# TRANSFER ARTICULATION AGREEMENT ("TAA")

Cincinnati State Technical & Community College, Associate of Science, Pre-Engineering

to

University of Cincinnati, College of Engineering & Applied Science, Bachelor of Science, Chemical Engineering



Originating Institution: Cincinnati State Technical & Community College ("Cincinnati State")

Degree/Program: Associate of Science (AS) / Pre-Engineering

University of Cincinnati: College of Engineering & Applied Science **Degree/Program:** Bachelor of Science (BS) / Chemical Engineering

**Introduction:** This TAA details the <u>applicability</u> of courses from the Cincinnati State AS Pre-Engineering to the University of Cincinnati ("UC") BS Chemical Engineering in the College of Engineering & Applied Science. Students who complete the AS Pre-Engineering at Cincinnati State have partially satisfied the UC General Education requirement.

**Articulation Overview:** Graduates from Cincinnati State who have followed the prescribed program and are accepted into the College of Engineering & Applied Science will enter with 62 hours of transfer credit applicable toward the BS Chemical Engineering degree.

**Admission Criteria:** Completing the courses on the appendices below does not guarantee admission to UC BS Chemical Engineering program.

Transfer students seeking admission to the BS Chemical Engineering in the UC College of Engineering & Applied Science must:

- Have earned credit equivalent to UC's MATH 1061
- Have earned credit equivalent to UC's CHEM 1040 or PHYS 2001
- · Meet the minimum GPA requirements listed below

Minimum GPA: 2.80

Minimum Math/Science GPA: 2.80

**BS Completion**: Completion of this program may require more than four semesters to complete due to prerequisite requirements and the order in which required courses must be taken and are offered. UC academic advising staff will work with each transfer student to develop the most expedient pathway to graduation.

**Admission Period**: Cincinnati State students must be admitted to the UC College of Engineering & Applied Science during the duration of this TAA (i.e. between January 1, 2025 and July 31, 2027).

TAA Effective Date: January 1, 2025 TAA Expiration Date: July 31, 2027

### **EXECUTION. DURATION AND REVIEW OF AGREEMENT:**

This TAA becomes effective upon its signing and will remain effective through the expiration date noted above. At the end of this time, the TAA will be reviewed and may be renegotiated. Cincinnati State and the UC College of Engineering & Applied Science agree to keep one another informed as program changes affecting this TAA occur. Additions and/or amendments to this TAA must be in writing and signed by the Parties.

This TAA will be reviewed on an annual basis and is subject to changes in program curriculum.

Cincinnati State students are encouraged to work closely with their academic advisor to monitor possible changes.

SEE ATTACHED APPENDICES FOR COURSE EQUIVALENCIES AND SAMPLE TRANSFER DEGREE MAPS.

signed via Docusign

Dr. Doug Bowling [date]

Dean

Engineering & Technologies Division

Cincinnati State Technical & Community College

signed via Docusign

John Weidner, PhD

Dean

College of Engineering & Applied Science

[date]

University of Cincinnati

signed via Docusign

George Armstrong [date]

Program Chair, Pre-Engineeering

Cincinnati State

**Primary Contact Person for this Agreement:** 

	Cincinnati State	University of Cincinnati
Name	Dr. Myshamil Walker	Rachel Fulton
Title	itle Transfer Center, Director	Sr Transfer & Articulation Specialist
		Transfer Center, Enrollment Management
Email	Myshamil.Walker@cincinnatistate.edu	Rachel.Fulton@uc.edu

# TRANSFER DEGREE MAP

# CINCINNATI STATE TECHNICAL & COMMUNITY COLLEGE



FROM

Associate of Science (AS)
Pre-Engineering

10

College of Engineering & Applied Science

**Bachelor of Science (BS) Chemical Engineering** 

This Transfer Articulation Agreement ("TAA") is valid from January 1, 2025 to July 31, 2027 (not to exceed three (3) years)

The following suggested course sequence includes all course requirements for this TAA. You should consult with an academic advisor each semester to ensure you maintain appropriate degree progress and are fulfilling all requirements for the agreement. Course sequencing below assumes a fall start date. If starting the program during any other term, please consult with your academic advisor. For details beyond course planning, please consult with your academic advisor or the Transfer Center.

SEMESTER 1			UNIVERSITY OF CINCINNATI		
Course ID	Title	Cr Hrs	Course ID	Title / Program Requirement	Cr Hrs
CHE 121	General Chemistry 1	Г	CHEM 1040	General Chemistry I	4
+ CHE 131	+ General Chemistry 1 Lab	5	+ CHEM 1040L	+ General Chemistry I Lab	+ 1
ENG 101	English Composition 1	3	ENGL 1001	English Composition	3
FYE 1XX	First Year Experience Elective	1-3	FYE/MLTI BLOCK	Not used in BS Program	
ENGR 111	Introduction to Engineering 1	2	ENGR	Counts for ENED 1100	1.5
ENGRIII	introduction to Engineering 1	3	1000BLOCK	+ Counts for ENED 1200	+1.5

SEMESTER 2			UNIVERSITY OF CINCINNATI		
Course ID	Title	Cr Hrs	Course ID	Title / Program Requirement	Cr Hrs
PHY 201	Physics 1: Calculus-Based	5	PHYS 2001 + PHYS 2001L	Technical Elective	4 + 1
MAT 251	Calculus 1	5	MATH 1061	Calculus I + Not used in BS Program	4 +
ENG 10X	English Composition 2 Elective – <i>choose any except</i> ENG 105	3	ENGL 2089	Used for ENGL 4092	3
ENGR 112	Introduction to Engineering 2	3	ENGR 1000BLOCK	Counts for ENED 1100 + Counts for ENED 1200	1.5 +1.5

SEMESTER 3			UNIVERSITY OF CINCINNATI		
Course ID	Title	Cr Hrs	Course ID	Title / Program Requirement	Cr Hrs
MAT 252	Calculus 2	5	MATH 1062	Calculus II + Not used in BS Program	4 +
COMM 110	Public Speaking	3	COMM 1071	General Education Elec-FA/HP/HU/SS	3
CHE 121 + CHE 131	General Chemistry 1 + General Chemistry 1 Lab (OT36 Math/Science Elective)	5	CHEM 1041 + CHEM 1041L	General Chemistry II + General Chemistry II Lab	4 + 1
OT36 AH	OT36 Arts/Humanities Elective – <i>choose from</i> MUS 110, THE 105, PHI 105/110, or REL 105	3		General Education Elective-SCE	3

SEMESTER 4		UNIVERSITY OF CINCINNATI			
Course ID	Title	Cr Hrs	Course ID	Title / Program Requirement	Cr Hrs
CHE 201 + CHE 211	Organic Chemistry 1 + Organic Chemistry 1 Lab (Technical Elective 1)	5	CHEM 2040 + CHEM 2040L	Organic Chemistry I + Organic Chemistry I Lab	4 + 1
PHY 202	Physics 2: Calculus-Based (Technical Elective 2)	5	PHYS 2002 + PHYS 2002L	Technical Elective	4 + 1
	OT36 Social Science Elective	3		General Education Elec-FA/HP/HU/SS	3
OT36 AH	OT36 Arts/Humanities Elective	3		Not Applicable to BS Program	

SEMESTER SUMMER			UNIVERSITY OF CINCINNATI		
Course ID	Title	Cr Hrs	Course ID	Title / Program Requirement	Cr Hrs
CHE 202 + CHE 212	Organic Chemistry 2 + Organic Chemistry 2 Lab (Technical Elective 3)	5	CHEM 2041 + CHEM 2041L	Organic Chemistry II + Organic Chemistry II Lab	4 +1
HST XXX	History Elective – <i>choose any except</i> HST 161 or HST 162	3		General Education Elective-DEI	3
	Total credits for AS:	68		Total transfer credits toward BS at UC:	62
			Total remaining credits for BS at UC:		62
				Total credits for BS at UC:	124

# **REMAINING UNIVERSITY OF CINCINNATI COURSES**

	SEMESTER 5 (Fall)	
Course ID	Title	Cr Hrs
CHE 2064 MATH 2073	Material and Energy Balances Differential Equations	3
PD 1011	Intro to Co-op	1
CHEM 3030	Instrumental Analysis	3
CHEM 3030L	Instrumental Analysis Lab	2
	SEMESTER 6 (Spring)	
Course ID	Title	Cr Hrs
COOP 2011	First Co-op Experience	0
	SEMESTER SUMMER	
Course ID	Title	Cr Hrs
CHE 3025	Transport 1 – Fluid Flow	3
ENED 3061 Elective	Engineering Statistics Technical Elective	3 2
Licetive		
Course ID	SEMESTER 7 (Fall) Title	Cr Hrs
COOP 2012	Second Co-op Experience	0
COO1 2012		0
Course ID	SEMESTER 8 (Spring) Title	Cr Hrs
CHE 3026	Transport II – Heat and Mass	4
	Transport	
CHE 3062	Thermodynamics	4
Elective	Technical Elective	2
	SEMESTER SUMMER	
Course ID	Title	Cr Hrs
COOP 3011	Third Co-Op Experience	0

	SEMESTER 9 (Fall)	
Course ID	Title	Cr Hrs
CHE 4061	Separation Processes	3
CHE 4062	Chemical Reaction Engineering	3
CHE 4071	Process Dynamics and Controls	3
CHE 5082	Industrial Chemical Processes	3
PD 2050	Mid-curricular Co-op Community	1
	for Engineering	
	SEMESTER 10 (Spring)	
Course ID	Title	Cr Hrs
COOP 4011	Fourth Co-op Experience	0
	SEMESTER SUMMER	
Course ID	Title	Cr Hrs
COOP 4012	<b>Title</b> Fifth Co-op Experience	Cr Hrs
	Fifth Co-op Experience	
COOP 4012	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I	0
COOP 4012  Course ID  CHE 5045  CHE 5037	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I  Chemical Engineering Laboratory	0 <b>Cr Hrs</b> 4 3
COOP 4012  Course ID  CHE 5045	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I	0 <b>Cr Hrs</b> 4
COOP 4012  Course ID  CHE 5045  CHE 5037	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I  Chemical Engineering Laboratory	0 <b>Cr Hrs</b> 4 3
COOP 4012  Course ID  CHE 5045  CHE 5037	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I  Chemical Engineering Laboratory Chemical Engineering Elective	0 <b>Cr Hrs</b> 4 3
COOP 4012  Course ID CHE 5045 CHE 5037 CHE Elective  Course ID CHE 5046	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I  Chemical Engineering Laboratory Chemical Engineering Elective  SEMESTER 12 (Spring)  Title  Process Design II	0
COOP 4012  Course ID CHE 5045 CHE 5037 CHE Elective  Course ID CHE 5046 CHE 5001	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I  Chemical Engineering Laboratory Chemical Engineering Elective  SEMESTER 12 (Spring)  Title  Process Design II  Senior Seminar	Cr Hrs 4 3 3 Cr Hrs 4 1
COOP 4012  Course ID CHE 5045 CHE 5037 CHE Elective  Course ID CHE 5046	Fifth Co-op Experience  SEMESTER 11 (Fall)  Title  Process Design I  Chemical Engineering Laboratory Chemical Engineering Elective  SEMESTER 12 (Spring)  Title  Process Design II	Cr Hrs 4 3 3 Cr Hrs 4

# **READY TO APPLY?** visit uc.edu/apply

**Admissions Information:** admissions.uc.edu/information/transfer

Questions – Contact Us Transfer Center transfer@uc.edu **Pre-Transfer Advising:** admissions.uc.edu/information/transfer/admissions-and-advising-appointments

### **ADMISSIONS & DEADLINES**

- Completion of the courses on this worksheet does not guarantee admission to the College of Engineering & Applied Science
- Students who complete the AS Pre-Engineering have partially satisfied the UC General Education requirement.
- Students must be admitted to the College of Engineering & Applied Science during the duration of this agreement.
- Minimum GPA: 2.80
- Minimum Math/Science GPA: 2.80
- Admission Criteria:
  - Have earned credit equivalent to UC's MATH 1061
  - o Have earned credit equivalent to UC's CHEM 1040 or PHYS 2001
- **BS Completion**. Completion of this program may require more than four semesters to complete due to prerequisite requirements and the order in which required courses must be taken and are offered. UC academic advising staff will work with each transfer student to develop the most expedient pathway to graduation.

### **TUITION & SCHOLARSHIPS**

- General Tuition & Fees information can be found at: uc.edu/bursar/fees
- Scholarships for transfer students can be found at: financialaid.uc.edu/sfao/scholars/transfer

#### MORE INFORMATION

- Further information about the majors in the College of Engineering & Applied Science can be found at: ceas.uc.edu/academics/departments/mechanical-materials-engineering/degrees-programs/chemical-engineering-bachelor-of-science html
- General information about the University of Cincinnati can be found at: uc.edu

# **EQUIVALENCY GUIDE**

# CINCINNATI STATE TECHNICAL & COMMUNITY COLLEGE



FROM

# Associate of Science (AS) Pre-Engineering

10

College of Engineering & Applied Science

**Bachelor of Science (BS) Chemical Engineering** 

This Transfer Articulation Agreement ("TAA") is valid from January 1, 2025 to July 31, 2027 (not to exceed three (3) years)

The following includes all course requirements for this TAA. You should consult with an academic advisor each semester to ensure you maintain appropriate degree progress and are fulfilling all requirements for the agreement. For details related to course planning, please consult the Transfer Degree Map and your academic advisor.

	CINCINNATI STATE		UNIVERSITY OF CINCINNATI		
Course ID	Title	Cr Hrs	Course ID	Title / Program Requirement	Cr Hrs
ENG 101	English Composition 1	3	ENGL 1001	English Composition	3
ENG 10X	English Composition 2 Elective – <i>choose any except</i> ENG 105	3	ENGL 2089	Used for ENGL 4092	3
MAT 251	Calculus 1	5 MATH 1061 Calculus I + Not used in BS Program		4 +	
MAT 252	Calculus 2	5	MATH 1062	Calculus II + Not used in BS Program	4 +
OT36 AH	OT36 Arts/Humanities Elective – <i>choose from</i> MUS 110, THE 105, PHI 105/110, or REL 105	3		General Education Elective–SCE	3
OT36 AH	OT36 Arts/Humanities Elective	3		Not Applicable to BS Program	
	OT36 Social Science Elective	3		General Education Elec-FA/HP/HU/SS	3
HST XXX	History Elective  - choose any except HST 161 or HST 162	3		General Education Elective-DEI	3
CHE 121	General Chemistry 1	5	CHEM 1040	General Chemistry I	4
+ CHE 131	+ General Chemistry 1 Lab	5	+ CHEM 1040L	+ General Chemistry I Lab	+ 1
PHY 201	Physics 1: Calculus-Based	5	PHYS 2001	Technical Elective	4
			+ PHYS 2001L		+ 1
COMM 110	Public Speaking	3	COMM 1071	General Education Elec-FA/HP/HU/SS	3
CHE 121 + CHE 131	General Chemistry 1 + General Chemistry 1 Lab (OT36 Math/Science Elective)	5	CHEM 1041 + CHEM 1041L	General Chemistry II + General Chemistry II Lab	4 + 1
FYE 1XX	First Year Experience Elective	1-3	FYE/MLTI	Not used in BS Program	
ENGR 111	Introduction to Engineering 1	3	ENGR 1000BLOCK	Counts for ENED 1100 + Counts for ENED 1200	1.5 +1.5
ENGR 112	Introduction to Engineering 2	3	ENGR 1000BLOCK	Counts for ENED 1100 + Counts for ENED 1200	1.5 +1.5
CHE 201 + CHE 211	Organic Chemistry 1 + Organic Chemistry 1 Lab (Technical Elective 1)	5	CHEM 2040 + CHEM 2040L	Organic Chemistry I + Organic Chemistry I Lab	4 + 1
PHY 202	Physics 2: Calculus-Based (Technical Elective 2)	5	PHYS 2002 + PHYS 2002L	Technical Elective	4 + 1
CHE 202 + CHE 212	Organic Chemistry 2 + Organic Chemistry 2 Lab (Technical Elective 3)	5	CHEM 2041 + CHEM 2041L	Organic Chemistry II + Organic Chemistry II Lab	4 +1
	Total credits for AS	68		Total transfer credits toward BS at UC: Total remaining credits for BS at UC: Total credits for BS at UC:	62 62 124

REMAINING	UNIVERSITY OF CINCINNATION	OURSES
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CHE 2064	Material and Energy Balances	4
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PD 1011	Intro to Co-op	1
CHEM 3030	Instrumental Analysis	3
CHEM 3030L	Instrumental Analysis Lab	2
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Course ID	Title	Cr Hrs
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	Transport	
CHE 3062	Thermodynamics	4
Elective	Technical Elective	2
	SEMESTER SUMMER	
Course ID	Title	Cr Hrs
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	SEMESTER 9 (Fall)	
Course ID	Title	Cr Hrs
CHE 4061	Separation Processes	3
CHE 4062	Chemical Reaction Engineering	3
CHE 4071	Process Dynamics and Controls	3
CHE 5082	Industrial Chemical Processes	3
PD 2050	Mid-curricular Co-op Community	1
	for Engineering	
	SEMESTER 10 (Spring)	
Course ID	Title	Cr Hrs
COOP 4011	Fourth Co-op Experience	0

SEMESTER 11 (Fall)						
Course ID	Title	Cr Hrs				
CHE 5045	Process Design I	4				
CHE 5037	Chemical Engineering Laboratory	3				
CHE Elective	Chemical Engineering Elective	3				
	SEMESTER 12 (Spring)					
Course ID	Title	Cr Hrs				

Course ID	Title	Cr Hrs
CHE 5046	Process Design II	4
CHE 5001	Senior Seminar	1
CHE Elective	Chemical Engineering Elective	3

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- General information about the University of Cincinnati can be found at: uc.edu

# **READY TO APPLY?** visit uc.edu/apply

**Admissions Information:** admissions.uc.edu/information/transfer

Title

Course ID

COOP 4012

**SEMESTER SUMMER** 

Fifth Co-op Experience

**Questions – Contact Us Transfer Center** transfer@uc.edu

Cr Hrs

**Pre-Transfer Advising:** 

admissions.uc.edu/information/transfer/admissionsand-advising-appointments