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 Technology with Industrial

Electro-Mechanical Engineering Technology Associate of Applied Science

and Systems Engineering Track **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	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
CAM	1109	3	Fundamentals of Tooling & Machining	UNK 1XXX General Elective Credit (Excess)	3
COM	2211	3	Effective Public Speaking	COM 1010 Element A: Communication	3
EET	1120	2	Introduction to DC & AC Circuits	UNK 1XXX General Elective Credit (Excess)	2
EET	1139	3	Electrical Machinery	UNK 1XXX General Elective Credit (Excess)	3
EET	1166	3	Industrial Machine Wiring	UNK 1XXX General Elective Credit (Excess)	3
EET	1198	2	Digital Technology	UNK 1XXX General Elective Credit (Excess)	2
EET	2281	3	Programmable Logic Controllers (CTAG CTEET003 Eliqible Credit)	EE 2XXX General Elective Credit	3
EGR	1128	3	Robotics in Computer Integrated Manufacturing (CIM) Systems	UNK 1XXX General Elective Credit (Excess)	3
EGR	1217	2	Fluid Power & Control	UNK 1XXX General Elective Credit (Excess)	2
EGR	2278 or	3	Automation & Control Capstone	UNK 2XXX	3

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	2279		Mechatronics Capstone	General Elective Credit	
				(Excess)	
ENG	1101	3	English Composition I	ENG 1100	3
NAAT	4.470 .	0.0	O all a mar Al mala ma	Element A: Communication	0.0
MAT	1470 +	3+3 or	College Algebra	MTH 1280 + 1350	3+3 or
	1570 or	_	Analytic Geometry & Trigonometry	General Elective Credit	
	1580	5	Precalculus	(Excess)	3+2
MET	1111	3	Preparatory Math for Engineering	UNK 1XXX	3
			Technology	General Elective Credit	
				(Excess)	
MET	1131	1	Personal Computer Applications	CS 1XXX	1
			for Engineering Technology	General Elective Credit	
				(Excess)	
MET	1231	4	Introduction to Engineering	UNK 1XXX	4
			Design Using 3D CAD	General Elective Credit	
			(MET 1231 CTAG CTMET005 Eligible Credit)	(Excess)	
MET	1301	4	SolidWorks Basics	ME 1040 + 1XXX	3+1
			(MET 1231 CTAG CTMET005 Eligible Credit)	(ME 1040 CTAG CTMET005	•
			(MET 1201 017/6 01/ME1000 Englishe choart)	Eligible Credit)	
MET	1401	3	Additive Design & Printing	UNK 1XXX	3
			· · · · · · · · · · · · · · · · · · ·	General Elective Credit	
				(Excess)	
MET	1431	3	Additive Manufacturing Post	UNK 1XXX	3
IVIL 1	1-101		Process	General Elective Credit	J
			1100033		
MET	2281	3	Engineering Technology	(Excess) UNK 2XXX	3
IVILI	2201		Professional Practice		3
			Froiessional Fractice	General Elective Credit	
PHY	1141	4	College Physics I	(Excess) PHY 1110 + 1110L	3+1
FIII	1141	4			371
			Natural & Physical Sciences Ohio Transfer 36	Element E: Natural Science	
		3	Elective	Flament D. Casial	3
		3	One Ohio Transfer 36 Social &	Element D: Social	3
			Behavioral Science Course	and Behavioral	
		00.01		Science	20.01
TOTAL		63-64			63-64

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

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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 2XXX	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
PLS 1120	3	American Federal Government	PLS 2120	3
PLS 1232	3	State & Local Government	PLS 3220	3
PLS 2200	3	Political Life, Systems & Issues	PLS 2000	3
PLS 2220	3	International Relations	PLS 2220	3
PSY 1100	3	General Psychology	PSY 1010	3
PSY 1160	3	Black Psychology	PSY 1XXX	3
SOC 1101	3	Introduction to Sociology	SOC 2000	3
SOC 1117	3	Popular Culture	SOC 1XXX	3
SOC 1145	3	Introduction to Cultural Anthropology	ATH 2150	3

- All students with declared Engineering Technology major are automatically admitted as Pre-Engineering Technology students.
- In order to be admitted fully as an engineering technology 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 1101, MAT 2270, and PHY 1141 at Sinclair.
- 128-146 hours minimum are required for a BS degree at Wright State.

Total Credit Hours for Associate Degree: 63-64

All students pursing an Engineering Technology program at Wright State must complete the following coursework at Sinclair prior to transferring to Wright State in order to graduate from Wright State in a timely manner:

SUBJECT	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
ISE	2220	3	Applied Statistics for Process Control & Improvement	ISE 2211	3

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MAT	2270	5	Calculus and Analytic Geometry I	MTH 2300 + Elective Element B: Mathematics + General	4+1
				Elective Credit	
TOTAL		8			8

• Students must earn a C or higher in MAT 2270 at Sinclair.

Students opting for Business Analytics and Computing and Information Technology Minors must also complete the following coursework at Sinclair <u>prior to</u> transferring to Wright State in order to graduate from Wright State in a timely manner:

SUBJECT CODE	COURSE NUMBER	SINCLAIR CREDIT HOUR	COURSE TITLE	WRIGHT STATE COURSE #	WRIGHT STATE CREDIT HOUR
CIS	2266	3	Python for Data Analytics	CS 2XXX (Substitutes for CS 1160 Requirement)	3
ISE	2240	3	Six Sigma: Green Belt	ISE 2XXX (Substitutes for ISE 4850 Requirement)	3
		3	One Ohio Transfer 36 Arts & Humanities History Course	Element C: Arts and Humanities - History	3
TOTAL		9			9

• Choose one Ohio Transfer 36 Arts & Humanities history course from:

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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BUSINESS ANALYTICS EMPHASIS

		THIRD YEAR	
Wright St	ate Unive	rsity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
		FALL SEMESTER	
EE	2010	Analog Circuit Theory	3
EE	2010L	Analog Circuit Theory Lab	1
ISE	4150	Advanced Probability and Statistics for Engineering	3
ISE	4711	Operations Research I	3
PHY	1120	Principles of Physics II	4
		Element E: Natural Science	
PHY	1120L	Principles of Physics II Lab	1
		Element E: Natural Science	
		SPRING SEMESTER	•
EGR	3350	Technical Communications for Engineers and Scientists	3
		Element A: Communication	
ISE	4510 or	Computer Applications in ISE	3
	4820	Supply Chain Analysis and Design	
ISE	4712	Simulation and Stochastic Models	4
ISE	4830	Engineering Project Management and Applications	3
MIS	3000	Fundamentals of Information Systems	3
Total Hou	ırs:		31

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	_	FOURTH YEAR	_
Wright St	ate Unive	rsity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
		SUMMER SEMESTER	
		Element C: Arts and Humanities	3
		Global Inquiry	
		Integrated Writing	<u> </u>
		FALL SEMESTER	
ISE	4400	Engineering Economy	3
ISE	4810	Production and Service Systems	3
ISE	4910	Industrial and Systems Engineering Design I	3
MIS	3820	Data Mining for Business	3
MIS	3840	Data Visualization for Business	3
		SPRING SEMESTER	
EE	4120L	Industrial Controls and Automation Lab (Students Earn EE 4120 + 4120L Equivalents after Completing Both EET 2281 from Sinclair and EE 4120L from Wright State)	1
		· · · · · · · · · · · · · · · · · · ·	_
ISE	4920	Industrial Systems Design Engineering Design II	3
MIS	3810	Introduction to Business Data	3
MIS		Business Analytics Emphasis Electives	6
		Element D: Social and Behavioral Science	3
Total Hou	ırs:		34

Total Credit Hours for Bachelor's Degree: 145-146

COMPUTING AND INFORMATION TECHNOLOGY EMPHASIS

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		THIRD YEAR	
Wright St	tate Unive	rsity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
		FALL SEMESTER	
EE	2010	Analog Circuit Theory	3
EE	2010L	Analog Circuit Theory Lab	1
ISE	4150	Advanced Probability and Statistics for Engineering	3
ISE	4711	Operations Research I	3
PHY	1120	Principles of Physics II	4
		Element E: Natural Science	
PHY	1120L	Principles of Physics II Lab	1
		Element E: Natural Science	
		SPRING SEMESTER	
EGR	3350	Technical Communications for Engineers and Scientists	3
		Element A: Communication	
ISE	4510 or	Computer Applications in ISE	3
	4820	Supply Chain Analysis and Design	
ISE	4712	Simulation and Stochastic Models	4
ISE	4830	Engineering Project Management and Applications	3
		Element D: Social and Behavioral Science	3
Total Hou	ırs:		31

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		FOURTH YEAR	
Wright St	tate Unive	rsity	
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
		FALL SEMESTER	
CEG	2350	Operating System Concepts and Usage	4
CS	1180	Computer Science I	4
ISE	4400	Engineering Economy	3
ISE	4810	Production and Service Systems	3
ISE	4910	Industrial and Systems Engineering Design I	3
		SPRING SEMESTER	
CEG	2400	Introduction to PC Networking	3
CEG	3400	Introduction to CyberSecurity	3
CS	3700	Introduction to Databases and Modeling	3
EE	4120L	Industrial Controls and Automation Lab (Students Earn EE 4120 + 4120L Equivalents after Completing Both EET 2281 from Sinclair and EE 4120L from Wright State)	1
ISE	4920	Industrial Systems Design Engineering Design II	3
		Element C: Arts and Humanities Global Inquiry Integrated Writing	3
Total Hou	ırs:		32

Total Credit Hours for Bachelor's Degree: 144-145

EARNED ASSOCIATES TECHNICAL FOUNDATIONS EMPHASIS

This emphasis is available to only transfer students with an earned associate's degree in an engineering technology field.

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		THIRD YEAR			
Wright St	tate Unive	rsity			
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS		
		FALL SEMESTER			
CS	CS 1160 Introduction to Computer Programming				
ISE	4150	Advanced Probability and Statistics for Engineering	3		
ISE	4711	Operations Research I	3		
PHY	1120	Principles of Physics II	4		
		Element E: Natural Science			
PHY	1120L	Principles of Physics II Lab	1		
		Element E: Natural Science			
	ı	SPRING SEMESTER			
EE	2010	Analog Circuit Theory	3		
EE	2010L	Analog Circuit Theory Lab	1		
EGR	3350	Technical Communications for Engineers and Scientists	3		
		Element A: Communication			
ISE	4510 or	Computer Applications in ISE	3		
	4820	Supply Chain Analysis and Design			
ISE	4712	Simulation and Stochastic Models	4		
Total Hou	ırs:		29		

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FOURTH YEAR			
Wright State University			
SUBJECT CODE	COURSE NUMBER	COURSE TITLE	CREDIT HOURS
FALL SEMESTER			
ISE	4400	Engineering Economy	3
ISE	4810	Production and Service Systems	3
ISE	4850	Six Sigma for Engineers	3
ISE	4910	Industrial and Systems Engineering Design I	3
		Element C: Arts and Humanities - History	3
SPRING SEMESTER			
EE	4120L	Industrial Controls and Automation Lab (Students Earn EE 4120 + 4120L Equivalents after Completing Both EET 2281 from Sinclair and EE 4120L from Wright State)	1
ISE	4830	Engineering Project Management and Applications	3
ISE	4920	Industrial Systems Design Engineering Design II	3
		Element C: Arts and Humanities	3
		Global Inquiry	
		Integrated Writing	
		Element D: Social and Behavioral Science	3
Total Hours:			28

Total Credit Hours for Bachelor's Degree: 128-129

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.

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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 engineering technology 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 1101, MAT 2270, and PHY 1141 at Sinclair.

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

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

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This agreement will expire two years from date of signature.

Charles Long, M.S.

Date

J/G /2025

J/G /2025

Manager of Curriculum, Transfer, and Articulation Sinclair College

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