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

Clark State College

to

Wright State University

Mechanical Engineering Technology



Industrial and Systems Engineering with Humans and Systems Concentration 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/clarkstate.**

SUBJECT CODE	COURSE NUMBER	CLARK STATE CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
CAD	2100	3	Solid Modeling	ME 2XXX (Substitutes for ME 1040 Requirement)	3
EBE	1000	1	Employability Skills	UNK 1XXX General Elective Credit	1
EBE		2	Co-Op Education I	UNK 2XXX General Elective Credit (Excess)	2
ENG	1111	3	English I	ENG 1100 Element A: Communication	3
ENG	1112	3	English II	ENG 2100 General Elective Credit (Excess)	3
ENT	1000	3	Introduction to Industrial and Engineering Technology	UNK 1XXX (Substitutes for ISE 1110 Requirement) Element E: Natural Science	3
ENT	1050	4	Manufacturing Foundations	UNK 1XXX General Elective Credit	4
ENT	1500	3	Engineering Materials	UNK 1XXX General Elective Credit	3
ENT	2100	3	Manufacturing Processes	ME 2XXX General Elective Credit (Excess)	3
ENT	2200	3	Statics	UNK 2XXX General Elective Credit (Excess)	3
ENT	2300	3	Strength of Materials	UNK 2XXX	3

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SUBJECT CODE	COURSE NUMBER	CLARK STATE CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
				General Elective Credit (Excess)	
ENT	2600	3	Engineering Design	UNK 2XXX General Elective Credit (Excess)	3
INT	1000	1	OSHA 10-Hour General Safety	UNK 1XXX	1
INT	1320	1	Electrical Control Relay	General Elective Credit UNK 1XXX	1
INT	2500	3	Programmable Logic Control	General Elective Credit (Excess) UNK 2XXX General Elective Credit (Excess)	3
MTH	1280 or 2200	4	College Algebra Calculus I	MTH 1280 or MTH 2300 + Elective General Elective Credit (Excess) or Element B: Mathematics + General	4 or 4+1
MTH	1340 or 2220	5	Pre-Calculus Calculus II	Elective Credit (Excess) MTH 1340 or MTH 2310 + Elective General Elective Credit (Excess) or Element B: Mathematics + General Elective Credit (Excess)	5 or 4+1
PHY	1501 or 2501	5	General Physics I with Algebra College Physics I with Calculus	PHY 1110 + 1110L or PHY 2400 + 2400L	4+1
PHY	1502 or 2502	5	General Physics II with Algebra College Physics II with Calculus	Element E: Natural Science PHY 1120 + 1120L or PHY 2410 + 2410L	4+1
PSY	1111	3	Introduction to Psychology Social & Behavioral Science Ohio Transfer 36	Element E: Natural Science PSY 1010 Element D: Social and Behavioral Science	3
TOTAL		61-62			61-62

- 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 1111, MTH 2200, and PHY 1501 or 2501 at Clark State.
- 139-148 hours minimum are required for a BS degree at Wright State.

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FIRST YEAR							
Clark St	Clark State College				State Ur	niversity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
		F	FALL SE	MESTER			
EBE	1000	Employability Skills	1	UNK	1XXX	Non-Equivalent Transfer Course General Elective Credit	1
ENG	1111	English I	3	ENG	1100	Academic Writing and Reading Element A: Communication	3
ENT	1000	Introduction to Industrial and Engineering Technology	3	UNK	1XXX	Non-Equivalent Transfer Course (Substitutes for ISE 1110 Requirement) Element E: Natural Science	3
ENT	1050	Manufacturing Foundations	4	UNK	1XXX	Non-Equivalent Transfer Course General Elective Credit	4
INT	1000	OSHA 10-Hour General Safety	1	UNK	1XXX	Non-Equivalent Transfer Course General Elective Credit	1
MTH	1280 or 2200	College Algebra Calculus I	4	MTH	1280 or 2300	College Algebra Calculus I + Elective General Elective Credit (Excess) or Element B: Mathematics + General Elective Credit (Excess)	4 or 4+1
		SF	PRING S	EMESTE	R	i de la companya de l	
ENG	1112	English II	3	ENG	2100	Research Writing and Argumentation General Elective Credit (Excess)	3
ENT	1500	Engineering Materials	3	UNK	1XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	3
INT	1320	Electrical Control Relay	1	UNK	1XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	1
INT	2500	Programmable Logic Control	3	UNK	2XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	3
MTH		Pre-Calculus Calculus II	5		2310	Precalculus Calculus II + Elective General Elective Credit (Excess) or Element B: Mathematics + General Elective Credit (Excess)	5 or 4+1
			MMER S	SEMESTE			
EBE		Co-Op Education I	2		2XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	2
Total Hours: 33-34 Total Hours:						33-34	

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SECOND YEAR							
Clark State College				Wright	State U	niversity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
	_			MESTER			
CAD	2100	Solid Modeling	3	UNK	1XXX	Non-Equivalent Transfer Course (Substitutes for ME 1040 Requirement)	2
ENT	2100	Manufacturing Processes	3	ME	2XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	2
PHY	1501 or 2501	General Physics I with Algebra College Physics I with Calculus	5	PHY		Principles of Physics I + Lab General Physics I + Lab Element E: Natural Science	4+1
PSY	1111	Introduction to Psychology	3	PSY	1010	Introduction to Psychology	3
		Social & Behavioral Science Ohio Transfer 36				Element D: Social and Behavioral Science	
		SF	PRING S	EMESTEI	R		
ENT	2200	Statics	3	UNK	2XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	3
ENT	2300	Strength of Materials	3	UNK	2XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	3
ENT	2600	Engineering Design	3	UNK	2XXX	Non-Equivalent Transfer Course General Elective Credit (Excess)	3
PHY		General Physics II with Algebra College Physics II with Calculus	5	PHY	1120L oi	Principles of Physics II + Lab General Physics II + Lab Element E: Natural Science	4+1
Total Ho	ours:		28	Total He	ours:		28

Total Credit Hours for Associate Degree: 61-62

Students must complete the following coursework prior to transferring to Wright State if it was not completed as part of the associate degree in order to graduate from Wright State in a timely manner:

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SUBJECT CODE	COURSE NUMBER	CLARK STATE CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
MTH	2200	5	Calculus I	MTH 2300 + Elective	4+1
				Element B: Mathematics + General	
				Elective Credit	
TOTAL		5			5

		THIRD YEAR	
Wright \$	State Univ	versity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT
		FALL SEMESTER	
ANT	2100,	Human Anatomy and Physiology I	4,
BIO	1060,	General Ecology and Diversity	4,
BIO	1120, or	Cells and Genes	4, or
СНМ	1210 +	General Chemistry I + Lab	3+2
	1210L	Element E: Natural Science	
CS	1160	Introduction to Computer Programming	4
EGR	3350 or	Technical Communications for Engineers and Computer Scientists	3
ENG	2140	Research, Technical Writing and Presentation for Scientists and Engineers	
		Element A: Communication	
		Element C: Arts and Humanities - History	3
		SPRING SEMESTER	
CS	2200 or	Discrete Structures and Their Algorithms	4
MTH	2570	Discrete Mathematics for Computing	
ISE	2211	Statistics for Engineers	3
MTH	2310	Calculus II (If MTH 2220 Was Not Completed at Clark State)	0-4
		Element B: Mathematics	
		Element C: Arts and Humanities	3
		Global Inquiry	
		Inclusive Excellence	
		Integrated Writing	
		Element D: Social and Behavioral Science	3
Total Ho			27-32

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		FOURTH YEAR				
Wright	State Univ	versity				
SUBJECT CODE	GUURSE IIILE					
		FALL SEMESTER				
ISE	4150	Advanced Probability and Statistics for Engineering	3			
ISE	4300	Fundamentals of Human Factors Engineering	3			
ISE	4711	Optimization Methods	3			
ISE	4850	Six Sigma for Engineers	3			
MTH	2530	Elementary Linear Algebra	3			
		SPRING SEMESTER				
CS ISE	3840 or 3540	Applied Machine Learning Introduction to Machine Learning in Engineering Applications	3			
ISE	4320	Human-System Interaction and Design Thinking Principles	3			
ISE	4510	Computer Applications in ISE	4			
ISE	4712	Simulation and Stochastic Models	4			
ISE	4820	Supply Chain Analysis and Design	3			
Total Ho	ours:		32			

	FIFTH YEAR				
Wright	Wright State University				
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	4920	Industrial and Systems Engineering Design II	3		
MGT	3100 or	Management and Organizational Behavior	3		
MIS	3000	Fundamentals of Information Systems			
Total Ho	Total Hours:				

Total Credit Hours for Bachelor's Degree: 139-148

1.ADMISSIONS AND DEADLINES Wright Path Articulation Agreement (UPDATED July 1, 2024)

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Join the Wright Path Program

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

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

Transfer to Wright State University

Students must earn a minimum 2.0 GPA from Clark State College 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 to the Undergraduate Admission one semester prior to completing their studies at Clark State College.

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

Students must earn a C or higher in ENG 1111, MTH 2200, and PHY 1501 or 2501 at Clark State.

2. TUITION AND SCHOLARSHIPS

Students interested in scholarship opportunities at Wright State should contact:

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

Wright Path Articulation Agreement (UPDATED July 1, 2024)

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3.CONTACT INFORMATION

Clark State College Travis Binkley, Dean Enrollment Services binkleyt@clarkstate.edu 937-431-7157 Wright State University Transfer Center 138 Student Union 3640 Colonel Glenn Hwy. 937-775-5700

This agreement will expire two years from date of signature.

6.24.2024

Dr. Adrienne Forgette Vice President of Academic Affairs Clark State College Date

7/22/2024

Dr. Amy Thompson Date Provost and Senior Vice President for Academic Affairs Wright State University

Wright State University

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