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INDUSTRIAL DESIGN TECHNOLOGY

*Associate in Applied Science Degree in Industrial Design Technology
Certificate of Completion in Industrial Design Technology: Solidworks*

MORE INFORMATION: 602-286-8653

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**GATEWAY
COMMUNITY COLLEGE**
A MARICOPA COMMUNITY COLLEGE



MARICOPA
COMMUNITY COLLEGES

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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Maricopa County Community College District (MCCCD) is an EEO/AA institution and an equal opportunity employer of protected veterans and individuals with disabilities. A lack of English language skills will not be a barrier to admission and participation in the career and technical education programs of the college.

The Maricopa Community Colleges do not discriminate on the basis of race, color, national origin, sex, disability or age in its programs or activities. For Title IX/504 concerns, call the following number to reach the appointed coordinator: (480) 731-8499. For additional information, as well as a listing of all coordinators within the Maricopa College system, <http://www.maricopa.edu/non-discrimination>.

REGISTRATION CHECKLIST

1	Submit 'Student Information Form' https://admissions.maricopa.edu/	Enrollment Services IE 1214	(602) 286-8200
2	Verify in-state residency https://my.maricopa.edu/services/admissions-records-registration/proof-identity-id-authentication	Enrollment Services IE 1214	(602) 286-8200
3	Send Official Transcript and/or High School Transcripts to Enrollment Services GateWay Community College Attn: Admissions and Records 108 North 40th Street Phoenix, AZ 85034	Enrollment Services IE 1214	(602) 286-8200
4	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.	Testing Center IE 1252	(602) 286-8160
5	Apply for Financial Aid and Scholarships, if interested http://www.gatewaycc.edu/Pay/FinancialAid/Apply.aspx http://www.fafsa.ed.gov/index.htm	Enrollment Services IE 1214	(855) 622-2332
6	Meet with an Industrial Technology Program Advisor Explore your program options, obtain registration advisement and setup a program of study plan.	Enrollment Services IE 1214	(602) 286-8174
7	Register for Courses Schedule Available at http://classes.sis.maricopa.edu/ Enroll online at https://my.maricopa.edu	Enrollment Services IE 1214	(602) 286-8200
8	Pay Tuition and Fees Payment Plans and Payment Extensions Available. Ask for details.	Enrollment Services IE 1214	(602) 286-8200
9	Obtain Student ID, Optional Enrollment Services — BRING PICTURE ID	Enrollment Services IE 1214	(602) 286-8141
10	Obtain Parking Decal, Required Required if parking a vehicle on campus.	Enrollment Services IE 1214	(602) 286-8200
11	Purchase Books Bookstore or online at https://www.bkstr.com/gatewayccstore/home	Main Building, Bookstore MA 1200	(602) 286-8400
12	Attend a Program Orientation Session A week before the start of the semester.	Room location varies each semester.	(602) 286-8613

Industrial Design Technology

Career Description

Use the very latest three-dimensional solid design software to develop new products, create prototypes 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, 3D printers for additive manufacturing. The core-specialty of the program is hands-on experience with Mechanical Design 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 and you will be industry-certified by SolidWorks: CSWA Certified SolidWorks Associate. 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 SolidWorks: CSWP Certified SolidWorks Professional. Program classes will lead to Certified Professional Advanced: Sheet Metal, Weldments, Surfacing and Drawing Tools. Completion of five Professional Certifications will allow testing for CSWE: Certified SolidWorks Expert

Employment Outlook

This is a rapidly growing field with strong potential for the future. In Arizona, Industrial Design Specialists earn an average hourly rate of \$27.81 for an average annual salary of \$57,854.

Program Costs

Tuition and fees are set by the Maricopa Community College District Governing Board. Tuition is based on the 2018-2019 tuition rate of \$85 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).



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

Admissions Criteria: Math Assessment score on District placement exam placing students into MAT 090 or higher, or permission of department.

Program Prerequisite: None

Program Notes: Students must earn a grade of “C” or better for all courses required within the program.

+ indicates course has prerequisites and/or corequisites.

Course Pre-Fix	Course Name	Credits	Advisor Notes
Industrial Design Technology Required Courses			
MET109	Machine Trades Print Reading OR Satisfactory completion of Departmental credit by exam	3	
+MET112	Inspection Techniques	3	
+MET113	Applied Geometric Dimensioning and Tolerancing	3	
+MET220	Fundamentals of Coordinate Measurement Machines (CMM)	3	
+MET231	Manufacturing Processes and Materials	3	
+MET260	Tooling and Fixturing	3	
+MET286AE	Solid Design I: Part Modeling: SolidWorks	3	
+MET288AE	Solid Design II: Advanced Part Modeling: SolidWorks	3	
+MET289AE	Solid Design III: Detailing/GD&T: SolidWorks	3	
+MET290AE	Solid Design IV: Assembly and Kinematics: SolidWorks	3	
+MET291AE OR +MET298AA	Solid Design: Certified SolidWorks Associate (Test Preparation)/Special Projects	1	
+MET292AE	Solid Design 3D Printing: Techniques in Additive Manufacturing	3	
+MET293AE AND/OR +MET294AE AND/OR +MET298AC	Solid Design: Surface Modeling: Solidworks/Solid Design: Sheet Metal and Weldments: SolidWorks/Special Projects Note: Must take 2 of the 3 courses for a total of 6 credits	6	
Associate in Applied Science Required General Education Courses			
ENG101+ OR ENG107	First-Year Composition	3	
ENG102+ OR ENG108 OR ENG111	First-Year Composition	3	
COM100	Introduction to Communications OR any approved General Education course in oral communications Except COM225	3	
CRE101	Critical Reading or Equivalent by Assessment	0-3	
PHY101+, OR CHM130	Introduction to Physics, or Fundamental Chemistry	3-4	
MAT122+ OR MAT120 OR MAT121	Intermediate Algebra	3-5	
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		61-70	

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

Description: The Certificate of Completion (CCL) in Industrial Design Technology: Design Specialist: SolidWorks prepares students for careers as technical assistants, engineering technicians or hands on product designers. This expertise will allow employment in a variety of hi-tech product development and manufacturing companies. The program includes courses designed to provide students with a working knowledge in the field of product design, product development and rapid part manufacturing. Competency and technical expertise will be learned on industry specific three-dimensional 3D Solid Design software, 3D printers, and mechanical design simulation software. The core specialty of the program is hands-on experience with solid design and 3D printing.

Admissions Criteria: Math assessment score on District placement exam placing students into MAT090 or higher, or permission of department.

Program Prerequisite: None

Course Pre-Fix	Course Name	Credits	Advisor Notes
Industrial Design Technology Required Courses			
MET109	Machine Trades Print Reading OR Satisfactory completion of Departmental credit by exam	3	
MET112	Inspection Techniques	3	
MET113	Applied Geometric Dimensioning and Tolerancing	3	
+MET220	Fundamentals of Coordinate Measuring Machines (CMM)	3	
+MET231	Manufacturing Processes	3	
+MET286AE	Solid Design I: Part Modeling: SolidWorks	3	
+MET288AE	Solid Design II: Advanced Part Modeling: SolidWorks	3	
MET291AE	Solid Design: Certified SolidWorks Associate (Test Preparation)	1	
Total Required Credits for Certificate of Completion		22	

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

Program of Study/Suggested Course Sequence

FALL/Spring START: Evening Classes

1st Semester, Fall/Spring				
Course	Credit	Tuition	Course Fees	Book
MET109	3	\$255	\$100	Yes
MET112	3	\$255	\$100	Yes
MET113	3	\$255	\$100	Yes
MET231	3	\$255	\$100	Yes
General Education	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			

2nd Semester, Fall/Spring				
Course	Credit	Tuition	Course Fees	Book
MET286AE (1st 8 weeks)	3	\$255	\$100	Yes
MET288AE (2nd 8 weeks)	3	\$255	\$100	Yes
MET220 (1st 8 weeks)	3	\$255	\$100	No
MET291AE (2nd 8 weeks)	1	\$85	\$100	Yes
General Education	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			

3rd Semester, Fall/Spring				
Course	Credit	Tuition	Course Fees	Book
MET260	3	\$255	\$100	Yes
MET289AE (1st 8 weeks)	3	\$255	\$100	Yes
MET292AE	3	\$255	\$100	Yes
MET290AE (2nd 8 weeks)	3	\$255	\$100	Yes
General Education	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			

4th Semester, Fall/Spring				
Course	Credit	Tuition	Course Fees	Book
MET293AE (1st 8 weeks)	3	\$255	\$100	Yes
MET294AE (2nd 8 weeks)	3	\$255	\$100	Yes
MET298AC	3	\$255	\$100	No
General Education	<i>Required general education core classes can be taken at any other MCCD Colleges at your convenience (summer, online and Saturday classes are available)</i>			

PROGRAM COSTS

Industrial Design Certificate and Degree Cost Estimates

Program	Tuition	Course Fees	Total
Associate of Applied Science in Industrial Design Technology	\$5,950	\$1,600	\$7,550
Certificate of Completion: Design Specialist, SolidWorks	\$1,870	\$700	\$2,570

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 2018- 2019 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