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TWO DEGREES, ONE PATH

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## **TRANSFER PATHWAY GUIDE 2023-2024**

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) degree at Gateway Community and Technical College (GCTC) and leads to the Bachelor of Science (BS) in Chemistry (General Chemistry Track) degree at Northern Kentucky University (NKU).

### ***Applying to the Gateway2NKU 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 Gateway, enrolled in an associate degree program, plan to transfer to NKU, and maintain a minimum 2.0 cumulative GPA at Gateway.

### ***Degree Requirements for GCTC***

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 GCTC.

**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.

## GCTC AS TO NKU BS IN CHEMISTRY (GENERAL CHEMISTRY TRACK) CHECKLIST

### Gateway Community and Technical College

#### Category 1: GCTC General Education Core Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
ENG 101	Writing I (WC)	3	ENG 101	
Taken at NKU	Chemical Information & Writing (WC)	3	CHE 391 W	
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/Lab I (NS)	5	CHE 120/120L	
CHE 180/185	General College Chemistry II/Lab II (SL)	5	CHE 121/121L	
MAT 175	Calculus I (QR)	5	MAT 129	
MAT 185	Calculus II (QR)	5	MAT 229	
	<b>Subtotal General Education Core Courses</b>	<b>41</b>		

TBS XXX means to be selected by GCTC 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.

#### Category 2: GCTC AS Requirements

GCTC Course	Course or Category	Credits	NKU Course	Completed
PHY 201/202	College Physics I / Lab	5	PHY 211	
PHY 203/204	College Physics II / Lab	5	PHY 213	
	<b>Subtotal AS Requirement Courses</b>	<b>10</b>		

#### Category 3: GCTC Electives

GCTC Course	Course or Category	Credits	NKU Course	Completed
CIT 105 or OST 105	Introduction to Computing or Introduction to Information Systems	3	BIS 101	
FYE 105	Achieving Academic Success	3	UNV 100T	
Taken at NKU	Analytical Chemistry with Lab	5	CHE 340/340L	
	<b>Subtotal Elective Courses</b>	<b>11</b>		
	<b>TOTAL Associate Degree Hours</b>	<b>62</b>		

If completing digital literacy using other means, additional credits will be required in order to fulfill elective requirements.

Degree Requirement: One course must be selected from the KCTCS identified Cultural Competence course list in the KCTCS catalog.

## Northern Kentucky University

### Category 4: NKU Major Core Requirements for the BS in Chemistry

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
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 310/310L	Organic Chemistry I with Lab	4	CHE 270/275	
CHE 311/311L	Organic Chemistry II with Lab	4	CHE 280/285	
CHE 340/340L	Analytical Chemistry with Lab	5	Taken at NKU	x
CHE 360	Physical Chemistry I	3		
CHE 391W	Chemical Information and Writing	3	NKU Course	x
CHE 482	Biochemistry I	3		
MAT 129	Calculus I	4	MAT 175	x
MAT 229	Calculus II	5	MAT 185	x
PHY 211	General Physics I with Lab	4	PHY 201/202	x
PHY 213	General Physics II with Lab	4	PHY 203/204	x

### Category 5: NKU Major Track Requirements for the BS in Chemistry – General Chemistry Track

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
CHE 300	Careers in Chemistry	1		
CHE 320/320L	Inorganic Chemistry with Lab	5		
CHE 350/350L	Instrumental Analysis with Lab	5		
CHE 361/362L	Physical Chemistry II with Lab	5		
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)			
	<b>Subtotal Major Credit Hours at NKU</b>	<b>39-40</b>		
	<b>Subtotal Major Credit Hours at GCTC</b>	<b>32</b>		

NKU Course	Course	Credits	GCTC Course	Taken at GCTC
	<b>Total Major Credit Hours</b>	<b>71-72</b>		

Note: Students majoring in BS Chemistry may choose from the following tracks: General Chemistry Track, Biochemistry Track, Forensics Track, or Pharmaceutical Sciences Track. Category 5 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.

#### Category 6: Additional Requirements at NKU

NKU Course	Course	Credits	KCTCS Course	Taken at KCTCS
	<b>Subtotal Elective (300/400 level) Hours</b>	<b>18-19</b>		
	<b>Total Baccalaureate Degree Credit Hours</b>	<b>120</b>		

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