

ADMISSION

Program Outcomes

The Mechanical Engineering Technology curriculum prepares graduates for employment as technicians in the diversified mechanical and manufacturing engineering fields. Mechanical Engineering technicians assist in design, development, testing, process design and improvement, and troubleshooting and repair of engineered systems. CCC&TI offers several different educational programs in this area:

- A.A.S: Mechanical Engineering Technology
- Drafting Certificate: Mechanical Engineering Technology

These curriculums are designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects. Course work includes mathematics, natural sciences, engineering sciences and technology. Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, industrial and technology managers, or research technicians. Mechanical Engineering Technology is a course of study that prepares the students to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Includes instruction in principles of mechanics, applications to specific engineering systems, design testing procedures, prototype and operational testing and inspection procedures, manufacturing system-testing procedures, test equipment operation and maintenance, computer applications, critical thinking, planning and problem solving, and oral and written communications. Graduates of the curriculum will find employment opportunities in the manufacturing or service sectors of engineering technology. Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME, and NICET.

Program Information

Emphasis is placed on:

- manual and computer-aided drafting equipment
- manufacturing methods and processes
- mathematics
- materials
- statics
- physics
- written oral communication

Occupational Outlook

The Department of Labor's [*Occupational Outlook Handbook*](#) states, "Employment of mechanical engineering technicians is projected to grow 2 percent from 2014 to 2024, slower than the average for all occupations. Nevertheless, there should be opportunities for those who can master new software and technology, as well as traditional manual skills." (Visited 2016).

There are no additional costs for this program outside of tuition, fees, books, and supplies.

Admission Steps

- Complete CCC&TI admissions application online at cccti.edu
- Submit official high school/GED/AHS transcripts and college transcripts
- Complete FASFA online at www.studentaid.gov
- Meet placement testing requirements
- Meet with advisor to register for classes
- Pay for classes and purchase books bundle bookstore

Important Contact Information

Admissions

Contact Sara Greene, Admissions Specialist, at 828.726.2706 or sgreene@cccti.edu for more information and how to complete the enrollment and registration process.

Financial Aid

Contact Financial Aid at 828.726.2713 as soon as possible to inquire and complete your FAFSA. Check your CCC&TI student email frequently to monitor your Financial Aid status.

Program Director

Contact Susan Deal, Director, Mechanical Engineering and Industrial Systems Technologies Career and Technical Education, at 828.726.2497 or sdeal@cccti.edu.

PROGRAM OFFERINGS – Mechanical Engineering Technology Associate Degree Program (A40320)

Fall Semester I					
ACA	115	Success & Study Skills	F/S/SS		1 Credit
BPR	111	Print Reading	Fall Only		2 Credits
DFT	151	CAD I	Fall Only		3 Credits
ENG	111	Writing and Inquiry	F/S/SS		3 Credits
HYD	110	Hydraulics/Pneumatics I	Fall Only		3 Credits
ISC	112	Industrial Safety	Fall Only		2 Credits
				Total	14 Credits
Spring Semester I					
DFT	152	CAD II	Spring Only	Prerequisite: DFT 151 (L)	3 Credits
DFT	231	Jig & Fixture Design	Spring Only		2 Credits

MAT	121	Algebra/Trigonometry I	Spring Only	Prerequisite: DMA 010, DMA 020, DMA 030, DMA 040, DMA 050, DMA 060, or MAT-003	3 Credits
MEC	110	Intro to CAD/CAM	Spring Only		2 Credits
MEC	145	Manufacturing Materials I	Spring Only		3 Credits
				Total	13 Credits
Summer Semester I					
COM	120	Intro to interpersonal Communication	F/S/SS		3 Credits
Student Choice	Social/Behavioral Science Elective		F/S/SS		3 Credits
Student Choice	Humanities/Fine Arts Elective		F/S/SS		3 Credits
				Total	13 Credits
Fall Semester II					
DFT	121	Intro to GD&TI	Fall Only		2 Credits
DFT	154	Intro to Solid Modeling	Fall Only		3 Credits
MAC	121	Intro to CNC	Fall Only		2 Credits
MAC	141	Machining Applications I	Fall Only		4 Credits
PSY	131	Physics - Mechanics	On Demand	Prerequisite: MAT 121 or MAT 171	4 Credits
				Total	13 Credits
Spring Semester II					
DFT	254	Intermed Solid Model/Render	Spring Only	Prerequisite: DFT 154	3 Credits
EGR	250	Statics/Strength of Materials	Spring Only	Prerequisite: MAT 121 or MAT 171	5 Credits
MEC	128	CNC Machining Processes	Spring Only	Prerequisite: MAC 121 (L)	4 Credits
WBL	110	Work of Work	On Demand		1 Credit
OR					
WBL	111	Work-Based Learning I	F/S/SS		1 Credit
				Total	13 credits
Total Hours: 64					

PROGRAM OFFERINGS – Certificate – Mechanical Engineering Technology Drafting (C40320D)

Fall Semester I					
DFT	151	CAD I	Fall Only		3 Credits
DFT	154	Intro to Solid Modeling	Fall Only		3 Credits
				Total	6 Credits
Spring Semester I					
DFT	152	CAD II	Spring Only	Prerequisite: DFT 151 (L)	3 Credits
DFT	254	Intermed Solid Model/Render	Spring Only	Prerequisite: DFT 154	3 Credits
				Total	13 Credits
Total Hours: 12					

COST

	Associate	Certificates
Tuition (\$76/credit hour)	<p>Fall Semester I \$1,064</p> <p>Spring Semester I \$988</p> <p>Summer Semester I \$684</p> <p>Fall Semester II \$1,140</p> <p>Spring Semester II \$988</p> <p>Tuition Total \$4,864</p>	<p>\$912</p> <p>This program is designed to be completed in 6 – 12 months depending on certificate.</p>
Additional Fees	<p>\$35 campus activity fee (each semester)</p> <p>\$2/per course (max \$10 per semester) campus service fee</p> <p>\$2 (per semester) student accident insurance</p> <p>Total (per semester) \$47</p>	<p>\$35 campus activity fee (each semester)</p> <p>\$2/per course (max \$10 per semester) campus service fee</p> <p>\$2 (per semester) student accident insurance</p> <p>Total (per semester) \$47</p>
Textbooks (purchased from CCC&TI Bookstore)	varies	varies
Graduation Fee	\$25	\$25
Total	approximately \$5,077	approximately \$1,031