COURSE SLO ASSESSMENT 4-YEAR TIMELINE

Unit Name	Course SLO Assessment Cycle	Course ID	Course Name	Course SLO Title	Course SLO Statement
El Camino: Course SLOs (IND) - Computer Aided Design/Drafting	2013-14 (Fall 2013)	ECC: CADD 5	Introduction to Mechanical Drafting	SLO #2 Creating Missing Orthographic Views	Given an incomplete engineering drawing of a simple machined part, the student will be able to utilize the AutoCAD software to produce the missing views in standard 3rd angle orthographic projection.
	2013-14 (Fall 2013)	ECC: CADD 5	Introduction to Mechanical Drafting	SLO #3 Working From Isometric Views	Given an isometric drawing of a simple machined part, the student will be able to utilize the AutoCAD software to produce front, top and right side views in standard 3rd angle orthographic projection.
	2014-15 (Fall 2014)	ECC: CADD 31	Orientation to CATIA	SLO #1 Creating CATIA V5 Simple 3D Solid Models	Given a fully dimensioned multi-view engineering drawing of a machined part, the student will be able to utilize the appropriate functions within the CATIA V5 software to construct a 3D solid model of the part.
	2014-15 (Fall 2014)	ECC: CADD 31	Orientation to CATIA	SLO #2 Creating CATIA V5 Simple Engineering Drawings	Given a 3D solid model of a simple machined part, the student will be able to utilize the appropriate functions within the CATIA software to create a fully dimensioned multi-view engineering drawing of the part.
	2014-15 (Fall 2014)	ECC: CADD 31	Orientation to CATIA	SLO #3 Creating CATIA V5 Simple Assembly Models	Given a set of 3D solid models of the component parts of a simple assembly, the student will be able to utilize the appropriate functions within the CATIA software to create a fully constrained assembly model.
	2014-15 (Spring 2015)	ECC: CADD 32	Product Modeling with CATIA	SLO #1 3D Model and Engineering Drawing	Given a fully dimensioned multi-view engineering drawing of a complex machined part, utilize the appropriate functions within the CATIA V5 software to construct a 3D solid model of the part, and engineering drawing of the product containing this component.
	2014-15 (Spring 2015)	ECC: CADD 37	Advanced CATIA Functions	SLO #1 3D Wireframe Modeling	Given a fully-dimensioned multi-view engineering drawing of a machined part, the student will be able to utilize the appropriate functions within the CATIA V5 software to construct a 3D wireframe model of the part.
	2014-15 (Spring 2015)	ECC: CADD 43	Design Process and Concepts	SLO #1 Design Team	Given sufficient design requirement definition, the student shall be able to plan, sketch and create complete engineering drawing packages of sample products work individually as well as functioning effectively as a member of a design team.
	2015-16 (Fall 2015)	ECC: CADD 28	Parametric Solid Modeling and Assemblies	SLO #1 Multi-view Drawing - 3D Solid Model	Given a fully dimensioned multi-view engineering drawing of a machined part, the student will be able to utilize the appropriate functions within the Inventor software to construct a 3Dsolid model of the part.
	2015-16 (Fall 2015)	ECC: CADD 33	Analyses and Simulations with CATIA	SLO #1 Knowledgeware and Generative Sheet Metal Functions	Given sufficient product definition information, the student will be able to create tabulated models and flat pattern models utilizing the Knowledgeware and Generative Sheet Metal functions within the CATIA V5 software.
	2015-16 (Fall 2015)	ECC: CADD 45	Geometric Dimensioning and Tolerancing	SLO #1 Detecting Errors and Omissions	Given sample engineering drawing whose dimensioning and tolerancing is done with Geometric Dimensioning and Tolerancing,

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	2015-16 (Fall 2015)	ECC: CADD 45	Geometric Dimensioning and Tolerancing	SLO #1 Detecting Errors and Omissions	the student will be able to point out errors and omissions in the application of dimensions and tolerances.
	2015-16 (Fall 2015)	ECC: CADD 5	Introduction to Mechanical Drafting	SLO #1 Creating Dimensioned Orthographic Drawings	Given sufficient product definition information of a simple machined part, the student will be able to utilize the AutoCad software to produce a dimensioned orthographic drawing of the item.
	2015-16 (Fall 2015)	ECC: CADD 7	Wireframe with Surfaces, Solid Modeling and Assemblies	SLO #1 Creating Simple Machined Part-3D Solid Model	Given sufficient product definition information of a simple machined part, the student will be able to utilize the AutoCad software to produce a 3D solid model of the item.
	2016-17 (Spring 2017)	ECC: CADD 28	Parametric Solid Modeling and Assemblies	SLO #2 3D Solid Model - Multi-view Drawing	Given a 3D solid model of a simple machined part, the student will be able to utilize the appropriate functions within the Inventor software to create a fully-dimensioned multi-view engineering drawing of the part.
	2016-17 (Spring 2017)	ECC: CADD 37	Advanced CATIA Functions	SLO #2 Utilizing Surfacing Functions	Given a fully dimensioned multi-view engineering drawing of a complex molded part, the student will be able to utilize the appropriate functions within the CATIA V5 software to construct a 3D surface model of the part.
	2016-17 (Spring 2017)	ECC: CADD 43	Design Process and Concepts	SLO #2 Product Definition Packages	Given sufficient design requirement definition, the student will be able to plan, sketch and create complete two dimensional engineering drawing packages of sample products.
	2016-17 (Spring 2017)	ECC: CADD 5	Introduction to Mechanical Drafting	SLO #2 Creating Missing Orthographic Views	Given an incomplete engineering drawing of a simple machined part, the student will be able to utilize the AutoCAD software to produce the missing views in standard 3rd angle orthographic projection.
	2016-17 (Spring 2017)	ECC: CADD 7	Wireframe with Surfaces, Solid Modeling and Assemblies	SLO #2 Modifying Simple Machined Part-3D Solid Model	Given a 3D solid model of a simple machined part and a dimensioned drawing defining necessary changes, the student will be able to utilize the AutoCad software to modify the 3D solid model to conform to the new requirements.
	2017-18 (Fall 2017)	ECC: CADD 31	Orientation to CATIA	SLO #2 Creating CATIA V5 Simple Engineering Drawings	Given a 3D solid model of a simple machined part, the student will be able to utilize the appropriate functions within the CATIA software to create a fully dimensioned multi-view engineering drawing of the part.
	2017-18 (Fall 2017)	ECC: CADD 32	Product Modeling with CATIA	SLO #2 Creating CATIA V5 Complex Engineering Drawings	Given a 3D solid model of a complex machined part, the student will be able to utilize the appropriate functions within the CATIA software to create a fully dimensioned multi-view engineering drawing of the part.
	2017-18 (Fall 2017)	ECC: CADD 33	Analyses and Simulations with CATIA	SLO #2 Kinematic Simulations	Given a CATIA Product model of a simple mechanism, the student will be able to create kinematic simulations utilizing the Kinematics Simulation function within the CATIA V5 software.
	2017-18 (Fall 2017)	ECC: CADD 45	Geometric Dimensioning and Tolerancing	SLO #2 Revising Incomplete Drawings	Given an incomplete sample engineering drawing, the student will be able to revise the drawing to completely specify desired geometry and permissible variation of geometric characteristics utilizing appropriate symbology per the ASME Y14.5 Standard.

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	2017-18 (Spring 2018)	ECC: CADD 28	Parametric Solid Modeling and Assemblies	SLO #3 Animating Assemblies	Given a 3D solid model of a simple mechanism, the student will be able to utilize the appropriate functions within the Inventor software an animated simulation of the mechanism's function.
	2017-18 (Spring 2018)	ECC: CADD 37	Advanced CATIA Functions	SLO #3 Joining Surfaces	Given a 3D surface model of two separate surfaces of a complex molded part, the student will be able to utilize the appropriate functions within the CATIA V5 software to construct a third surface blending the original two. The new surface will be tangent continuous with both of the original surfaces.
	2017-18 (Spring 2018)	ECC: CADD 43	Design Process and Concepts	SLO #3 Design Team	Given sufficient task definition, the student will be able to function as a member of a design team charged with planning and creating a complete two dimensional engineering drawing package of a simple product.
	2017-18 (Spring 2018)	ECC: CADD 5	Introduction to Mechanical Drafting	SLO #3 Working From Isometric Views	Given an isometric drawing of a simple machined part, the student will be able to utilize the AutoCAD software to produce front, top and right side views in standard 3rd angle orthographic projection.
	2017-18 (Spring 2018)	ECC: CADD 7	Wireframe with Surfaces, Solid Modeling and Assemblies	SLO #3 Creating Assembly Models	Given sufficient product definition information of a mechanical assembly and its components, the student will be able to utilize the AutoCad software to create 3D solid models of the individual components and bring them together into an assembly model.
	2018-19 (Fall 2018)	ECC: CADD 31	Orientation to CATIA	SLO #3 Creating CATIA V5 Simple Assembly Models	Given a set of 3D solid models of the component parts of a simple assembly, the student will be able to utilize the appropriate functions within the CATIA software to create a fully constrained assembly model.
	2018-19 (Fall 2018)	ECC: CADD 32	Product Modeling with CATIA	SLO #3 Creating CATIA V5 Complex Assembly Models	Given a set of 3D solid model s of the component parts of a complex assembly, the student will be able to utilize the appropriate functions within the CATIA software to create a fully constrained assembly model.
	2018-19 (Fall 2018)	ECC: CADD 33	Analyses and Simulations with CATIA	SLO #3 Stress Analysis	Given a CATIA Product model of a simple mechanism, the student will be able to perform stress analyses utilizing Stress Analysis functions within the CATIA V5 software.
	2018-19 (Fall 2018)	ECC: CADD 45	Geometric Dimensioning and Tolerancing	SLO #3 Applying Geometric Controls	Given a sample engineering drawing of a machined part without dimensioning and tolerancing and a description of the part's function, the student will be able to correctly apply dimensions, tolerances and datum identifiers.
	2018-19 (Spring 2019)	ECC: CADD 28	Parametric Solid Modeling and Assemblies	SLO #1 Multi-view Drawing - 3D Solid Model	Given a fully dimensioned multi-view engineering drawing of a machined part, the student will be able to utilize the appropriate functions within the Inventor software to construct a 3Dsolid model of the part.
	2018-19 (Spring 2019)	ECC: CADD 37	Advanced CATIA Functions	SLO #1 3D Wireframe Modeling	Given a fully-dimensioned multi-view engineering drawing of a machined part, the student will be able to utilize the appropriate functions within the CATIA V5 software to construct a 3D wireframe model of the part.

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	2018-19 (Spring 2019)	ECC: CADD 43	Design Process and Concepts	SLO #1 Design Team	Given sufficient design requirement definition, the student shall be able to plan, sketch and create complete engineering drawing packages of sample products work individually as well as functioning effectively as a member of a design team.
	2018-19 (Spring 2019)	ECC: CADD 5	Introduction to Mechanical Drafting	SLO #1 Creating Dimensioned Orthographic Drawings	Given sufficient product definition information of a simple machined part, the student will be able to utilize the AutoCad software to produce a dimensioned orthographic drawing of the item.
	2018-19 (Spring 2019)	ECC: CADD 7	Wireframe with Surfaces, Solid Modeling and Assemblies	SLO #1 Creating Simple Machined Part-3D Solid Model	Given sufficient product definition information of a simple machined part, the student will be able to utilize the AutoCad software to produce a 3D solid model of the item.
	2019-20 (Fall 2019)	ECC: CADD 31	Orientation to CATIA	SLO #1 Creating CATIA V5 Simple 3D Solid Models	Given a fully dimensioned multi-view engineering drawing of a machined part, the student will be able to utilize the appropriate functions within the CATIA V5 software to construct a 3D solid model of the part.
	2019-20 (Fall 2019)	ECC: CADD 32	Product Modeling with CATIA	SLO #1 3D Model and Engineering Drawing	Given a fully dimensioned multi-view engineering drawing of a complex machined part, utilize the appropriate functions within the CATIA V5 software to construct a 3D solid model of the part, and engineering drawing of the product containing this component.
	2019-20 (Fall 2019)	ECC: CADD 33	Analyses and Simulations with CATIA	SLO #1 Knowledgeware and Generative Sheet Metal Functions	Given sufficient product definition information, the student will be able to create tabulated models and flat pattern models utilizing the Knowledgeware and Generative Sheet Metal functions within the CATIA V5 software.
	2019-20 (Fall 2019)	ECC: CADD 45	Geometric Dimensioning and Tolerancing	SLO #1 Detecting Errors and Omissions	Given sample engineering drawing whose dimensioning and tolerancing is done with Geometric Dimensioning and Tolerancing, the student will be able to point out errors and omissions in the application of dimensions and tolerances.