



TWO DEGREES, ONE PATH

TRANSFER PATHWAY GUIDE 2024-2025

Associate in Science to
Bachelor of Science in Chemistry (General Chemistry Track)

Overview

Completion of the following curriculum will satisfy the requirements for the Associate in Science (AS) at a Kentucky Community and Technical College System (KCTCS) institution and leads to the Bachelor of Science (BS) in Chemistry (General Chemistry Track) at Northern Kentucky University (NKU).

Applying to the KCTCS2NKU 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 a KCTCS institution, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at their KCTCS institution.

Degree Requirements for KCTCS

1) Completion of minimum 60 credit hours, 2) minimum cumulative GPA 2.0, 3) minimum of 15 credit hours earned at the institution awarding the degree, 4) cultural competence course, 5) demonstration of digital literacy, and 6) college success requirement.

Admission Requirements to 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. In addition, students must have a minimum GPA of 2.0 across all major coursework and earn at least a C- in each course counted toward the major. A minor is not required for this major.

Students may receive American Chemical Society (ACS) certification in the Bachelor of Science in Chemistry (General Chemistry Track) by selecting appropriate course options.

Note: Students majoring in the BS in Chemistry may choose from the following tracks: General Chemistry Track, Biochemistry Track, Forensics Track, or Pharmaceutical Sciences Track. This pathway outlines the courses for the General Chemistry Track. Students interested in another track should see the course catalog and work with an NKU advisor. Additionally, NKU offers a Bachelor of Arts in Chemistry. Students wishing to be certified to teach chemistry at the secondary level should complete the BA in Chemistry along with a BA in Secondary Education.

General Transfer Information

Students must complete the online application to NKU. There is no application fee for students who are transferring from a KCTCS institution.

KCTCS Scholars Award: Students who are KY residents transferring directly from a KCTCS institution with at least 36 hours from that institution and minimum GPA of 3.0, were never enrolled as a degree-seeking student at NKU, and will be enrolled in at least 12 credit hours both fall and spring semester are eligible for a limited number of \$2,500 annual scholarships (\$1,250 per fall and spring). Students must gain admission to NKU by June 15 for fall and November 1 for spring to be eligible for a possible scholarship. Online accelerated programs are not eligible for the KCTCS Scholars Award.

KCTCS AS TO NKU BS IN CHEMISTRY (GENERAL CHEMISTRY TRACK) CHECKLIST

Kentucky Community and Technical College System Institution

Category 1: KCTCS General Education Core Requirements

KCTCS Course	Course or Category	Credits	NKU Course	Completed
ENG 101	Writing I (WC)	3	ENG 101	
ENG 102	Writing II (WC)	3	ENG 102	
TBS XXX	Oral Communication (OC)	3	TBD XXX	
TBS XXX	Arts & Humanities (AH) – Heritage	3	TBD XXX	
TBS XXX	Arts & Humanities (AH) – Humanities	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences Course (SB)	3	TBD XXX	
TBS XXX	Social & Behavioral Sciences Course (SB)	3	TBD XXX	
CHE 170/175	General College Chemistry I with Lab (NS)	5	CHE 120/120L	
CHE 180/185	General College Chemistry II with Lab (SL)	5	CHE 121/121L	
MAT 175	Calculus I (QR)	5	MAT 129	
MAT 185	Calculus II (QR)	5	MAT 229	
	Subtotal General Education Core Courses	41		

TBS XXX means to be selected by KCTCS student.

TBD XXX means to be determined by NKU based on course selected.

For Social and Behavioral Sciences courses, two disciplines must be represented and different from those in the Arts and Humanities category.

Students who do not meet the prerequisite for MAT 175 Calculus will need to take MAT 150 College Algebra and MAT 155 Trigonometry.

Category 2: KCTCS AS Requirements

KCTCS Course	Course or Category	Credits	NKU Course	Completed
PHY 201/202	College Physics I with Lab (SL)	5	PHY 211	
PHY 203/204	College Physics II with Lab (SL)	5	PHY 213	
	Subtotal AS Requirement Courses	10		

Category 3: KCTCS Electives

KCTCS Course	Course or Category	Credits	NKU Course	Completed
	Digital Literacy	0-3		
	First-Year College Success Course/Experience	0-3		
TBS XXX	Electives (students can take CHE 270/275 and CHE 280/285 to fulfill NKU requirement)	4-10	TBD XXX	
	Subtotal Elective Courses	10		

KCTCS Course	Course or Category	Credits	NKU Course	Completed
	Total Associate Degree Hours	61		

A course carrying the Cultural Competence status must also be completed as part of the AA and AS requirements. Approved Cultural Competence courses are listed in the catalog under Academic Services - Cultural Competence Requirement.

Northern Kentucky University

Category 4: NKU Major Requirements for the BS in Chemistry (General Chemistry Track)

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
CHE 125	Introduction to Chemistry & Biochemistry	1		
CHE 120/120L	General Chemistry I with Lab	4	CHE 170/175	x
CHE 121/121L	General Chemistry II with Lab	4	CHE 180/185	x
CHE 300	Careers in Chemistry	1		
CHE 310/310L	Organic Chemistry I with Lab	4	CHE 270/275	
CHE 311/311L	Organic Chemistry II with Lab	4	CHE 280/285	
CHE 320/320L	Inorganic Chemistry with Lab	5		
CHE 340/340L	Analytical Chemistry with Lab	5		
CHE 350/350L	Instrumental Analysis with Lab	5		
CHE 360	Physical Chemistry I	3		
CHE 361/362L	Physical Chemistry II with Lab	5		
CHE 391W	Chemical Information and Writing	3		
CHE 400	Chemistry Seminar	1		
	Choose at least 3 credit hours from the following:			
CHE 410	Spectrometric Identification of Compounds	3-4		
CHE 440	Environmental Chemistry			
CHE 450	Advanced Chemical Analysis			
CHE 460/460L	Molecular Spectroscopy with Lab			
CHE 483	Biochemistry II			
CHE 511	Natural and Medicinal Product Synthesis			
CHE 512	Physical Organic Chemistry			
CHE 560	Quantum Mechanics			
	Choose at least 3 credit hours from the following:			
CHE 392	Advanced laboratory Projects (1-3 hrs)	3		
CHE 482L	Biochemistry I Lab (1 hr)			
CHE 483L	Biochemistry II Lab (1 hr)			
CHE 492	Research: Chemistry (1-3 hrs)			
CHE 505	The History of Chemistry (2-3 hrs)			
CHE 482	Biochemistry I	3		
MAT 129	Calculus I	4	MAT 175	x
MAT 229	Calculus II	5	MAT 185	x

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
PHY 211	General Physics I with Lab	4	PHY 201/202	x
PHY 213	General Physics II with Lab	4	PHY 203/204	x
	Subtotal Major Credit Hours at NKU	46-47		
	Subtotal Major Credit Hours at KCTCS	25		
	Total Major Credit Hours	71-72		

Category 6: Additional Requirements at NKU

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	Subtotal Elective (including 300/400 Level) Credit Hours	12-13		
	Total Baccalaureate Degree Credit Hours	120		

Note: Students majoring in BS Chemistry may choose from the following tracks: General Chemistry Track, Biochemistry Track, Forensics Track, or Pharmaceutical Sciences Track. Category 4 above outlines the courses for the General Chemistry Track. Students interested in another track should see the course catalog and work with an NKU advisor. Additionally, students interested in Pre-Veterinary Medicine coursework should see the Chemistry (Biochemistry Track) pathway.

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