

Industrial Design Technology

Associate of Applied Science in Industrial Design Technology

Certificate of Completion in Industrial Design Technology: SolidWorks Design Specialist

Certified SolidWorks Associate Certificate

MasterCam Industry Certificate



For More Information, Contact:
**The Industrial Technology Division at
GateWay Community College**

Phone (602) 286-8613

<http://industry.gatewaycc.edu/>



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Welcome to the Industrial Design Technology Program at GateWay Community College

If you have any questions about the enclosed program material, please feel free to contact any of the following program contacts:

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Registration Checklist

1	Submit 'Student Information Form' www.my.maricopa.edu	South Building, A&R Office Room SO1146	602.286.8200
2	Request Official Transcripts from all other educational agencies to be forwarded to Admissions & Records	South Building, A&R Office Room SO1146	602.286.8200
3	Take Course Placement Test (if applicable) Some courses and programs require test scores prior to enrollment. No fee required_BRING PICTURE ID_Call for times	South Building, Testing Center Room SO1136	602.286.8160
4	Apply for Financial Aid and Scholarships, if interested http://enroll.gatewaycc.edu/FinancialAid/ApplyForFinancialAid/ http://enroll.gatewaycc.edu/FinancialAid/Scholarships/	South Building, Financial Aid Room SO118	602.286.8300
5	Meet with an Industrial Technology Program Advisor Explore your program options, obtain registration advisement and setup a program of study plan.	South Building, Industrial Tech Room SO1300	602.286.8613
6	Register for Courses	South Building, A&R Office Room SO1146	602.286.8200
7	Pay Tuition and Fees Payment Plans and Payment Extensions Available. Ask for Details.	South Building, Cashiers Office Room SO1107	602.286.8277
8	Obtain Student ID, Optional Student Life_BRING PICTURE ID	Main Building, Student Life Room MA1132	602.286.8141
9	Obtain Parking Decal, Required Required if parking a vehicle on campus	South Building, A&R Office Room SO1146	602.286.8200
10	Purchase Books Bookstore or online at www.efollet.com	Main Building, Bookstore Room MA1200	602.286.8400

Industrial Design Technology

Career Description

Use the very latest three-dimensional design software to develop new products, create prototypes and product simulations, and manufacture the finished design. You will gain a working knowledge in the field of product design, product development and rapid part production. You will learn competency and technical expertise on industry specific 3D Solid Design software, Computer Aided Manufacturing (CAM) software, 3D printers and Multi-Axis Computer Numerical Control (CNC) controlled machines. The core-specialty of the program is hands-on experience with CAD, CAM, CNC and 3D printing.

How To Get Started

The Certificate of Completion in Industrial Design Technology: Design Specialist-SolidWorks requires 25 credits, including a Solid Design internship in one of five specialty areas. The Associate in Applied Science Degree in Industrial Design Technology requires 62-63 credit hours for completion, including the internship. When you complete our program, you will be industry-certified by NIMS, Haas, Mastercam and SolidWorks.

Employment Outlook

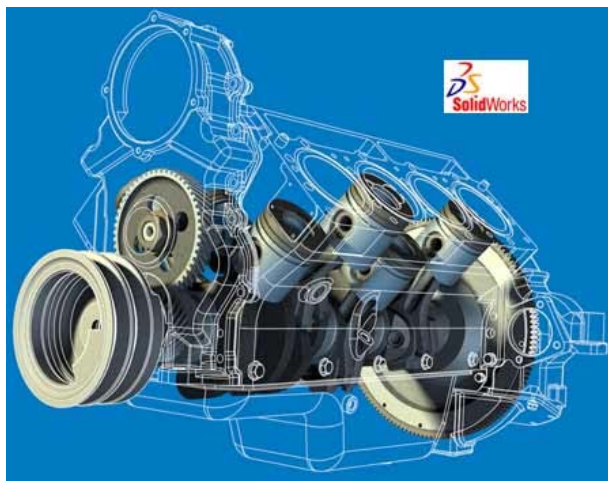
This is a rapidly growing field with strong potential for the future. In Arizona, Product Development Specialists earn an hourly range of \$10.63 to \$25.83 for an annual salary range of \$22,110 to \$53,730.

Program Costs

Tuition and fees are set by the Maricopa Community College District Governing Board. Tuition is based on the 2008-2009 tuition rate of \$71 per credit hour (for in-country students). Tuition and fees are subject to change. Additional fees may apply. Financial Aid and Child Care are available to those who qualify.

Accreditation

GateWay Community College is a Maricopa Community College, accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools (30 North LaSalle Street, Suite 2400, Chicago, IL 60602-2504. Phone (800) 621-7440)



INDUSTRY CERTIFICATIONS

GateWay Community College's Industrial Design Technology Department is a Certified CSWA and Master-Cam educational provider and proctor and provides a series of courses to prepare students for successful completion of both certification programs.

Upon completion, certifications are issued by the industry providers. GateWay does not provide a certificate of completion for the programs below, however credit may be awarded to fulfill other certificate and degree requirements as applicable.



Certified SolidWorks Associate (CSWA) Certificate

Program Prerequisite:

Course Pre-Fix	Course Name	Credits	Advisor Notes
Industrial Design Technology Core Courses			
MET286AE	Solid Design I: Part Modeling: SolidWorks	3	
MET288AE	Solid Design II: Advanced Part Modeling: SolidWorks	3	
MET292AE	Solid Design III: Detailing/GD&T/Assembly/Kinematics: SolidWorks	3	
MET291AE	Certified SolidWorks Associate (CSWA) Test Preparation	1	
Total Required Credits for Certificate of Completion		10	



MasterCam Certification Program

Program Prerequisite:

Course Pre-Fix	Course Name	Credits	Advisor Notes
Industrial Design Technology Core Courses			
MET236AD	CAD/CAM Programming: MasterCam	3	
MET246AD	Advanced CAD/CAM Programming: MasterCam	3	
MET266AD	Solids CAD/CAM Programming: MasterCam	3	
MET276AD	MasterCam Certified Programmer Mill Level I: Test Preparation	1	
Total Required Credits for Certificate of Completion		10	

To receive this certification and/or degree, students must earn a grade 'C' or better in all courses within the program.

Note: (+) Indicates a prerequisite and/or co requisite is required

CERTIFICATE OF COMPLETION

Certificate of Completion (CCL) in Industrial Design Technology: Design Specialist SolidWorks 20086-99999 Major Code: 5642

Admissions Criteria: Completion of Math ASSET test with a minimum score of 42 and permission of department.

Program Prerequisite: CIS105 Survey of Computer Information Systems OR Equivalent experience determined by program director.

Course Pre-Fix	Course Name	Credits	Advisor Notes
Industrial Design Technology Required Courses			
MET112	Inspection Techniques	3	
MET113	Applied Geometric Dimensioning and Tolerancing	3	
MET231	Manufacturing Processes	3	
MET286AE	Solid Design I: Part Modeling: SolidWorks	3	
MET288AE	Solid Design II: Advanced Part Modeling: SolidWorks	3	
MET292AE	Solid Design III: Detailing/GD&T/Assembly and Kinematics: SolidWorks	3	
MET291AE	Solid Design: Certified SolidWorks Associate (Test Preparation)	1	
Restricted Electives (Students should select two of the Solid Design Internships: MET297AA, MET297AB, MET297AC, MET297AD, MET297AE)		6	
Total Required Credits for Certificate of Completion		25	

To receive this certification and/or degree, students must earn a grade 'C' or better in all courses within the program.

Note: (+) Indicates a prerequisite and/or co requisite is required

Associate in Applied Science (AAS) in Industrial Design Technology
20086-99999 Major Code: 3116

Program Prerequisite: Completion of Math ASSET test with a minimum score of 42 and permission of department.

Course Pre-Fix	Course Name	Credits	Advisor Notes
Industrial Design Technology Required Courses			
MET112	Inspection Techniques	3	
MET113	Applied Geometric Dimensioning and Tolerancing	3	
MET231	Manufacturing Processes	3	
MET206	CNC Programming	3	
MET236AD	CAD/CAM Programming for CNC: MasterCam	3	
MET246AD	Advanced CAD/CAM for CNC: MasterCam	3	
MET266AD	Solids CAD/CAM Programming: MasterCam	3	
MET276AD	MasterCam Certified Programmer Mill Level I (Test Preparation)	1	
MET286AE	Solid Design I: Part Modeling: SolidWorks	3	
MET288AE	Solid Design II: Advanced Part Modeling: SolidWorks	3	
MET292AE	Solid Design III: Detailing/GD&T/Assembly and Kinematics: SolidWorks	3	
MET291AE	Solid Design: Certified SolidWorks Associate (Test Preparation)	1	
Restricted Electives (Students should select one of Solid Design Internships: MET297AA, MET297AB, MET297AC, MET297AD, MET297AE, MET 207, MET 208)		6	
Associate in Applied Science Required General Education Courses			
ENG101+	First-Year Composition	3	
ENG102+	First-Year Composition	3	
COM100	Introduction to Communications	3	
CRE101	Critical Reading or Equivalent by Assessment	3	
PHY101+, or CHM130/LL	Introduction to Physics, or General Chemistry and Lab	3-4	
MAT122+	Intermediate Algebra	3	
Humanities/Fine Arts (<i>course must be on the approved list of courses to meet the AAS degree in General Education Requirements and must meet Cultural, Global and Historical</i>)		3	
Social/Behavioral Sciences (<i>course must be on the approved list of courses to meet the AAS degree in General Education Requirements</i>)		3	
Total Required Credits for Associate in Applied Science		62-63	

To receive this certification and/or degree, students must earn a grade 'C' or better in all courses within the program.

Note: (+) Indicates a prerequisite and/or co requisite is required

Individual Education Plan

Placement Test		
Math:	Reading:	English:

Semester _____		Year _____
Course	Credit	Complete/ Grade

Semester _____		Year _____
Course	Credit	Complete/ Grade

Semester _____		Year _____
Course	Credit	Complete/ Grade

Semester _____		Year _____
Course	Credit	Complete/ Grade

Semester _____		Year _____
Course	Credit	Complete/ Grade

Semester _____		Year _____
Course	Credit	Complete/ Grade

PROGRAM COSTS

Industrial Design Certificate and Degree Cost Estimates

Program	Tuition	Course Fees	Total
Associate of Applied Science in Industrial Design Technology	\$4,473	\$1,000	\$5,573
Certificate of Completion: Design Specialist, SolidWorks	\$1,775	\$600	\$2,375
Certified SolidWorks Associate Certificate (Industry Cert)	\$2,769	\$400	\$3,169
MasterCam Certification Program (Industry Cert)	\$2,130	\$300	\$2,430

Please note that these are only estimates and do not include books. These estimates may change based on increases to tuition, course fees and book costs. Estimates are based on the 2008-2009 tuition rates for in-county students. Additional fees may apply.

COLLEGE CONTACT INFORMATION

Admissions, Registration and Records	(602) 286-8200
Adult Re-Entry	(602) 286-8900
Apprenticeship Programs	(602) 286-8681
Assessment/Testing Center	(602) 286-8160
Bookstore	(602) 286-8400
Cafeteria	(602) 286-8308
Career and Employment Services Center	(602) 286-8500
College Safety	(602) 286-8911
Cashier's Office	(602) 286-8277
Cashier's TIP Hotline	(602) 286-8286
Children's Learning Center	(602) 286-8130
College Information	(602) 286-8000
Counseling	(602) 286-8900
Disability Services	(602) 286-8888
Financial Aid	(602) 286-8300
Institute for Computer Training (ICT) Lab	(602) 286-8568
Learning Center	(602) 286-8800
Library	(602) 286-8454
Phone Registration	(602) 286-8100
Student Activities/Clubs	(602) 286-8700
Veterans Services	(602) 286-8076