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

Sinclair College

to

Wright State University

Engineering and Engineering Technology University Transfer

Industrial and Systems Engineering with Humans and Systems Industrial Engineering Concentration

Associate of Science





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 the Wright State website at **wright.edu/sinclair**.

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
CHE	1211	5	General Chemistry I	CHM 1210 + 1210L	3+2
СОМ	2206 or 2211	3	Interpersonal Communication Effective Public Speaking	Element E: Natural Science COM 2020 or COM 1010 General Elective Credit	3
ENG	1101	3	English Composition I	ENG 1100	3
ISE	2240	3	Six Sigma: Green Belt Engineering Transfer Elective	ISE 2XXX (Substitutes for ISE 4850 Requirement)	3
MAT	2270	5	Calculus and Analytic Geometry I	MTH 2300 + Elective Element B: Mathematics + General Elective Credit	4+1
MAT	2280	5	Calculus and Analytic Geometry II	MTH 2310 + Elective Element B: Mathematics + General Elective Credit	4+1
MAT	2320	3	Linear Algebra	MTH 2530	3
MAT	2600	3	Engineering Transfer Elective Applied Statistics Engineering Transfer Elective	Other Course Requirement ISE 2211	3
MET	1301	4	SolidWorks Basics Engineering Transfer Elective	ME 1040 + General Elective Credit	3+1
PHY	1141	4	College Physics I	PHY 1110 + 1110L	3+1

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				Element E: Natural Science	
PHY	1142	4	College Physics II	PHY 1120 + 1120L	3+1
				Element E: Natural Science	
PHY	2210	3	MATLAB for Scientists and	ME 1020	3
			Engineers	(Substitutes for CS	
			Engineering Transfer Elective	1160 Requirement)	
PSY	1100	3	General Psychology	PSY 1010	3
			Social & Behavioral Science Ohio Transfer 36	Element D: Social and	
			Elective	Behavioral Science	
		3	One Ohio Transfer 36 Arts &	Element C: Arts	3
			Humanities History Course	and Humanities -	
			•	History	
		3	One Ohio Transfer 36 Arts &	Element C: Arts	3
			Humanities Course That Is Not	and Humanities	
			History		
		3	One Ohio Transfer 36 Social &	Element D: Social	3
			Behavioral Science Course	and Behavioral	
				Science	
		4-5	One Ohio Transfer 36 Natural &	Element E: Natural	4-5
			Physical Sciences Course	Science	
			Engineering Transfer Elective	(Substitutes for ISE	
				1110 Requirement)	
TOTAL		61-62			61-62

• Choose one Ohio Transfer 36 Arts & Humanities history course from (Consult with your Sinclair and Wright State advisors for additional course options):

SINCLAIR COURSE	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
HIS 1101	3	United States History I	HST 2110	3
HIS 1102	3	United States History II	HST 2120	3
HIS 1105	3	African American History	HST 1XXX	3
HIS 1111	3	Western Civilization I	HST 1100	3
HIS 1112	3	Western Civilization II	HST 1200	3
HIS 2215	3	Survey of African History	RST 2710	3
HIS 2216	3	Survey of Latin American History	RST 2810	3
HIS 2217	3	Survey of East Asian History	RST 2XXX	3
HIS 2218	3	History of Ohio	HST 2XXX	3

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• Choose one Ohio Transfer 36 Arts & Humanities course that is not history from (Consult with your Sinclair and Wright State advisors for additional course options):

SINCLAIR COURSE	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
ART 1110	3	Art Appreciation: Introduction to Art & Art Media	ART 2140	3
ART 2230	3	Art History: Ancient through Medieval Periods	ART 2110	3
ART 2231	3	Art History: Renaissance through Contemporary Periods	ART 2120	3
ART 2235	3	History of Photography	ART 2XXX	3
ART 2236	3	History of Women Artists	ART 2XXX	3
ART 2237	3	History of American Art	ART 2XXX	3
ART 2238	3	History of African Art	RST 2XXX	3
ART 2239	3	History of Asian Art	ART 2XXX	3
DAN 1155	3	Dance History	DAN 2510 + 2520	3
DAN 1157	3	Dance Appreciation	DAN 1XXX	3
HUM 1125	3	Introduction to the Humanities	HUM 1XXX	3
HUM 1130	3	Humanity & the Challenge of Technology	CS 1XXX	3
HUM 1131	3	The Search for Utopia	PHL 1XXX	3
HUM 1135	3	Environmental Ethics	EES 2600	3
HUM 1140	3	Appalachian Folkways	HST 1XXX	3
HUM 1141	3	Appalachian History & Culture	UNK 1XXX	3
LIT 2201	3	British Literature I	ENG 3210 or ENG 3220	3
LIT 2202	3	British Literature II	ENG 3230	3
LIT 2211	3	American Literature I	ENG 3310	3
LIT 2212	3	American Literature II	ENG 3320	3
LIT 2217	3	Images of Women in Literature	ENG 2XXX	3
LIT 2220	3	Introduction to Literature	ENG 2XXX	3
LIT 2230	3	Great Books of the Western World	ENG 2040	3
LIT 2234	3	Literature of Africa, Asia & Latin America	ENG 2310	3

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LIT 2236	3	African-American Literature	ENG 2050	3
			Inclusive Excellence	
LIT 2400	3	Children's & Adolescent Literature	ENG 2XXX	3
MUS 1121	3	Music Appreciation	MUS 2140	3
MUS 1123	3	World Music	MUS 2420	3
			Inclusive Excellence	
MUS 2117	3	Surveys of Musical Styles I	MUS 1210	3
MUS 2118	3	Survey of Musical Styles II	MUS 2XXX	3
PHI 2204	3	Great Books: Philosophy	PHL 2040	3
PHI 2205	3	Introduction to Philosophy	PHL 2050	3
PHI 2206	3	Introduction to Ethics	PHL 3110	3
REL 1111	3	Eastern Religions	REL 2320	3
REL 1112	3	Western Religions	REL 2070	3
REL 1135	3	American Religious Movements	REL 1XXX	3
REL 2204	3	Great Books: The Bible & Western Culture	REL 2040	3
DEL OOSS	0	_	DEL OVVV	
REL 2255	3	People & Religion	REL 2XXX	3
THE 1101	3	Theatre Appreciation	TH 2140	3
THE 2201	3	History of Theatre I	TH 2XXX	3
THE 2202	3	History of Theatre II	TH 2XXX	3

 Choose one Ohio Transfer 36 Social & Behavioral Science course from (Consult with your Sinclair and Wright State advisors for additional course options):

SINCLAIR COURSE	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
AFR 1100	3	African-American Studies	AFS 2000	3
ECO 1100	3	Introduction to Economics	EC 2000	3
ECO 2160	3	Principles of Macroeconomics	EC 2050	3
ECO 2180	3	Principles of Microeconomics	EC 2040	3
GEO 1101	3	Global Forces, Local Diversity	GEO 2200	3
GEO 1102	4	Earth's Physical Environment	GEO 2100 + Elective	3+1
GEO 1201	3	World Regional Geography: People, Places & Globalization	GEO 3300	3
HIS 2219	3	Survey of the Middle East	RST 2910	3
PLS 1120	3	American Federal Government	PLS 2120	3

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SINCLAIR COURSE	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
PLS 1232	3	State & Local Government	PLS 3220	3
PLS 2200	3	Political Life, Systems & Issues	PLS 2000	3
			Inclusive Excellence	
PLS 2220	3	International Relations	PLS 2220	3
SOC 1101	3	Introduction to Sociology	SOC 2000	3
			Inclusive Excellence	
SOC 1117	3	Popular Culture	SOC 1XXX	3
SOC 1145	3	Introduction to Cultural Anthropology	ATH 2150	3
			Global Inquiry Inclusive Excellence	

• Choose one Ohio Transfer 36 Natural Sciences course from:

SINCLAIR COURSE	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
BIO 1171	5	Principles of Biology I	BIO 1120 + Elective	4+1
BIO 1272	5	Principles of Biology II	BIO 1150 + Elective	4+1
CHE 1221	5	General Chemistry II	CHM 1220 + 1220L	3+2
GLG 1101	4	Physical Geology	EES 2510	4
GLG 1201	4	Historical Geology	EES 2550	4

- 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 MAT 2270, ENG 1101, and PHY 1141 at Sinclair.
- 120 hours minimum are required for a BS degree at Wright State.

	FIRST YEAR						
Sinclair	Sinclair College				Wright State University		
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
	FALL SEMESTER						

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			FIRS	T YEAR			
Sinclair	College)		Wright	State Uni	versity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
CHE	1211	General Chemistry I	5	СНМ	1210 + 1210L	General Chemistry I + Lab Element E: Natural Science	3+2
ENG	1101	English Composition I	3	ENG	1100	Academic Writing and Reading Element A: Communication	3
MAT	2270	Calculus and Analytic Geometry I	5	MTH	2300	Calculus I + Elective Element B: Mathematics + General Elective Credit	4+1
PSY	1100	General Psychology Social & Behavioral Science Ohio Transfer 36 Elective	3	PSY	1010	Introduction to Psychology Element D: Social and Behavioral Science	3
		S	PRING	SEMESTE	ER		
ISE		Six Sigma: Green Belt Engineering Transfer Elective	3	ISE	2XXX	Non-Equivalent Transfer Course (Substitutes for ISE 4850 Requirement)	3
MAT	2280	Calculus and Analytic Geometry II	5	MTH	2310	Calculus II + Elective Element B: Mathematics + General Elective	4+1
MET	1301	SolidWorks Basics Engineering Transfer Elective	4	ME	1040	Engineering Design and Solid Modeling + General Elective Credit	3+1
PHY	1141	College Physics I	4	PHY	1110 + 1110L	Principles of Physics I Principles of Physics I Lab Element E: Natural Science	3+1
Total Ho	ours:		32	Total H	ours:		32

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			SECON	D YEAR			
Sinclair	r College)		Wright	State Un	iversity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS	SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
			FALL SE	MESTER			
MAT	2600	Applied Statistics	3	ISE	2211	Statistics for Engineers	3
		Engineering Transfer Elective					
PHY	1142	College Physics II	4	PHY		Principles of Physics II Principles of Physics II Lab Element E: Natural Science	3+1
		Ohio Transfer 36 Arts & Humanities History Course	3			Element C: Arts and Humanities – History	3
		Ohio Transfer 36 Arts & Humanities Course That Is Not History	3			Element C: Arts and Humanities	3
		Ohio Transfer 36 Social & Behavioral Science Course	3			Element D: Social and Behavioral Science	3
		SI	PRING S	EMESTE	R		
СОМ	2206 or 2211	Interpersonal Communication Elective Public Speaking	3	СОМ	2020 or 1010	Interpersonal Communication Essentials of Public Address General Elective Credit	3
MAT	2320	Linear Algebra Engineering Transfer Elective	3	MTH	2530	Elementary Linear Algebra Other Course Requirement	3
PHY	2210	MATLAB for Scientists and Engineers Engineering Transfer Elective	3	ME	1020	Engineering Programming with Matlab (Substitutes for CS 1160 Requirement)	3
		Ohio Transfer 36 Natural & Physical Sciences Course Engineering Transfer Elective	4-5			Element E: Natural Science (Substitutes for ISE 1110 Requirement)	4-5
Total He	ours:		29-30	Total Ho	ours:		29-30

Total Credit Hours for Associate Degree: 61-62

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		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	4400	Engineering Economy	3				
ISE	4711	Optimization Methods	3				
MTH	2570	Discrete Mathematics for Computing	4				
		SPRING SEMESTER					
CS	3840 or	Applied Machine Learning	3				
ISE	3540	Introduction to Machine Learning in Engineering Applications					
EGR	3350 or	Technical Communications for Engineers and Scientists	3				
ENG	2140	Research, Technical Writing and Presentation for Scientists and Engineers					
		Element A: Communication					
ISE	4320	Human-System Interaction and Design Thinking Principles	3				
ISE	4510	Computer Applications in ISE	3				
ISE	4712	Simulation and Stochastic Models	4				
Total Hou	ırs:		32				

		FOURTH YEAR	
Wright State University			
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
FALL SEMESTER			
ISE	4310	Ergonomics	3
ISE	4810	Production and Service Systems	3
ISE	4910	Industrial and Systems Engineering Design I	3
		Technical Elective	3
SPRING SEMESTER			
ISE	4820	Supply Chain Analysis and Design	3
ISE	4920	Industrial and Systems Engineering Design II	3
MGT	3100 or	Management and Organizational Behavior	3
MIS	3000	Fundamentals of Information Systems	
		Technical Elective	3
		Technical Elective or General Elective Credit	2-3
Total Hours:			26-27

Total Credit Hours for Bachelor's Degree: 120

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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/sinclair.

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

Transfer to Wright State University

Students must earn a minimum 2.0 GPA from Sinclair 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 for undergraduate admission one semester prior to completing their studies at Sinclair College.

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 MAT 2270, ENG 1101, and PHY 1141 at Sinclair.

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

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transfer@wright.edu

3. CONTACT INFORMATION

Sinclair College Academic Advising Center Building 10-301 444 W. Third St. 937-512-3700 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.

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07/12/2024

7/22/2024

Anthony M. Ponder, Ed.D. Senior Vice President and Provost Sinclair College Date

Amy Thompson, Ph.D. Date Provost and Senior Vice President for Academic Affairs Wright State University

Wright Path Articulation Agreement (UPDATED July 1, 2024)