

ABOUT THE DEGREE PROGRAM

- Manufacturing Engineering Technology is a varied and challenging field that is becoming increasingly important with the advent of new production methods.
- Manufacturing Engineering Technicians work with engineers to design experiments, plan production methods, find better ways to manufacture products, troubleshoot, inspect, and perform quality control.
- Students use Computer Aided Drafting (CAD), Computer Aided Manufacturing (CAM), and Computer Integrated Manufacturing (CIM) technologies to design cutting tools, gauges, jigs, fixtures, and dies.
- Students study production line layout, production forecasting, planning, inventory control, and statistical quality control.
- Students learn the methods of determining and distributing expenses and estimating material, labor, and tool costs of product manufacturing.
- Students make time studies of manufacturing operations and investigate hydraulic control, manufacturing processes, and engineering materials.

Plan Ahead



**For further information about the
Manufacturing Engineering Technology
degree, contact:**

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Non-Discrimination Statement

CT State Community College does not discriminate on the basis of race, color, religious creed, age, gender, gender identity or expression, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, political belief, veteran status, sexual orientation, genetic information or criminal record in its programs and activities.

CT STATE
COMMUNITY COLLEGE

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**Manufacturing
Engineering
Technology**

Associate in Science Degree



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Manufacturing Engineering Technology - MENT-AS-COT

CAREERS & SALARY

- Manufacturing Engineers
Median Salary \$116,363
- Industrial Engineers
Median Salary \$93,688
- Manufacturing Engineering Technologists
Median Salary \$66,860
- Manufacturing Production Technicians
Median Salary \$66,860
- Millwrights
Median Salary \$59,130

PLACES TO WORK

- Collins Aerospace
- General Dynamics Electric Boat
- Medtronic
- Parker-Hannifin Corporation
- Pratt and Whitney
- Sikorsky Air Craft Lock Heed Martin
- UTC Aerospace System
- Valley Tool and Manufacturing LLC



PROGRAM REQUIREMENTS

Technology Studies Gen Ed Courses (23 Credits)

Course	Title	Credits
ENG 1010	Composition	3
MATH 1610	Precalculus	4
ART	ART Elective	3
CHEM 1110	Concepts of Chemistry	4
or CHEM 1210	or General Chemistry I	4
HISX	Historical Knowledge Course	3
or SBSX	or Elective Course in ECON	3
ENG 1080	CompII: Technical Writing & Pres	3
CCS 1001	College & Career Success	3

Technology Studies Program Core (10-11 Credits)

Course	Title	Credits
PHYS1201	General Physics I	4
or PHYS 2201	or Calculus-Based Physics I	4
BHEL	Behavioral Sci Elect. - ANTH, PSY, SOC	3
MATH1200	Statistics I	3
or MATH 1201	or Statistics I with Computer Apps	4

Manufacturing Engineering Tech Courses (10-11 Crds)

Course	Title	Credits
EGR 1120	Engineering Drawing Specs	3
MFG 1477	Machine Technology Fundamentals	4
or MFG 1467	or Conventional Process Machining	4
PHYS 1202	General Physics II	4
or PHYS 2202	or Calculus Based-Physics II	4
MFG 2439	Geometric Dimension & Tolerancing	3
CAD 2200	Parametric Design (SolidWorks)	3
MATH 2600	Calculus I	4
MFG 1411	Manufacturing Materials & Processes I	3
MFG 2444	CNC I	3
MFG 2405	Principles of CNC with Mastercam	3

PROGRAM OUTCOMES

Upon successful completion of all program requirements, the graduate should be able to:

- Demonstrate team-oriented skills that permit effective participation in multicultural work and social environments.
- Apply appropriate mathematical and scientific principles to manufacturing applications.
- Demonstrate proficiency in manufacturing engineering fundamentals to analyze manufacturing engineering problems and make appropriate decisions.
- Assist in the design process to meet effective production objectives.
- Possess knowledge of engineering materials and be able to demonstrate competency in their selection and utilization in manufacturing.
- Apply knowledge and skills to develop, interpret and select appropriate manufacturing processes.
- Maintain a practical knowledge of state-of-the-art hardware and software in support of manufacturing systems.
- Be aware of and use available information and data sources in support of the manufacturing systems.
- Apply skills and knowledge to effectively and efficiently plan, organize, implement, measure and control manufacturing processes.
- Demonstrate a thorough knowledge and understanding of engineering graphics as well as engineering drawing interpretation and application of geometric dimensioning and tolerancing basics.
- Demonstrate a high level of proficiency in the use of state-of-the-art computer-aided design (CAD) software and be able to respond positively to continuous software revisions and upgrades.
- Demonstrate a thorough understanding of two-dimensional and isometric CAD concepts, procedures and applications.
- Apply knowledge of computer applications in integrating computer-aided manufacturing, computer numerical control, CAD, spreadsheets, graphs and word processing for manufacturing engineering, and technology documentation and support purposes.
- In addition, the graduate will complete the comprehensive learning outcomes identified with the General Education Core.