comprehensive Food Plans	Upon completion of the Nutrition and Foods program, the student will be able to outline the overall nutritional needs of children and adults and develop comprehensive food plans to ensure nutritional needs are being met.
2014-15 (Fall 2014)	El Camino: PLOs (IND) - Air Conditioning and Refrigeration	PLO #1 Safety Knowledge and Skills	Students successfully completing air conditioning and refrigeration program, whether in the certificate program or degree program, will acquire and be able to use specific safety knowledge and skills relating to the air conditioning and refrigeration discipline and will be able to apply those skills to specific job requirements.
2014-15 (Fall 2014)	El Camino: PLOs (IND) - Architecture	PLO #1 Construction Documents	Upon completion of a course of study in Architecture, a student will be able to design a building and draw the construction documents and specifications necessary for contractors to build it.

Upon completion of this discipline's course of study, the student will be able pass at

least one ASE certification test or practice test in Auto Collision Repair (B2, B3, B4, B5

**Painting** or B6) 2014-15 (Fall 2014) El Camino: PLOs (IND) -PLO #2 I-CAR Welds Upon completion of this discipline's course of study, the student will be able pass the official I-CAR MIG welding qualification test or ECC imitation. Welds include butt weld, Auto Collision Repair and **Painting** lap weld and plug weld in flat and vertical positions. PLO #3 Damage Repair Estimate Upon completion of this discipline's course of study, the student will be able to examine 2014-15 (Fall 2014) El Camino: PLOs (IND) -Auto Collision Repair and a damaged vehicle and create an informal written estimate of the parts, tools, materials **Painting** and time needed to repair the vehicle.

PLO #1 ASE Certification Tests

**PLO Name** 

**PLO Assessment** 

2014-15 (Fall 2014)

Cycle

**Unit Name** 

El Camino: PLOs (IND) -

Auto Collision Repair and

2014-15 (Fall 2014) El Camino: PLOs (IND) - Automotive Technology Skills Upon completion of a course of study in ATEC, the student working in the field will develop updated knowledge and skills in the automotive field.

2014-15 (Fall 2014) El Camino: PLOs (IND) - PLO #3 Updated Knowledge and develop updated knowledge and skills in the automotive field.

2014-15 (Fall 2014) PLO #1 Safely Operating Industry Upon successful completion of this program, students will be able to identify and safely Page 1 of 5

PLO Assessment Cycle	Unit Name	PLO Name	PLO
	Electronics and Computer Hardware and Technology	Equipment	operate/manipulate various types of electronic hand tools and test equipment.
2014-15 (Fall 2014)	El Camino: PLOs (IND) - Fashion	PLO #2 Creating Garment Sketches	Upon successful completion of the courses in the fashion department (both AS degrees and certificates) the student will be able to use Adobe Illustration (Industry level software) to create garment sketches.
2014-15 (Fall 2014)	El Camino: PLOs (IND) - Nutrition and Foods	PLO #2 Sources of Nutrients	Upon completion of the Nutrition and Foods program, Students know the sources and functions of macronutrients and micronutrients.
2014-15 (Spring 2015)	El Camino: PLOs (IND) - Architecture	PLO #2 Design Drawings	Upon completion of the Architecture Program, a student will be able to create conceptual diagrams that illustrate the main idea in the solution of the design problem given to the student.
2014-15 (Spring 2015)	El Camino: PLOs (IND) - Computer Aided Design/Drafting	PLO #2 Creating and Interpreting 3D CADD Models	Upon completion of the Computer Aided/Design Drafting program, the student will be able to utilize CADD software to create 3D CADD models of detail parts and assemblies of various manufactured products and their components at an industry entry skill level.
2014-15 (Spring 2015)	El Camino: PLOs (IND) - Cosmetology	PLO #2 Cosmetology Practicum	Upon completion of the El Camino College Cosmetology program, students will independently perform a permanent wave procedure on a mannequin, following manufacturer's directions for applying the waving solution and neutralizer to hair.
2014-15 (Spring 2015)	El Camino: PLOs (IND) - Electronics and Computer Hardware and Technology	PLO #2 Using industry Level Skills	Upon successful completion of this program, students will be able to, accurately identify and analyze various types of Electronic/Electrical Circuits using both calculations, simulation, and test and measurements.
2014-15 (Spring 2015)	El Camino: PLOs (IND) - Environmental Technology	PLO #2 Sustainable Urban Environment	The student will be able to identify and analyze systems for improvement, and discuss the various issues concerning urban infrastructure and the systems that allow our urban environment to function and thrive in a sustainable and resilient manner.
2014-15 (Spring 2015)	El Camino: PLOs (IND) - Nutrition and Foods	PLO #3 Using Published Nutrition Facts	Upon completion of the Nutrition and Foods program, Students compare canned/packaged food products using the information on the Nutrition Facts Panel, ingredient list, and Daily Values
2014-15 (Spring 2015)	El Camino: PLOs (IND) - Welding	PLO #1 Success in the Welding Industry	Success in the Welding Industry Upon completion of the Welding program, students will be able to demonstrate knowledge of the skills needed for success in the welding industry.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Administration of Justice	PLO #1 The 4th Amendment	Upon completion of a course of study in administration of justice, a student will be able to recognize unlawful behavior and take appropriate enforcement action properly utilizing probable cause as required in the 4th amendment of the US Constitution
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Administration of Justice	PLO #2 Crime Reports	Upon completion of a course of study in administration of justice, students will be able to properly document a criminal investigation by writing a crime report of a simulated crime. The report will include the correct elements of the crime involved, will include the relevant facts, be accurate and complete and will be grammatically correct.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Administration of Justice	PLO #3 Interpreting Profiles	Students completing a course of study in administration of justice will be able to correctly interpret a behavioral profile of a criminal offender, and will be able to identify and explain at least 3 crime causation theories that explain the behavior described in the profile.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Administration of Justice	PLO #4 Certificates, Graduation, and Transfer	Students completing a course of study in administration of justice will successfully earn a certificate/graduate/transfer to 4 year universities and will successfully compete for jobs in which they can apply legal, investigative and communicative skills acquired in the administration of justice program.
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PLO Assessment Cycle	Unit Name	PLO Name	PLO
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Air Conditioning and Refrigeration	PLO #2 Installing Servicing and Repairing Systems	Upon completion of a course of study in air conditioning and refrigeration, a student will be able to install, service, and repair ACR systems as required by the industry guidelines.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Architecture	PLO #3 Computer Software	Upon completion of the Architecture Program, a student will be able to use various computer software to generate various kinds of drawings to show the process of a project from Design Sketches, Massing Models, Building Perspectives to Construction Documents.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Automation, Robotics, and Manufacturing (ETEC, MTEC, MTT)	PLO #1 Solving Engineering Problems	Students will apply principles from mathematics, physics, and chemistry to solve applied problems in engineering.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Electronics and Computer Hardware and Technology	PLO #3 Using Industry Reporting and Analysis Protocols	Upon successful completion of this program, students will be able to incorporate data and analysis reporting protocols, using either "paper" or "paperless" environments, similar to data reporting and analysis used by many Electronics Manufacturers and Service Organizations.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Fashion	PLO #3 Entry Level Position in the Fashion Industry	Upon successful completion of the courses in the fashion department (both AS degrees and certificates) the student will be able to identify entry level positions and related duties in the fashion industry.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Fire and Emergency Technology	PLO #3 Knowledge of Laws and Regulations	Upon completion of the Fire and Emergency Technology program, the student will show knowledge of federal and state laws, regulations and codes pertaining to safety and efficiency in all risk emergencies and scenarios pertaining to fire, safety, and or medical services.
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Nutrition and Foods	PLO #3 Using Published Nutrition Facts	Upon completion of the Nutrition and Foods program, Students compare canned/packaged food products using the information on the Nutrition Facts Panel, ingredient list, and Daily Values
2015-16 (Fall 2015)	El Camino: PLOs (IND) - Welding	PLO #2 Safety Knowledge and Skills	Upon completion of the Welding program, whether in the certificate program or degree program, students will acquire and be able to use specific safety knowledge and skills relating to welding discipline and will be able to apply those skills to specific job requirements
2015-16 (Spring 2016)	El Camino: PLOs (IND) - Air Conditioning and Refrigeration	PLO #3 Pressure Testing and Charging Systems	Upon completion of a course of study, students in air conditioning and refrigeration will be able to properly pressure test, evacuate, and charge ACR system.
2015-16 (Spring 2016)	El Camino: PLOs (IND) - Air Conditioning and Refrigeration	PLO #4 Attaining Certificates, Degrees, Transferring and Attaining Jobs	Students completing a course of study in air conditioning and refrigeration will successfully earn a certificate/graduate/transfer to 4 year universities and will successfully compete for jobs in which they can apply their knowledge and communicative skills acquired in the air conditioning and refrigeration program.
2015-16 (Spring 2016)	El Camino: PLOs (IND) - Computer Aided Design/Drafting	PLO #3 Product Development	Upon Completion of the Computer Aided/Design Drafting program, the student will be able to function as a member of a product development team.
2015-16 (Spring 2016)	El Camino: PLOs (IND) - Construction Technology	PLO #2 Project Estimating	Upon successful completion of the Construction Technology program, students will be able to reference a set of plans and produce a complete materials list.
2015-16 (Spring 2016)	El Camino: PLOs (IND) -	PLO #3 Advanced Cosmetology	Upon completion of the El Camino Cosmetology program, students will successfully
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PLO Assessment Cycle	Unit Name	PLO Name	PLO
	Cosmetology		perform three unique haircuts requested by salon owners as part of the interview/hiring process.
2015-16 (Spring 2016)	El Camino: PLOs (IND) - Environmental Technology	PLO #3 Green Building Techniques & Materials	The student will gain a "hands on" understanding of the various methods of construction and application specifically relating to existing and emerging alternative and green building technologies and materials. This knowledge base can lead to jobs and careers in multiple areas, including architecture, construction, mechanical system development, automobile technology, fashion, real estate development and various fields in agriculture.
2015-16 (Summer 2016)	El Camino: PLOs (IND) - Nutrition and Foods	PLO #2 Sources of Nutrients	Upon completion of the Nutrition and Foods program, Students know the sources and functions of macronutrients and micronutrients.
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Auto Collision Repair and Painting	PLO #1 ASE Certification Tests	Upon completion of this discipline's course of study, the student will be able pass at least one ASE certification test or practice test in Auto Collision Repair (B2, B3, B4, B5 or B6)
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Auto Collision Repair and Painting	PLO #2 I-CAR Welds	Upon completion of this discipline's course of study, the student will be able pass the official I-CAR MIG welding qualification test or ECC imitation. Welds include butt weld, lap weld and plug weld in flat and vertical positions.
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Auto Collision Repair and Painting	PLO #3 Damage Repair Estimate	Upon completion of this discipline's course of study, the student will be able to examine a damaged vehicle and create an informal written estimate of the parts, tools, materials and time needed to repair the vehicle.
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Automation, Robotics, and Manufacturing (ETEC, MTEC, MTT)	PLO #2 Digital and Analog Sensor Technologies	Upon completion of the courses in this discipline, the student will be able to identify different digital and analog sensor technologies.
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Automotive Technology	PLO #1 ASE Certification Test Exam	Given an in class exam, based on readings, classroom discussions and demonstrations, the student will be able to take a Pass/No Pass practice exam, or an official ASE Certification Test exam with a grade equivalent of "pass".
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Fashion	PLO #4 Apparel Presentations	Upon successful completion of the courses in the fashion department, the student will be able to create a professionally sketched complete apparel group presentation using color, texture and technical flats.
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Fire and Emergency Technology	PLO #2 Analyzing, Appraising and Evaluation Fire Incidents	Demonstrate the ability to analyze, appraise, evaluate fire incidents; Explain size-up, the incident command system, the 10 standard fire orders, the 18 situations that shout watch out and identify the common factors associated with injuries and deaths in the line of duty.
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Nutrition and Foods	PLO #1 Comprehensive Food Plans	Upon completion of the Nutrition and Foods program, the student will be able to outline the overall nutritional needs of children and adults and develop comprehensive food plans to ensure nutritional needs are being met.
2016-17 (Fall 2016)	El Camino: PLOs (IND) - Welding	PLO #3 Attaining Certificates, Degrees, Transferring and Attaining Job	Upon completion of the Welding program, students will successfully earn a certificate/graduate/transfer to 4 year universities and will successfully compete for jobs in which they can apply their knowledge and communicative skills acquired in welding program.
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PLO Assessment Cycle	Unit Name	PLO Name	PLO
` . • ,	El Camino: PLOs (IND) - Construction Technology	PLO #3 Project Layout and Construction	Upon successful completion of the Construction Technology program, students will be able to participate in the layout and construction of a residential structure.
	El Camino: PLOs (IND) - Environmental Technology	·	The student will be able to develop landscape based site plans dealing with environmental and green building code compliance, and develop planting and irrigation plans that can lead to the successful building of sustainable and regenerative landscapes and building sites.
2016-17 (Spring 2017)	El Camino: PLOs (IND) - Fashion		Upon successful completion of the courses in the fashion department (both AS degrees and certificates) the student will be able to identify basic sewing techniques.
,	El Camino: PLOs (IND) - Automation, Robotics, and Manufacturing (ETEC, MTEC, MTT)	PLO #3 Industry Standards	Upon completion of the courses in this discipline, the student will be able to follow and build robotic devices and components in accordance with industry standard schematics and diagrams.
	El Camino: PLOs (IND) - Automotive Technology	PLO #2 Skills for Entry Level Positions	Upon completion of a course of study in ATEC, the student will develop knowledge and skills for job entry positions in the automotive field.
	El Camino: PLOs (IND) - Fire and Emergency Technology	PLO #1 Minimum Qualifications	Identify minimum qualifications and the needed entry skills for the fire fighter position.
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