

Parametric Modeling Certificate

Revised

Certificate Number 90-606-2

Description:

The Parametric Modeling Certificate introduces the student to 3D parametric modeling using SolidWorks software and Autodesk Inventor. Topics covered include extruded, revolved, swept and lofted features, fully dimensioned orthographic drawings of models, special drawing views, surfacing and Autodesk Inventor.

Requirements for Certificate Entry:

- Competency in Windows Operating System.

Certificate Completers Will be Able to:

- Create parametric models, assemblies and two-dimensional drawings using SolidWorks software.

Curriculum

CATALOG #	DESCRIPTION	CREDITS
10-614-113 <i>Offered in:</i> <i>Fall 2008</i> <i>Spring 2009</i>	2D Essentials... an introduction to technical communication, annotation, geometric construction, model, orthographic and pictorial, section and auxiliary views and dimensioning. Knowledge integral to Model Building.	2
10-614-136 <i>Offered in:</i> <i>Summer 2008</i> <i>Fall 2008</i> <i>Spring 2009</i>	3D Modeling with Inventor... develop the knowledge and skills, to create Solid Models using Autodesk Inventor; creating and editing 3D drawings; rapid prototyping; manipulating data.	1
10-606-166 <i>Offered in:</i> <i>Fall 2008</i> <i>Spring 2009</i>	SolidWorks Loft/Surface... necessary to create and manipulate lofted and surface component parts using SolidWorks software. Course content includes lofting, sweeping complex contours, and surfaces. (Prerequisite: 10-606-163, Solidworks-Intermediate)	1
10-606-162 <i>Offered in:</i> <i>Summer 2008</i> <i>Fall 2008</i> <i>Spring 2009</i>	Solidworks Fundamentals... terminology, software operation and interface, creating basic models, casting and forging models. (Corequisite: 10-606-119, Sketching-Technical; OR 10-614-113 2D Essentials; Familiarity with Windows file management)	1
10-606-165 <i>Offered in:</i> <i>Fall 2008</i> <i>Spring 2009</i>	Solidworks Sheet Metal... create and manipulate sheet metal parts using SolidWorks software. Course content includes basic sheetmetal commands, forming tools, sheetmetal drawings, designing sheetmetal parts in the flat state, and topdown sheetmetal assemblies. (Prerequisite: 10-606-164, Solidworks Assembly/Drawing)	1
10-606-164 <i>Offered in:</i> <i>Fall 2008</i> <i>Spring 2009</i>	Solidworks-Assemblies/Draw... manipulate configurations, create assemblies, and create dimensioned orthographic drawings using SolidWorks software. (Prerequisite: 10-606-163, SolidWorks Intermediate)	1
10-606-163 <i>Offered in:</i> <i>Fall 2008</i> <i>Spring 2009</i>	Solidworks-Intermediate... creating and manipulating intermediate models using SolidWorks software. Course content includes models requiring the use of revolved and swept features, equations, and thin walled parts. (Prerequisite: 10-606-162, Solidworks Fundamentals)	1
<i>Certificate Total</i>		8

For more information, please contact: The Trades and Technical Division, (920) 498-5461 or (800) 422-NWTC, extension 5461, or contact Donna Meves, Flexible Learning Manager, (920) 498-6872 or (920) 498-5431, donna.meves@nwtc.edu