TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE
2024-2025

Associate of Science to Bachelor of Science in Physics

Overview

Completion of the following curriculum will satisfy the requirements for the Associate of Science (AS) degree at Cincinnati State (CState) and leads to the Bachelor of Science (BS) in Physics 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.

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 prerequisites for courses and 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 Science advising brochure or the catalog for A and B list courses in Arts and Humanities or Social and Behavioral Sciences. Some courses in this document may have prerequisites that are not reflected in the grid. Students should work with their advisor to ensure that prerequisites are met.

CINCINNATI STATE AS TO NKU BS IN PHYSICS CHECKLIST

Cincinnati State

Category 1: Ohio Transfer 36 Requirements

CState Course	Course or Category	Credits	NKU Course	Completed
ENG 101	English Composition 1	3	ENG 101	
ENG 102 or ENG 103 or ENG 104 or ENG 105	English Composition 2: Contemporary Issues English Composition 2: Writing about Literature English Composition 2: Technical Communication English Composition 2: Business Communication	3	ENG 102 or (GWR 200G)	
COMM 110	Public Speaking	3	CMST 101	
TBS XXX	Arts/Humanities List A Elective	3	TBD XXX	
TBS XXX	Arts/Humanities List B Elective	3	TBD XXX	
TBS XXX	Social/Behavioral Science List A Elective	3	TBD XXX	
TBS XXX	Social/Behavioral Science List B Elective	3	TBD XXX	
MAT 251	Calculus 1	5	MAT 129	
MAT 252	Calculus 2	5	MAT 229	
MAT 253	Calculus 3	5	MAT 329	
PHY 201	Physics 1: Calculus-Based	5	PHY 220	
PHY 202	Physics 2: Calculus-Based	5	PHY 224	
	Subtotal General Education Core	**46**		

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

Category 2: CState Degree Requirements for the AS and NKU Recommendations

CState Course	Course or Category	Credits	NKU Course	Completed
FYE 1XX	First Year Experience Elective	1	UNV 100T	
HUM 190	Career Exploration Seminar: AA/AS	2	CEP 101	
HUM XXX	Co-op/Internship Elective 1 and Elective 2	2	CEP 300	
CHE 121/131	General Chemistry 1 with Lab	5	CHE 120/120L	
CHE 122/132	General Chemistry 2 with Lab	5	CHE 121/121L	
TBS XXX	Directed Electives	1	TBD XXX	
	Total Associate Degree Credit Hours	**62**		

Northern Kentucky University

Category 3: NKU Major Requirements for the BS in Physics

NKU Course	Course	Credits	CState Course	Taken at CState
CHE 120/120L	General Chemistry I with Lab	4	CHE 121/131	x
CHE 121/121L	General Chemistry II with Lab	4	CHE 122/132	x
MAT 129	Calculus I	4	MAT 251	x
MAT 229	Calculus II	5	MAT 252	x
MAT 329	Calculus III	4	MAT 253	x
MAT 325	Differential Equations	3		
PHY 100	Science, Engineering, and Design	1		
PHY 220	University Physics with Laboratory I	4	PHY 201	x
PHY 222	University Physics with Laboratory II	4		
PHY 224	University Physics with Laboratory III	4	PHY 202	x
PHY 300	Intermediate Physics Laboratory	2		
PHY 310	Dynamics	3		
PHY 360	Thermodynamics	3		
PHY 361	Modern Physics I	3		
PHY 393	Physics Seminar	1		
PHY 405	Classical Mechanics	3		
PHY 410	Electromagnetic Theory	4		
PHY 460	Quantum Mechanics	3		
Select 1 course: PHY 301 AST 310	Select one course from the following: Advanced Physics Laboratory Astronomical Techniques	2-3		
Select 6 credits: PHY 305 PHY 320 PHY 330 PHY 315 PHY 392 PHY 394 PHY 396 PHY 399 PHY 420 PHY 492 AST 315 AST 325 AST 392 AST 394 AST 397 AST 399 AST 492	Select 6 credit hours from the following: Statics Physical Optics Mathematical Physics Introduction to Astrophysics Directed Research: Physics (1-3 credits) Topics: Physics (1-3 credits) Special Projects: Physics (1-3 credits) Readings in Physics (1-3 credits) Modern Physics II Undergraduate Research: Physics (1-3 credits) Introduction to Astrophysics Geology of the Planets Directed Research: Astronomy (1-3 credits) Topics: Astronomy Special Projects: Astronomy (1-3 credits) Independent Study in Astronomy (1-3 credits) Directed Research: Astronomy (1-3 credits)	6		

NKU Course	Course	Credits	CState Course	Taken at CState
	Subtotal Major Credit Hours at NKU	**38-39**		
	Subtotal Major Credit Hours at CState	**29**		
	Total Major Credit Hours	**67-68**		

Category 4: Additional Requirements at NKU

	Category	Credits		
	Subtotal Minor/Focus Hours (6 credits needed for a minor in Mathematics)	**6-24**		
	Subtotal Elective Credit Hours	**0-14**		
	Total Baccalaureate Degree Credit Hours	**120**		

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