

# TRANSFER ARTICULATION AGREEMENT

Columbus State Community College, Associate of Science,  
Systems Engineering

to

University of Cincinnati, College of Engineering & Applied Science,  
Bachelor of Science, Industrial & Systems Engineering



**Originating Institution:** Columbus State Community College

**Degree/Program:** Associate of Science (AS) / Systems Engineering

**Target Institution:** University of Cincinnati / College of Engineering & Applied Science

**Degree/Program:** Bachelor of Science (BS) / Industrial & Systems Engineering (ISE)

**Introduction:** This agreement details the applicability of courses from the Columbus State Community College AS Systems Engineering to the UC BS ISE in the College of Engineering & Applied Science. Students who complete the AS Systems Engineering at Columbus State Community College have satisfied the UC General Education requirement.

**Articulation Overview:** Graduates from Columbus State Community College who have followed the prescribed program and are accepted into the College of Engineering & Applied Science will enter with 57 hours of transfer credit applicable toward the BS ISE.

**Admission Criteria:** \*Note: completing the courses on the appendices below does not guarantee admission to the UC BS ISE.

Transfer students seeking admission to the BS ISE 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 requirement listed below

**Minimum GPA:** 2.6

**Minimum Math/Science GPA:** 2.5

**BS Completion:** Completion of this program will require more than four semesters to complete due to prerequisite and co-op 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:** Columbus State Community College students must be admitted to the UC College of Engineering & Applied Science during the duration of this agreement (i.e. between August 1, 2024 and July 2027).

**Agreement Execution Date:** August 2024

**Agreement End Date:** July 31, 2027

## EXECUTION, DURATION AND REVIEW OF AGREEMENT:

This agreement becomes effective upon its signing by the Deans of both Colleges and will remain effective for the duration outlined above. At the end of this time, the agreement will be reviewed and may be renegotiated. Columbus State Community College and the UC College of Engineering & Applied Science agree to keep one another informed as program changes affecting the agreement occur. The Deans of both Colleges will agree upon any future additions and/or amendments to this document in writing.

This agreement will be reviewed on an annual basis and is subject to change due to revisions in program curriculum.

**Columbus State Community College 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.**

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Systems Engineering

to

University of Cincinnati, College of Engineering & Applied Science,  
Bachelor of Science, Industrial & Systems Engineering



*signed via DocuSign 5/21/2024*

Dr. Kelly Hogan [date]  
Associate VP of Academic Affairs  
Columbus State Community College

*signed via DocuSign 5/27/2024*

John Weidner, Ph.D. [date]  
Dean  
College of Engineering & Applied Science  
University of Cincinnati

*signed via DocuSign 5/21/2024*

Dr. Allysen Todd [date]  
Dean, Arts & Sciences Division  
Columbus State Community College

CEAS Curriculum Committee *Approved 05/13/2024*  
CEAS Department *Approved 05/08/2024*

## Primary Contact Person for this Agreement:

	Columbus State Community College	University of Cincinnati
<b>Name</b>	Mary Whitt, MS	Sr Transfer & Articulation Specialist
<b>Title</b>	Assistant Director, Curriculum Management, University Transfer Center	Transfer Center, Enrollment Management
<b>Email</b>	mwhitt@csc.edu <i>initialed via DocuSign 5/21/2024</i>	transfer@uc.edu

# Transfer Degree Map

FROM

Columbus State Community College  
**Associate of Science (AS)  
Systems Engineering**

TO

University of Cincinnati  
College of Engineering & Applied Science  
**Bachelor of Science (BS)  
Industrial & Systems Engineering (ISE)**

This agreement is valid from **August 1, 2024 to July 31, 2027**

## Admissions & Deadlines

**Transfer Admissions Information:** [admissions.uc.edu/information/transfer](https://admissions.uc.edu/information/transfer)

### Admission Criteria:

- Completion of the courses on this worksheet does not guarantee admission to the UC program.
- Students who complete the AS Systems Engineering at Columbus State Community College have satisfied the UC General Education requirement.
- Students must be admitted to the UC College of Engineering & Applied Science during the duration of this agreement.
- Minimum GPA: 2.6
- Minimum Math/Science GPA: 2.5
- Have earned credit equivalent to UC's MATH 1061
- Have earned credit equivalent to UC's CHEM 1040 or PHYS 2001

## Tuition & Scholarships

**General Tuition & Fees:** [uc.edu/bursar/fees](https://uc.edu/bursar/fees)

**Scholarships for transfer students:** [financialaid.uc.edu/sfao/scholars/transfer](https://financialaid.uc.edu/sfao/scholars/transfer)

## Contact Information

### UC Transfer Center:

Email: [transfer@uc.edu](mailto:transfer@uc.edu)

[admissions.uc.edu/information/transfer](https://admissions.uc.edu/information/transfer)

### Details of this agreement or equivalencies:

Rachel Fulton, Sr Transfer & Articulation Specialist,

Transfer Center, [transfer@uc.edu](mailto:transfer@uc.edu)

## More Information

### BS ISE majors in the College of Engineering & Applied Science:

[ceas.uc.edu/academics/departments/mechanical-materials-engineering/degrees-programs/industrial-and-systems-engineering-bachelor-of-science.html](https://ceas.uc.edu/academics/departments/mechanical-materials-engineering/degrees-programs/industrial-and-systems-engineering-bachelor-of-science.html)

**General information about the University of Cincinnati:** [uc.edu](https://uc.edu)

## Curriculum Equivalencies

The following suggested course sequence includes all course requirements for this articulation agreement. 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**

Columbus State Community College			University of Cincinnati		
Course ID	Course Title	Cr Hr	Course ID	Course Title	Cr Hr
ENGL 1100	Composition I	3	ENGL 1001	English Composition	3
ENGR 1181	Fundamentals of Engineering I	3	ENED 1020	<i>Counts for ENED 1100 with ENGR 1182 only</i>	3
COLS 1100	First Year Experience Seminar	1	FYE 1000BLOCK	<i>Not Applicable to BS Program</i>	--
PHYS 1250	Calculus-Based Physics I	5	PHYS 2001 + PHYS 2001L	College Physics I + College Physics I Lab	4 + 1
MATH 1151	Calculus I	5	MATH 1061	Calculus I + <i>Not Applicable to BS Program</i>	4 + --

**SEMESTER 2**

Columbus State Community College			University of Cincinnati		
Course ID	Course Title	Cr Hr	Course ID	Course Title	Cr Hr
ENGR 1182	Fundamentals of Engineering II	3	ENGR 1000BLOCK	<i>Counts for ENED 1120 with ENGR 1182 only</i>	3
PHYS 1251	Calculus-Based Physics II	5	PHYS 2002 +PHYS 2002L	College Physics II + College Physics II Lab	4 + 1
ENGL 2367, 2467, 2567, 2667, or 2767	Intermediate Composition	3	ENGL 2089	<i>Counts for ENGL 4092</i>	3
MATH 1172	Engineering Mathematics A	5	MATH 1062	Calculus II + <i>Not Applicable to BS Program</i>	4 + --

**SEMESTER SUMMER**

Columbus State Community College			University of Cincinnati		
Course ID	Course Title	Cr Hr	Course ID	Course Title	Cr Hr
MATH 2173	Engineering Mathematics B	5	MATH 2063	Multivariable Calculus + <i>Not Applicable to BS Program</i>	4 + --
ASC 1190	Critical Thinking in Arts & Sciences	1	MLTI 1071	<i>Not Applicable to BS Program</i>	--

**SEMESTER 3**

Columbus State Community College			University of Cincinnati		
Course ID	Course Title	Cr Hr	Course ID	Course Title	Cr Hr
ENGR 2040	Statics & Intro Mechanics of Materials	4	AEEM 1001	<i>Used for MECH 2020 + Technical Elective</i>	1.5 + 2.5
GEOG 2400	Economic & Social Geography	3	GEOG 1004	Intro to Human Geography <i>(Society, Culture, Ethics Elective)</i>	3
MATH 2174	Linear Algebra & Diff Equat for Engr	5	MATH 2076	<i>Technical Elective</i>	5

SEMESTER 4					
Columbus State Community College			University of Cincinnati		
Course ID	Course Title	Cr Hr	Course ID	Course Title	Cr Hr
HUM 1160	Music & Art Since 1945	3	HUMT 1000BLOCK	<i>Not Applicable to BS Program</i>	--
ENGR 2030	Dynamics	4	AEEM 2032	<i>Counts for MECH 2020 + Technical Elective</i>	1.5 + 2.5
	Historical Study Course – choose any <i>except</i> HIST 2715, 2716	3		<i>General Education Elective [DEI]</i>	3
SBS XXXX	OT36 Social & Behavioral Science – choose any <i>except</i> ECON 1110, SOC 2309	3		<i>General Education Elective [HP, SS]</i>	3
Total credits for AS degree:		<b>64</b>	Total transfer credits toward BS at UC:		<b>57</b>
			Total remaining credits for BS at UC:		<b>71</b>
			Total credits required for BS at UC:		<b>128</b>

### Remaining Coursework at University of Cincinnati

SEMESTER 5 (FALL)		
Course ID	Course Title	Cr Hr
MECH 1072C	Engineering Design Graphics	4
PD 1011	Introduction to COOP for CEAS	1
CS 2023	Python Programming	3
ENED 3061	Probability & Statistics I	3
CHEM 1040 + CHEM 1040L	General Chemistry I + General Chemistry Laboratory I	3 +1

SEMESTER 6 (SPRING) - COOP		
Course ID	Course Title	Cr Hr
COOP 2011	COOP I	0

SEMESTER 7 (SUMMER)		
Course ID	Course Title	Cr Hr
COMM 1071	Introduction to Effective Speaking	3
ISE 2010	Data Analytics I	3
ISE 3020	Ergonomics in Systems Design	3
MECH 2030	Solid Mechanics	3

**SEMESTER 8 (FALL) - COOP**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
COOP 2012	COOP II	0

**SEMESTER 9 (SPRING)**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
CS 2070	Discrete Mathematics & Matrix Methods	3
ISE 3011	Deterministic Systems Models	3
MECH 2060	Manufacturing Processes	3
MECH 5060	Engineering & Production Economics	3

**SEMESTER 10 (SUMMER) - COOP**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
COOP 3011	COOP III	0

**SEMESTER 11 (FALL)**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
CS 2024C	Data Structures & Algorithms in Python	4
ISE 4012	Probabilistic Systems Models	3
ISE 4030	Quality & Reliability Engineering	3
MECH 5175	Production Planning & Control	3
PD 2050	Mid-Curricular COOP Community for Engineering	1

**SEMESTER 12 (SPRING) - COOP**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
COOP 4011	COOP IV	0

**SEMESTER 13 (SUMMER) - COOP**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
COOP 4012	COOP V	0

**SEMESTER 14 (FALL)**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
ISE 5050	Systems Simulation	3
MECH 5168	Digital Design & Manufacturing	3
	Technical Elective	3
	Technical Elective	3
	Technical Elective	3

**SEMESTER 15 (SPRING)**

<b>Course ID</b>	<b>Course Title</b>	<b>Cr Hr</b>
ISE 5051	Industrial & Systems Engineering Senior Design	3