

CURRICULUM GUIDE

Cyber Systems Technology (Tech Systems Concentration), CST (TS)

2022-2023

Website: <https://www.eku.edu/csit/>

Email Contact: kuangnan.chang@eku.edu

CST (TS) program coordinator: vigs.chandra@eku.edu

Department of Computer Science and Information Technology (CSIT)

521 Lancaster Ave.

417 Wallace Bldg.

Richmond, KY 40475

859-622-2398

The schedule below is an **EXAMPLE** of how you can arrange your class schedule. Please consult your advisor for specific changes that may need to be made.

	Fall Semester	Spring Semester	Course Number	Course Name
Freshman Year	† Concentration Elective	3	† Concentration Elective	3
	† Concentration Elective	3	† Concentration Elective	3
	SCO 100	1	Free elective (<i>Gen. Ed. 3A recommended</i>)	3
	(TEC 161 or INF 104)	3	Free elective (<i>Gen. Ed. 5A recommended</i>)	3
	° MAT 112A <i>and</i> 112B (<i>or higher, such as MAT 114 or 120</i>) (<i>fulfills Gen. Ed. 2</i>)	3	Gen. Ed 1B (<i>ENG 102</i>)	3
	Gen. Ed. 1A (<i>ENG 101</i>)	3		
	TOTAL	16	TOTAL	15
Sophomore Year	† Concentration Elective	3	† Concentration Elective	3
	† Concentration Elective	3	† Concentration Elective	3
	Free elective (<i>Gen. Ed. 3A recommended</i>)	0-1	° PHY 101 (<i>or higher</i>) (<i>fulfills Gen. Ed. 4</i>)	3
	Gen. Ed. 1C (<i>Oral Comm.</i>)	3	(<i>STA 215 or 270</i>)	3-4
	° ECO 120 (<i>or higher</i>) (<i>fulfills Gen. Ed. 5B</i>)	3	Gen. Ed. 3B (<i>Humanities</i>)	3
	TOTAL	12-13	TOTAL	15-16
Junior Year	AEM 202	3	AEM 310W	3
	EET 252	3	NET 343	3
	NET 302	3	NET 354	3
	NET 303	3	NET 395	3
	Gen. Ed. 3A (<i>Arts</i>)	3	NET 403	3
	TOTAL	15	TOTAL	15
Senior Year	(AEM 407 or CIS 410)	3	AEM 408	3
	(EET 351, AEM 352, EET 253, <i>or</i> NET 440)	3	NET 467	0
	NET 349	1	NET 499 (<i>ACCT</i>)	3
	‡ Supporting Course Elective	3	Gen. Ed. 4 (<i>Nat. Sci.</i>)	3
	Gen. Ed. 6 (<i>Div. of per. and exp.</i>)	3	Gen. Ed. 5A (<i>History</i>)	3
	Free Elective (<i>Co-op, NET 395, or NET 454 recommended</i>)	2-4	Gen. Ed. 6 (<i>Div. of per. and exp.</i>)	3
	TOTAL	15-17	TOTAL	15
TOTAL HOURS TO DEGREE COMPLETION		120		

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS (37)	
SCO 100	Student Success Seminar (1)
CORE COURSE REQUIREMENTS (34)	
AEM 202	Introduction to Quality (3)
AEM 310W	Technical Communication (3) (<i>writing intensive</i>)
AEM 408	Human Resource Development (3)
EET 252	Digital Electronics (3)
NET 302	PC Troubleshooting & Construction (3)
NET 303	LANs & PC Communications (3)
NET 343	Network Switches & Routers (3)
NET 349	Applied Learning in NET (1)
NET 354	Microcomputer & Network Security (3)
NET 395	Special Topics in NET (3)
NET 403	Advanced LANs and PC Communication (3)
NET 499	Senior Capstone (3) (<i>spring only</i>)
PROGRAM ELECTIVES (9)	
Select THREE (3) HOURS from:	
AEM 407	Fundamentals of Project Management (3) (<i>fall only</i>)
CIS 410	Project Management and Practice (3)
Select THREE (3) HOURS from:	
AEM 352	Robotics and Automated Systems (3)
EET 253	Microprocessor Control Systems (3)
EET 351	Programmable Logic Controllers (3)
NET 440	Wired/Wireless Communications (3)
Select THREE (3) HOURS from:	
INF 104	Computer Literacy with Software Applications (3)
TEC 161	Computer Applications in Technology (3)
TECH SYSTEMS CONCENTRATION REQUIREMENTS (24)	
† TWENTY-FOUR (24) HOURS of course work in computer systems, electricity and electronics, and networking related technical electives as approved by major adviser. (<i>This concentration is recommended for transfer students.</i>)	
SUPPORTING COURSE REQUIREMENTS (6-7)	
° ECO 120	Economic Reasoning and Issues (3)
° MAT 112A <i>and</i>	Algebra: Polynomials (1.5)
° MAT 112B	Algebra: Functions and Matrices (1.5)
° PHY 101	Conceptual Physics (3)
STA 215 <i>or</i>	Introduction to Statistical Reasoning (3)
STA 270	Applied Statistics (4)
‡ PLUS THREE (3) HOURS of AAC, AEM, CCT, CIS, FIN, MGT, MKT, or RMI upper division electives as approved by major adviser (<i>supporting course elective</i>)	
EXIT REQUIREMENT (0)	
NET 467	Exit Exam for BS in NET (0)
FREE ELECTIVES (9-10)	
Co-operative education, NET 349, recommended as free electives or NET 395 (Special Topics in NET) taken with a unique topic. Students with an ACT Math sub-score of 19-21 may consider taking CSC 101 (The World of Code) to build computing competencies early in the degree program.	

° Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed. requirement.

* **PREREQUISITES:** Consult with your advisor and/or the University catalog regarding prerequisites for upper division courses in your major.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300 level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories.

Refer to the University Catalog at <http://www.catalogs.eku.edu/> regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of the ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g., AEM 310W).

Applied Critical & Creative Thinking (ACCT) Requirement: Cyber Systems Technology majors will fulfill ACCT with NET 499. (Credit hours are incorporated into program requirements.)