# Mechanical Engineering Technology -Manufacturing Management Option & CNC Certificate (METM, METMC)

## Mechanical Engineering Technology —Manufacturing Management Option (METM)

In the Mechanical Engineering Technology - Manufacturing Management Option, students learn the technologies and skills needed to manage a high-tech production facility.

The curriculum includes hands-on manufacturing processes, stateof-the-art Computer-Aided Drafting and Computer-Aided Machining (CAD/CAM), Computer Numerical Control (CNC), and materials and quality control analysis using statistical process control (SPC).

Graduates earn an Associate of Applied Science degree and are prepared for immediate employment in a production facility, or for easy transition into to related bachelor's degree studies.

## Mechanical Engineering Technology -Manufacturing CNC Certificate (METMC)

The Mechanical Engineering Technology - Manufacturing CNC Certificate is designed for individuals currently employed in a manufacturing field who desire additional knowledge of computer numerical control (CNC) programming and computer-aided manufacturing processes.

Most students can complete the certificate requirements in a year or less. All courses completed while earning this certificate may be applied to the associate's degree program Mechanical Engineering Technology - Manufacturing Management Option.

For more information, please contact the Center for Innovative Technologies at (513) 569-1743.

To apply for this program at Cincinnati State, visit our Admissions Page (http://www.cincinnatistate.edu/academics/admission)

## Mechanical Engineering Technology — Manufacturing Management Option (METM)

Semester 1		Lec	Lab Cr	edits
MET 100	Introduction to Mechanical	1	2	2
	Engineering Technology ( <b>B</b> )			
MET 111	Manufacturing Processes 1 ( B)	2	3	3
MET 131	MET Computer Aided Drafting 1 (	2	3	3
	<b>B</b> )			

ENG 101 FYE 1XX First Year Experience Elective ( <b>B</b> )	English Composition 1 ( <b>G</b> )	3 1	0 0	3 1
MAT XXX Mathematics Elective 1 (G)		3	2	4
Semester 2				
MET 112	Manufacturing Processes 2 (T)	2	3	3
MET 132	MET Computer Aided Drafting 2 ( T)	2	3	3
MET 140	Engineering Materials (T)	2	2	3
MET 150	Statics and Strength of Materials for MET ( <b>T</b> )	2	3	3
MAT XXX Mathematics Elective 2 ( <b>B</b> )		3	2	4
Semester 3		4	40	0
MET 291	Full-Time Cooperative Education 1: Mechanical Engineering Technology ( <b>T</b> )	1	40	2
Semester 4				
MET 113	Manufacturing Processes 3 (T)	2	3	3
MET 240	Hydraulics and Pneumatics (T)	2	3	3
MET 285	Mechanical Engineering Technology Capstone Project 1 ( T)	2	3	3
EET 101	Electronic Fundamentals 1 (T)	2	3	3
ENG 10X English Composition Elective ( <b>G</b> )		3	0	3
Semester 5				
MET 230	Quality Control and Six Sigma (T)	3	2	4
MET 290	Mechanical Engineering Technology Capstone Project 2 ( T)	2	3	3
PHY 151	Physics 1: Algebra and Trigonometry-Based ( <b>G</b> )	3	3	4
XXX XXX Arts/ Humanities Elective ( <b>G</b> )		3	0	3
Semester 6				
MET 292	Full-Time Cooperative Education 2: Mechanical Engineering Technology ( <b>T</b> )	1	40	2
Total Credits:		47	123	65
Electives	3			
First Year Ex	perience Elective			
FYE 100	College Survival Skills			1

FYE 100	College Survival Skills	1
FYE 105	College Success Strategies	2
FYE 110	Community College Experience	3

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#### **Mathematics Electives**

Take one of the following series:

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MAT 125 & MAT 126	Algebra and Trigonometry and Functions and Calculus	
Or		
MAT 251 & MAT 252	Calculus 1 and Calculus 2	
English Compo	sition Elective	
ENG 102	English Composition 2: Contemporary Issues	3
ENG 104	English Composition 2: Technical Communication	3
ENG 105	English Composition 2: Business Communication	3
Arts/Humanities	s Elective	
CULT 105	Issues in Human Diversity	3
CULT 110	Social Issues in Technology	3
CULT 200	Introduction to Cultural Studies	3
PHI 110	Ethics	3

The letters G, B, and T (displayed after course titles or elective descriptions) identify types of courses required by the Ohio Department of Higher Education as part of an associate's degree curriculum.

G = General Education course in this curriculum

B = Basic Skills course in this curriculum

T = Technical course in this curriculum

# Mechanical Engineering Technology -Manufacturing CNC Certificate (METMC)

First Year				
Semester 1		Lec	Lab Credits	
MET 111	Manufacturing Processes 1	2	3	3
MAT 12X Mathematics Elective		2	2	3
MET 131	MET Computer Aided Drafting 1	2	3	3
Semester 2				
MET 112	Manufacturing Processes 2	2	3	3
MET 132	MET Computer Aided Drafting 2	2	3	3
Semester 3				
MET 113	Manufacturing Processes 3	2	3	3
Total Credits		12	17	18

### Electives

#### **Mathematics Elective**

MAT 121	Technical Algebra and Geometry with Statistics	3
MAT 125	Algebra and Trigonometry	4

## Faculty

#### **Program Chair/Advisor**

Professor Michael DeVore, PhD, PE michael.devore@cincinnatistate.edu

#### **Co-op Coordinator**

Professor Sue Dolan, M.Ed. sue.dolan@cincinnatistate.edu