TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE
2023-2024

Associate of Applied Science in Mechanical Engineering Technology – Design Major To Bachelor of Science in Mechanical and Manufacturing Engineering Technology

Overview

Completion of the following curriculum will satisfy the requirements for the Associate of Applied Science (AAS) in Mechanical Engineering Technology – Design Major (METD) degree at Cincinnati State (CState) and leads to the Bachelor of Science (BS) in Mechanical and Manufacturing Engineering Technology degree at Northern Kentucky University (NKU).

Applying to the CState2NKU Program

Students can apply to participate in the pathway program by completing the online application on the NKU transfer webpage. Students must be enrolled in at least six credit hours at Cincinnati State, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Cincinnati State.

Degree Requirements for Cincinnati State

1) Completion of minimum 60 credit hours, 2) minimum cumulative GPA 2.0, 3) completion of an FYE course as part of the first 12 credit hours taken at Cincinnati State, and 4) completion of Cooperative Education.

Admission Requirements for NKU

Students completing an associate degree with a cumulative GPA of 2.0 or higher will be accepted into NKU.

The accredited Bachelor of Science in mechanical and manufacturing engineering technology focuses on the design and development of parts, processes, and systems. Under this program graduates will acquire knowledge, problem-solving ability, and hands-on skills to enter careers in the design, installation, manufacturing, testing, evaluation, technical sales, or maintenance of mechanical systems. In addition, graduates will have strengths in the analysis, applied design, development, implementation,

or oversight of more advanced mechanical systems and processes.

This bachelor's degree program is designed to provide students with the knowledge and skills needed to succeed as engineers in today's industry. Students are required to co-op in industry starting with their second year, which often continues and leads to full-time employment. Together with the study of engineering principles, design is the cornerstone of the mechanical and manufacturing engineering technology degree program.

The MMET program is accredited by the Engineering Technology Accreditation Commission of ABET (http://www.abet.org).

Degree Requirements for NKU

To earn a bachelor's degree at NKU, students must complete a minimum of 120 credit hours with at least 45 credit hours numbered 300 and above. In addition, at least 25% of the credit hours required for the degree and the last 30 credit hours must be completed at NKU. Students must have an overall GPA of 2.0 and meet all requirements for the major.

Advising Note

Students in the CState2NKU program should work closely with their advisors when choosing courses. This document serves as a guide but does not replace academic advising. When choosing Cincinnati State courses, student may also consult the Associate of Arts advising brochure or the catalog for A and B list courses in Arts and Humanities or Social and Behavioral Sciences.

CINCINNATI STATE AAS IN MECHANICAL ENGINEERING TECHNOLOGY – DESIGN MAJOR TO - NKU BS IN MECHANICAL AND MANUFACTURING ENGINEERING TECHNOLOGY CHECKLIST

Cincinnati State

Category 1: Ohio Transfer 36 Requirements

CState Course	Course or Category	Credits	NKU Course	Completed
ENG 101	English Composition I	3	ENG 101	
ENG 102 or ENG 104	English Composition 2 Elective	3	ENG 102	
PHI 110	Ethics	3	PHI 200	
MAT 251	Calculus I	5	MAT 129 + MAT 100T	
PHY 151	Physics 1: Algebra and Trigonometry-Based	4	PHY 211	
	Subtotal General Education Core	**18**		

Note: PHI 110 satisfies the MMET requirement for an ethics course.

Note: Students who take MAT 125 & MAT 126 will need to take Calculus (MAT 128 and MAT 227 or MAT 129) at NKU to satisfy the requirements for the BS in MMET.

Category 2: CState Degree Requirements for the AAS in in Mechanical Engineering Technology – Design Major

CState Course	Course or Category	Credits	NKU Course	Completed
FYE 1XX	First Year Experience Elective	1	UNV 100T	
MAT 252	Calculus 2	5	MAT 229	
EET 101	Electronic Fundamentals	3	UND 100T	
MET 100	Introduction to Mechanical Engineering Technology	2	EGT 110	
MET 111	Manufacturing Processes	3	EGT 265	
MET 131	MET Computer Aided Drafting 1	3	EGT 212	
MET 132	MET Computer Aided Drafting 2	3	EGT 412	
MET 140	Engineering Materials	3	EGT 261	
MET 150	Statics and Strength of Materials for MET	3	EGT 300	
MET 240	Hydraulics and Pneumatics	3	EGT 361	
MET 250	Machine Design	4	MET 250 + MET 270 = EGT 480 + EGT 400T	
MET 260	Applied Thermodynamics	3	EGT 450	
MET 270	Kinematics	3	MET 250 + MET 270 = EGT 480 + EGT 400T	

CState Course	Course or Category	Credits	NKU Course	Completed
MET 285	Mechanical Engineering Technology Capstone Project 1	3	EGT 200T	
MET 290	Mechanical Engineering Technology Capstone Project 2	3	EGT 200T	
MET 291	Full-Time Cooperative Education 1: Mechanical Engineering Technology	2	CEP 300	
MET 292	Full-Time Cooperative Education 2: Mechanical Engineering Technology	2	CEP 300	
	Subtotal Additional Program Credit Hours	**49**		
	Total Associate Degree Credit Hours	**67**		

Northern Kentucky University

Category 3: NKU Additional General Education Requirements

NKU Course	Course	Credits	CState Course	Taken at CState
CMST 101	Public Speaking	3	COMM 110	
TBS XXX	Culture and Creativity	6		
TBS XXX	Cultural Pluralism	3		
TBS XXX	Individual and Society	3		
	Subtotal Additional General Education Credit Hours	**15**		

TBS XXX means to be selected.

Category 4: NKU Major Requirements for the BS in Mechanical and Manufacturing Engineering Technology

NKU Course	Course	Credits	CState Course	Taken at CState
CHE 130/130L	Chemistry: An Engineering Approach	4		
MAT 119	Precalculus Mathematics	3	MAT 125 & MAT 126	x (satisfied by MAT 251/252)
MAT 129	Calculus I	4	MAT 251	x
PHY 211	General Physics with Laboratory I	4	PHY 151	x
PHY 213	General Physics with Laboratory II	4	PHY 152	
SOC 100	Introduction to Sociology	3	SOC 105	
STA 205	Statistical Methods	3	MAT 131 + MAT 132	
EGT 116	Introduction to Manufacturing	3		
EGT 162	Industrial Electricity	3		

NKU Course	Course	Credits	CState Course	Taken at CState
EGT 211	Quality Control	3	MET 230	
EGT 212	Computer-Aided Drafting and Design	3	MET 131	x
EGT 260	Industrial Standards, Safety, and Codes	3		
EGT 261	Engineering Materials	3	MET 140	x
EGT 265	Manufacturing Processes and Metrology	3	MET 111	x
EGT 267	Programming for Engineering Applications	3	CIT 130	
EGT 300	Statics and Strength of Materials	3	MET 150	x
EGT 301	Cooperative Education in Engineering Technology	3	MET 291 and MET 292	x
EGT 310	Project Management and Problem Solving	3		
EGT 320	Robotic Systems and Material Handling	3		
EGT 340	Applied Dynamics	3		
EGT 361	Fluid Power	3	MET 240	x
EGT 365	CNC & Manufacturing Process Planning	3	MET 112 + MET 113 = EGT 365 + EGT 300T	
EGT 386	Electro-Mechanical Instrumentation & Control	3		
EGT 405	Metrology and Geometric Tolerancing	3		
EGT 416	Capstone I	1		
EGT 417	Capstone II	3		
EGT 450	Thermodynamics and Heat Transfer	3	MET 260	x
EGT 480	Machine Design	3	MET 250 + MET 270 = EGT 480 + EGT 400T	x
Select 3: EGT 280 EGT 318 EGT 321 EGT 362 EGT 411 EGT 412 EGT 423 EGT 462 EGT 465	Select three courses from the following: Introduction to Microtechnology Introduction to Nanotechnology Productivity Management, Scheduling, and Planning Tool Design and Computer Aided Manufacturing Quality Assurance and Auditing Advanced CADD Planning and Design of Industrial Facilities Finite Element Modeling Automated Manufacturing Systems	9		
	Subtotal Major Credit Hours at NKU	**60**		
	Subtotal Major Credit Hours at CState	**35**		
	Total Major Credit Hours	**95**		
	Total Baccalaureate Degree Credit Hours	**142**		

MET 291 and MET 292 can be used to satisfy EGT 301 with permission of the advisor.

Updated April 2023