



Transfer Institution: Waukesha County Technical College
Associate Degree Program: Electrical Engineering Technology
Bachelor's Degree Program: Industrial & Systems Engineering
Academic Year: 2025-2026

GENERAL STUDIES COURSES *asterisk indicates preferred course for transfer.

WCTC			CARROLL		
COURSE NUMBER	COURSE TITLE	CREDIT	COURSE NUMBER	COURSE TITLE	CREDIT
801-136 OR 801-223 Approved Sub	English Composition I English Composition II	3	ENG170	Writing Seminar	3
801-196 OR 801-198 Approved Sub	Oral/Interpersonal Communication Speech	3	COM101	Principles of Communication	3
804-156	Calculus 2	4	MAT161	Calculus II	4
804-198	Calculus 1	4	MAT160	Calculus I	4
806-187	Calculus Based Physics 1	3	PHY203	General Physics I	3
809-196	Intro to Sociology	3	SOC101	Introduction to Sociology	3
809-199 OR 809-198*	Psychology of Human Relations Introduction to Psychology	3	ELE000 PSY101	Elective Introductory Psychology	3
Total general studies credits earned:		23	Total general studies credits accepted:		23

CORE COURSES

WCTC			CARROLL		
COURSE NUMBER	COURSE TITLE	CREDIT	COURSE NUMBER	COURSE TITLE	CREDIT
605-118	Digital Electronics I	2	ELE000	Elective	2
605-119	Digital Electronics II	2	ELE000	Elective	2
605-126	Industrial Systems	3	ELE000	Elective	3
605-148	Data Acquisition	3	ELE000	Elective	3
605-182	Microcontrollers	3	ELE000	Elective	3
605-187	Electronic Data Communications	3	ELE000	Elective	3
662-102	DC Circuit Analysis	4	ELE000	Elective	4
662-104	AC Circuit Analysis	4	ELE000	Elective	4
662-108	Linear Circuit Analysis	3	ELE000	Elective	3
662-190	Electronic Circuits I	4	GEN320	Advanced Circuits and Electronics	4
662-191	Electronic Circuits II	4	ELE000	Elective	4
663-104	Programming for Electronics	1	ELE000	Elective	1
663-106 or 605-127 Approved Sub	Electronic Fabrication Elect Fabrication Techniques	1	ELE000	Elective	1
Total core credits earned:		37	Total core credits accepted:		37
Total credits required for graduation:		60	Total transfer credits accepted:		60

ADDITIONAL COURSES TO BE COMPLETED FOR B.S. DEGREE:

CARROLL			
COURSE NUMBER	COURSE TITLE	CREDIT	PROGRAM NOTES
ACC205	Financial Accounting	4	Please see Carroll University Catalog for Industrial and Systems Engineering degree requirements.
ACC206	Managerial Accounting	2	
BUS114	Applied Statistics for Bus and Econ	4	Total credits required for graduation are based upon a calculation of transfer credits accepted plus credits required to complete the B.S. degree.
BUS304	Principles of Finance	4	
BUS305	Principles of Operations Management	4	
CHE109	Principles of Chemistry I (+Lab)	4	Transfer students with an associate of applied science degree will receive an exemption from the PIO CORE requirements.
CMP112	Computational Thinking I	4	
CSC110	Problem Solving through Programming	4	
ECO124	Principles of Econ – Microeconomics	4	
ECO225	Principles of Econ – Macroeconomics	4	
GEN100	WAIVED	0	
GEN101	WAIVED	0	
GEN201	Seminar: Simulated Engineering Firm	1	
GEN301	Seminar: Simulated Engineering Firm	1	
GEN105	Engineering Graphics	4	
ISE2100	Engineering Economics	3	
ISE3100	Systems Engineering Principles	3	
ISE3200	Work Design and Measurement	3	
ISE3300	Quality Management and Proc.Control	3	
ISE3400	Operations Research	3	
ISE3800	Internship	3	
ISE4100	Industrial Automation and Robotics	3	
ISE4200	Smart Manufacturing and Industry 4.0	3	
ISE4300	AI for Industrial Applications	3	
ISE4900	Industrial Engineering Design Capstone	3	
MEE2100	Statics	3	
MEE2150	Dynamics	3	
PHY204	General Physics II (+Lab)	4	
PHY303	Modern Physics (+Lab)	4	
Total credits to be complete degree:		88	
Total credits required for graduation:		148	

 **CARROLL UNIVERSITY**

GRADUATION REQUIREMENTS

- Students must earn a minimum of 128 credits; with the final 32 credits completed at Carroll.
- Students must earn a minimum 2.0 cumulative GPA, a minimum 2.0 Carroll GPA and a minimum 2.0 major GPA.
- One-fourth of major requirements must be completed at Carroll.
- 72 credits may transfer from a two-year institution.

MISCELLANEOUS

- Students with the **A.A.S. Electrical Engineering Technology** degree will transfer with junior standing provided the degree includes appropriate program and grade requirements.
- Due to changes in course content, transfer equivalencies are subject to change.