

Computer Networks and Systems • Bachelor of Science

Why Choose Computer Networks and Systems?

Advancements in digital technologies such as computers, network communications, high-speed control, smart devices, and software create a constant demand for skilled professionals. The Computer Networks and Systems (CNS) graduate is prepared to take leadership roles in the application, development, and management of these technologies. Exceptional technical understanding provided by this program enables graduates to meet the challenges of an ever-evolving digital world.

Computer Networks and Systems is a dynamic Bachelor of Science program targeted to these exciting digital careers. Its strong technical emphasis meets employer's needs and allows graduates an excellent foundation to enter multiple high-paying career paths. This unique curriculum balances theory with extensive hands-on experience.

Prepare for a Great Career

Networking is emphasized throughout. CNS students gain extensive knowledge and experience designing, constructing, analyzing, and securing networks. Topics in electronics, microprocessors, network/computer hardware, operating systems, signaling, and software are presented throughout the program. To insure that graduates are optimally prepared, courses extend into the most current and specialized technologies. CNS also offers opportunities to gain valuable experience through summer internship and senior projects.

Since CNS is a Cisco Networking Academy member, advanced placement is available for students in the Cisco Networking Academy or who have CCNA certification!

Admission Requirements

Admission to the College of Technology is open to high school graduates who demonstrate academic preparedness, maturity and seriousness of purpose with backgrounds appropriate to their chosen program of studies.

Students entering the Computer Networks and Systems program must have a high school diploma or equivalent, two years of mathematics (including algebra and trigonometry) and a minimum ACT math subscore of 19. A laboratory science, preferably physics, and fundamental knowledge of personal computers are strongly recommended.

Graduation Requirements

The Computer Networks and Systems program at Ferris leads to a bachelor of science degree. Graduation requires a minimum 2.0 GPA in core classes, in the major and overall. Students must complete all general education requirements as outlined on the General Education website.

Required Courses

	Credit Hours
General Education	
COMM 121 Fundamentals-Public Speaking	3
ENGL 150 English 1	3
ENGL 250 English 2	3
ENGL 311 Advanced Technical Writing	3
ISYS 204 Introduction to Visual Basic	3
MATH 116 Intermediate Algebra-Num Trig	4
MATH 126 Algebra-Analytic Trigonometry	4
MATH 216 Applied Calculus	4
MATH 226 Fourier Series-Appl Diff Equat	4
PHYS 211 Introductory Physics 1	4
PHYS 212 Introductory Physics 2	4
Electives: (3) Cultural Enrichment Courses	9
(3) Social Awareness Courses	9
	57
Major	
ECNS 115 Networks 1	3
ECNS 125 Networks 2	3
ECNS 215 Networks 3	3
ECNS 225 Networks 4	3
ECNS 310 C-C++ Programming Applications	1
ECNS 311 High Level Programming	2
ECNS 315 Network Theory and Test	3
ECNS 322 PC Data Acquisition - Control	3
ECNS 323 Real Time Operating Systems	4
ECNS 325 Wireless Networks	3
ECNS 425 Network Security Theory - Tech	3
EEET 111 Mobile Robots	1
EEET 114 Electric Circuits 1	4
EEET 122 Digital 1	4
EEET 124 Electric Circuits 2	4
EEET 212 Digital 2	4
EEET 222 Microprocessor Applications	4
EEET 393 Internship	4
EEET 412 Advanced Digital Systems	4
EEET 418 Project Management	2
EEET 422 Advanced Digital Design	4
EEET 428 Senior Project	2
	68
Related Technical Courses	9
CPSC, ECNS, EEET, HSCJ, ISYS electives 300/400 level (consult your advisor)	
Minimum credits required for BS degree:	135



More Information

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FERRIS STATE UNIVERSITY

COLLEGE OF ENGINEERING TECHNOLOGY