Earn your associate degree from Edison State Community College and then transfer seamlessly to Wright State University to earn your bachelor's degree.

Edison State Community College

to

Wright State University



Industrial and Systems Engineering Bachelor of Science



Studies in industrial and systems engineering (ISE) focus on doing more with less—doing things better, cheaper, faster, more safely, and with less waste. Instead of designing bridges, machines, or circuits, industrial engineers will engineer all parts of a process—people, machines, materials, information, and energy—to make a product or provide a service.

Students interested in ISE must contact the advising office (cecs-advisors@wright.edu or 937-775-5272) at Wright State University as early in their interest as possible.

Students interested in Wright Path program benefits will apply to the program through Wright State website at **wright.edu/edisonstate**.

SUBJECT CODE	COURSE NUMBER	EDISON STATE CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
BIO CHM	121S or 121S	4 or 5	Intro Biology: Cells/Genetics/ Evolution General Chemistry I Elective	BIO 1120 or CHM 1210 + 1210L Other Course Requirement	4 or 3+2
CIS	110S	3	Computer Concepts and Applications	CS 1010 General Elective Credit	3
CIS	221S	3	Java Programming I Elective	CS 1180 (Substitutes for CS 1160 Requirement)	3
COM	121S	3	Introduction to Communication	COM 1010 General Elective Credit	3
ENG	121S	3	Composition I	ENG 1100 Element A: Communication	3
ENG	125S	3	Technical Writing	EGR 3350 Element A: Communication	3
MTH	221S	5	Calculus/Analytical Geometry I Mathematics, Statistics, & Logic Ohio Transfer 36	MTH 2300 + Elective Element B: Mathematics + General Elective Credit	4+1
MTH	2228	5	Calculus/Analytical Geometry II Elective	MTH 2310 + Elective Element B: Mathematics + General Elective Credit	4+1
PHY	241S	5	Science and Engineering Physics I Natural & Physical Sciences Ohio Transfer 36	PHY 2400 + 2400L Element E: Natural Science	4+1
PHY	242S	5	Science and Engineering Physics II Natural & Physical Sciences Ohio Transfer 36	PHY 2410 + 2410L Element E: Natural Science	4+1
PSY	121S	3	Introduction to Psychology Social & Behavioral Science Ohio Transfer 36	PSY 1010	3

Edison State Community College

to

Wright State University

Associate of Science

Industrial and Systems Engineering Bachelor of Science

				Element D: Social and Behavioral Science	
		3	Statistics for Engineers	ISE 2211	3
			Elective (Completed at Wright State through SOCHE Agreement While Studying at Edison State)		
		3	Engineering Design and Solid	ME 1040	3
			Modeling	Major CECS Course	
			(Completed at Wright State through SOCHE Agreement While Studying at Edison State)		
		4	Discrete Mathematics for	MTH 2570	4
			Computing	Major CECS Course	
			(Completed at Wright State through SOCHE Agreement While Studying at Edison State)		
		6	Two Ohio Transfer 36 Arts &	Element C: Arts and	6
			Humanities Courses from	Humanities	
			Different Subjects (from List		
		3	Below) One Ohio Transfer 36 Social &	Element C: Arts and	3
		J	Behavioral Science History	Humanities -	J
			Course (from List Below)	History	
TOTAL	61	1-62		y	61-62

• Choose two Ohio Transfer 36 Arts and Humanities courses from different subjects from:

EDISON STATE COURSE	EDISON STATE CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
ART 123S	3	Ancient Art History	ART 2110	3
ART 124S	3	Art History: The Modern Era	ART 2120	3
ENG 123S	3	Introduction to Literature	ENG 1XXX	3
ENG 205S	3	Great Books	ENG 2040	3
ENG 221S	3	American Literature I	ENG 3310	3
ENG 222S	3	American Literature II	ENG 3320	3
ENG 241S	3	British Literature I – Middle	ENG 3210 or	3
		Ages/Restoration	ENG 3220	
ENG 242S	3	British Literature II – Romantics/	ENG 3230	3
		20 th Century		
HST 224S	3	African American History Since 1619	HST 2XXX	3

Edison State Community College

to

Wright State University

Associate of Science

Industrial and Systems Engineering
Bachelor of Science

EDISON STATE COURSE	EDISON STATE CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
HUM 121S	3	Introduction to Humanities	HUM 1XXX	3
MUS 120S	3	Music Appreciation	MUS 2140	3
MUS 127S	3	Music as a World Phenomenon	MUS 2420	3
PHI 121S	3	Introduction to Philosophy	PHL 2050	3
PHI 123S	3	Introduction to Ethics	PHL 3110	3
REL 121S	3	World Religions	REL 2320	3
THE 121S	3	Introduction to Theatre	TH 2140	3

• Choose one Ohio Transfer 36 Social and Behavioral Science history course from:

EDISON STATE COURSE	EDISON STATE CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
HST 121S	3	United States History to 1877	HST 2110	3
HST 122S	3	United States History Since 1877	HST 2120	3
HST 125S	3	Western Civilization to 1715	HST 1100	3
HST 126S	3	Western Civilization Since 1715	HST 1200	3

- If PHY 241S and/or 242S are not offered at Edison, students are strongly recommended to take the course(s) at Wright State using SOCHE Cross Registration program.
- All students with declared Industrial and Systems Engineering major are automatically admitted as Pre-Industrial and Systems Engineering students.
- In order to be admitted fully as an industrial and systems engineering major at Wright State, students will need to achieve a cumulative GPA of a 2.25 at Wright State.
- Students must earn a C or higher in ENG 121S, MTH 221S, and PHY 241S at Edison State.
- 120 hours minimum are required for a BS degree at Wright State.

	FIRST YEAR							
Edison	State Co	ommunity College		Wright	State Un	iversity		
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	
			FALL SE	MESTER				
BIO		Intro Biology: Cells/Genetics/ Evolution	4 or	BIO	1120 or	Cells and Genes	4 or	
СНМ	121S	General Chemistry I	5	СНМ	1210 + 1210L	General Chemistry I + Lab Other Course Requirement	3+2	
ENG	121S	Composition I	3	ENG	1100	Academic Writing and Reading Element A: Communication	3	

Edison State Community College

to

Wright State University

Associate of Science

Industrial and Systems Engineering
Bachelor of Science

	FIRST YEAR							
Edison	State Co	ommunity College		Wright	State Ur	niversity		
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	
MTH	221S	Calculus/Analytical Geometry I Mathematics, Statistics, & Logic Ohio Transfer 36	5	MTH	2300	Calculus I + Elective Element B: Mathematics + General Elective Credit	4+1	
		Ohio Transfer 36 Social & Behavioral Science History Course	3			Element C: Arts and Humanities - History	3	
		S	PRING S	EMESTE	R			
СОМ	121S	Introduction to Communication	3	СОМ	1010	Essentials of Public Address General Elective Credit	3	
MTH	222S	Calculus/Analytical Geometry II Elective	5	MTH	2310	Calculus II + Elective Element B: Mathematics + General Elective Credit	4+1	
PSY		Introduction to Psychology Social & Behavioral Science Ohio Transfer 36	3	PSY	1010	Introduction to Psychology Element D: Social and Behavioral Science	3	
		Ohio Transfer 36 Arts & Humanities Course	3			Element C: Arts and Humanities	3	
Total Ho	ours:		29-30	Total Ho	ours:		29-30	

Edison State Community College

to

Wright State University

Associate of Science

Industrial and Systems Engineering
Bachelor of Science

			SECON	D YEAR			
Edison	State C	ommunity College		Wright	State Ur	niversity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
				MESTER			
CIS	1108	Computer Concepts and Applications	3	CS	1010	Introduction to Computers and Office Productivity Tools General Elective Credit	3
ENG	125S	Technical Writing	3	EGR	3350	Technical Communications for Engineers and Scientists Element A: Communication	3
PHY	241S	Science and Engineering Physics I Natural & Physical Sciences Ohio Transfer 36	5	PHY	0.4001	General Physics I + Lab Element E: Natural Science	4+1
		Ohio Transfer 36 Arts & Humanities Course	3			Element C: Arts and Humanities	3
		Elective (Completed at Wright State through SOCHE Agreement While Studying at Edison State)	3	ME	1040	Engineering Design and Solid Modeling Major CECS Course	3
		SF	PRING S	EMESTER	3		
CIS	221S	Java Programming I	3	CS	1180	Computer Science I (Substitutes for CS 1160) Major CECS Course	3
PHY	2428	Science and Engineering Physics II Natural & Physical Sciences Ohio Transfer 36	5	PHY	2410 + 2410L	General Physics II + Lab Element E: Natural Science	4+1
		Elective (Completed at Wright State through SOCHE Agreement While Studying at Edison State)	3	ISE	2211	Statistics for Engineers	3
		Elective (Completed at Wright State through SOCHE Agreement While Studying at Edison State)	4	MTH	2570	Discrete Mathematics for Computing Major CECS Course	4
Total He	ours:		32	Total Ho	ours:		32

Total Credit Hours for Associate Degree: 61-62

Edison State Community College

to

Wright State University

Associate of Science

Industrial and Systems Engineering Bachelor of Science

	THIRD YEAR						
Wright St	Wright State University						
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS				
		FALL SEMESTER					
ISE	4150	Advanced Probability and Statistics for Engineering	3				
ISE	4300	Fundamentals of Human Factors Engineering	3				
ISE	4711	Operations Research I	3				
ISE	4850	Six Sigma for Engineers	3				
ME	2120	Statics	3				
		SPRING SEMESTER					
CS ISE	3840 or 3540	Applied Machine Learning	3				
ISE	4320	Human-System Interaction and Design Thinking Principles	3				
ISE	4712	Simulation and Stochastic Models	4				
ISE	4721	Operations Research II	3				
MTH	2350 or	Differential Equations with Matrix Algebra	4 or				
	2530	Elementary Linear Algebra	3				
Total Hou	ırs:		31-32				

		FOURTH YEAR	
Wright St	tate Unive	rsity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
		FALL SEMESTER	
ISE	4310	Ergonomics	3
ISE	4400	Engineering Economy	3
ISE	4810	Production and Service Systems	3
ISE	4910	Industrial and Systems Engineering Design I	3
		SPRING SEMESTER	
ISE	4330	Engineering in Occupational Safety and Health	3
ISE	4510	Computer Applications in ISE	3
ISE	4820	Supply Chain Analysis and Design	3
ISE	4920	Industrial Systems Design Engineering Design II	3
		General Elective Credit	2-4
Total Hou	ırs:		26-28

Total Credit Hours for Bachelor's Degree: 120

Edison State Community College Wright State University

Associate of Science

Industrial and Systems Engineering
Bachelor of Science

1.ADMISSIONS AND DEADLINES

Join the Wright Path Program

Students interested in applying to the Wright Path must submit a request for membership at wright.edu/edisonstate.

High school students must be close to graduating before applying to the Wright Path, and current Edison State students must have a minimum 2.0 GPA.

Transfer to Wright State University

Students must earn a minimum 2.0 GPA from Edison State in order to transfer to Wright State.

Wright State processes applications as they are received. To help you make a smooth and timely transition, we recommend you submit your application by the following dates:

Fall Semester: April 1
Spring Semester: October 15
Summer Semester: February 1

Students must apply for undergraduate admission one semester prior to completing their studies at Edison State.

In order to be admitted fully as an industrial and systems engineering major at Wright State, students will need to achieve a cumulative GPA of a 2.25 at Wright State.

Students must earn a C or higher in ENG 121S, MTH 221S, and PHY 241S at Edison State.

2. TUITION AND SCHOLARSHIPS

Students interested in scholarship opportunities at Wright State should contact:

Transfer Center 138 Student Union 3640 Colonel Glenn Hwy. Dayton, OH 45435 937-775-5700 transfer@wright.edu

Edison State Community College

to

Wright State University

Associate of Science

Industrial and Systems Engineering Bachelor of Science

3. CONTACT INFORMATION

Edison State Community College Coordinator of Transfer Pathways Advising **Student Services Room #160** 1973 Edison Dr., Piqua, OH 937-778-7844

Wright State University **Transfer Center** 138 Student Union 3640 Colonel Glenn Hwy. Dayton, OH 937-775-5700

This agreement will expire two years from date of signature.

Melissa A. Wertz, Ed.

9 July 2025 Date

Provost

Edison State Community College

Jim Denniston, Ph.D.

7/9/2025 Date

Provost and Senior Vice President for Academic Affairs

Wright State University