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## TWO DEGREES, ONE PATH

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### **TRANSFER PATHWAY GUIDE 2024-2025**

Associate of Science in Pre-Engineering To  
Bachelor of Science in Electrical and Electronic Engineering Technology

#### ***Overview***

Completion of the following curriculum will satisfy the requirements for the Associate of Science (AS) in Pre-Engineering (PENG) degree at Cincinnati State (CState) and leads to the Bachelor of Science (BS) in Electrical and Electronic 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 62 credit hours, 36 of which from approved Ohio Transfer 36 courses, 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.

This program provides students with both the technological and managerial skills necessary to enter careers in design, application, installation, manufacturing, operation, and maintenance of electrical or electronics systems. Graduates gain skills to analyze, design, apply, and troubleshoot systems with electronic, digital, analog, microcontroller, software, and mechanical components. The combination of practical and theoretical education leads to graduates with diverse technical skills throughout a wide range of applications. Students are required to co-op in industry starting with their second year at school, which often continues and leads to full-time employment.

***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. In some cases, students must complete a focus or minor as indicated on the pathway.

***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 AS IN PRE- ENGINEERING TO NKU BS IN ELECTRICAL AND ELECTRONIC  
ENGINEERING TECHNOLOGY CHECKLIST**

**Cincinnati State**

**Category 1: Ohio Transfer 36 Requirements**

<b>CState Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
ENG 101	English Composition I	3	ENG 101	
ENG 10X	English Composition 2 Elective	3	ENG 102	
COMM 110	Public Speaking	3	CMST 101	
TBS XXX	Arts/Humanities List A Elective	3	TBD XXX	
PHI 110	Ethics	3	PHI 200	
SOC 105	Introduction to Sociology	3	SOC 100	
HST XXX	History Elective	3	TBD XXX	
MAT 251	Calculus I	5	MAT 129 + MAT 100T	
CHE 121 and CHE 131	General Chemistry I and General Chemistry I Lab	5	CHE 120/120L	
	<b>Subtotal General Education Core</b>	<b>31</b>		

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

TBS XXX means to be selected by Cincinnati State student

TBD XXX means to be determined by NKU based on course selected at Cincinnati State

**Category 2: CState Degree Requirements for the AS in Pre-Engineering and NKU Recommendations**

<b>CState Course</b>	<b>Course or Category</b>	<b>Credits</b>	<b>NKU Course</b>	<b>Completed</b>
FYE 1XX	First Year Experience Elective	1	UNV 100T	
MAT 252	Calculus 2	5	MAT 229	
ENGR 111	Introduction to Engineering 1	3	EGT 110	
ENGR 112	Introduction to Engineering 2	3	EGT 100T	
MET 111	Manufacturing Processes 1	3	EGT 265	
MET 131	MET Computer Aided Drafting I	3	EGT 212	
MET 140	Engineering Materials	3	EGT 261	
PHY 201	Physics 1: Calculus-Based	5	PHY 220	
PHY 202	Physics 2: Calculus-Based	5	PHY 224	
Choose 1: CET 291 MET 291 EET 291 EMET 291	Choose one Cooperative Education Cooperative Ed: Civil Engineering Technology Cooperative Ed: Mechanical Engineering Technology Cooperative Ed: Electronics Engineering Technology Cooperative Ed: Electro-Mechanical Engineering Technology	2	CEP 300	
	<b>Subtotal Additional Program Credit Hours</b>	<b>33</b>		
	<b>Total Associate Degree Credit Hours</b>	<b>64</b>		

## Northern Kentucky University

### Category 3: NKU Major Requirements for the BS in Electrical and Electronic Engineering Technology

NKU Course	Course	Credits	CState Course	Taken at CState
CHE 130 CHE 130L	Chemistry: An Engineering Approach	4	Waived by CHE 121 + CHE 131	x (satisfied by CHE 120/120L)
MAT 119	Precalculus Mathematics	3	MAT 125 and MAT 126	x (satisfied by MAT 251)
MAT 129	Calculus I	4	MAT 251	x
PHY 211	General Physics with Laboratory I	4	PHY 151	x (satisfied by PHY 220)
PHY 213	General Physics with Laboratory II	4	PHY 152	x (satisfied by PHY 224)
SOC 100	Introduction to Sociology	3	SOC 105	x
STA 205	Statistical Methods	3	MAT 131 + MAT 132	
EGT 161	DC Circuit Analysis	3	EET 131	
EGT 212	Computer-Aided Drafting and Design	3	MET 131	x
EGT 243	AC Circuit Analysis	3	EET 132	
EGT 245	Digital Electronics	3	EET 121	
EGT 267	Programming for Engineering Applications	3	CIT 130	
EGT 301	Cooperative Education in Engineering Technology	3	MET 291 + MET 292	
EGT 310	Project Management and Problem Solving	3		
EGT 330	Electrical Machines	3	EMET 252	
EGT 344	Analog Electronics	3		
EGT 367	Microprocessors	3	ESET 220	
EGT 377	Power Electronic Systems	3		
EGT 386	Electro-Mechanical Instrumentation and Control	3	EMET 141 or EMET 180 + EMET 240	
EGT 402	Control Systems	3		
EGT 404	Signals and Systems	3		
EGT 416	Capstone I	1		

NKU Course	Course	Credits	CState Course	Taken at CState
EGT 417	Capstone II	3		
EGT 448	Network Hardware	3		
EGT 467	Advanced Microprocessors	3		
EGT 477	Advanced Power Designs	3		
Select 5: EGT 261 EGT 280 EGT 300 EGT 318 EGT 320 EGT 321 EGT 340 EGT 361 EGT 394 EGT 405 EGT 408 EGT 412 EGT 423 EGT 450	Select fifteen credit hours from the following: Engineering Materials Introduction to Microsystems Statics and Strengths of Materials Introduction to Nanotechnology Robotic Systems and Material Handling Productivity Management, Scheduling and Planning Applied Dynamics Fluid Power Special Topics (1-3 credits) Metrology and Geometric Tolerancing Mechatronics Topics Advanced CADD Planning and Design of Industrial Facilities Thermodynamics and Heat Transfer	15	MET 140 = EGT 261  MET 150 = EGT 300  EMET 150 + EMET 270 = EGT 320 + EGT 151  EVT 240 or MET 240 = EGT 361  MET 132 = EGT 412  MET 260 = EGT 450	x (need 12 more credits)
	<b>Subtotal Major Credit Hours at NKU</b>	<b>67</b>		
	<b>Subtotal Major Credit Hours at CState</b>	<b>28</b>		
	<b>Total Major Credit Hours</b>	<b>95</b>		
	<b>Total Baccalaureate Degree Credit Hours</b>	<b>131</b>		

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

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