CURRICULUM GUIDE

Department of Computer Science and Information Technology (CSIT)

3+2 Cyber Systems Technology (Network Security and Electronics Concentration), B.S. 3+2 CST (NET) and Technology Management (Cyber Systems Tech Security Concentration), M.S., TM (CSTS)
2022-2023

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*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	
Freshman Year	SCO 100	1	EET 257	3
	EET 252	3	NET 302	3
	(TEC 161 _or_ INF 104)	3	NET 303	3
	EET 251	3	† Concentration Elective	3
	ᴳ MAT 112A _and_ 112B (**or higher, such as MAT 114 or 120**) (_fulfills Gen. Ed. 2_)	3	Gen. Ed. 1B (_ENG 102_)	3
	Gen. Ed. 1A (_ENG 101_)	3		
	TOTAL	**16**	**TOTAL**	**18**
Sophomore Year	(EET 351, AEM 352, EET 253, _or_ NET 440)	3	ᴳ ECO 120 (_or higher_) (_fulfills Gen. Ed. 5B_)	3
	NET 354	3	NET 343	1
	NET 395	3	NET 349	3-4
	† Concentration Elective	3	(STA 215 _or_ 270)	
	Gen. Ed. 1C (_Oral Comm._)	3	ᴳ PHY 101 (_or higher_) (_fulfills Gen. Ed. 4_)	3
			Gen. Ed. 3B (_Humanities_)	3
	TOTAL	**15**	**TOTAL**	**16-17**
Junior Year	AEM 202	3	AEM 310	3
	NET 344	3	NET 403	3
	NET 361	3	Gen. Ed. 3A (_Arts_)	3
	† Concentration Elective	3	Gen. Ed. 4 (_Nat. Sci._)	3
	Free Elective (_Co-op recommended_)	3	Free Elective (_NET 395_ or _Co-op recommended_)	3
	TOTAL	**15**	**TOTAL**	**15**
Senior Year	AEM 804	3	AEM 408	3
	NET 454	3	NET 467	3
	NSM 815	3	NET 499 (_ACCT_)	
	Gen. Ed. 5A (_History_)	3	NSM 845	3
	Gen. Ed. 6 (_Div. of per. and exp._)	3	Gen. Ed. 6 (_Div. of per. and exp._)	3
			Free Elective (_Co-op recommended_)	0-1
			(Undergraduate Complete = 120 hrs. + Grad = 9 hrs.	
	TOTAL	**15**	**TOTAL**	**12-13**
Senior +1 Year	AEM 801	3	AEM 821 _or_ 839	3
	NMS 895	3	MS Supporting Course Requirement	3
	TEC 860	3	MS Supporting Course Requirement	3
	TEC 830	3	(GRD 868b or GRD 867c)	0
	TOTAL	**12**	**TOTAL**	**9**
			TOTAL HOURS TO DEGREE COMPLETION	**141**

* 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.

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

Course Number	Course Name
GENERAL EDUCATION & UNIVERSITY REQUIREMENTS *(37)*	
SCO 100	**Student Success Seminar** *(1)*
CORE COURSE REQUIREMENTS *(43)*	
AEM 202	**Introduction to Quality** *(3)*
AEM 310	**Technical Communication** *(3)*
AEM 408	**Human Resource Development** *(3)*
AEM 804	**Project Management** *(3)*
EET 252	**Digital Electronics** *(3)*
NET 302	**PC Troubleshooting and Construction** *(3)*
NET 303	**LANs and PC Communications** *(3)*
NET 343	**Network Switches and Routers** *(3)*
NET 349	**Applied Learning in NET** *(1)*
NET 354	**Microcomputer and Network Security** *(3)*
NET 361	**Cloud Technology Foundations** *(3)*
NET 403	**Advanced LANs and PC Communication** *(3)*
NET 499	**Senior Capstone** *(3) (spring only)*
NSM 815	**Foundations of Network Security** *(3)*
NSM 845	**Advanced Server Security** *(3)*
PROGRAM ELECTIVES *(6)*	
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)*
NETWORK SECURITY AND ELECTRONICS CONCENTRATION REQUIREMENTS *(24)*	
EET 251	**Electricity and Electronics** *(3)*
EET 257	**Electronic Devices and Circuits** *(3)*
NET 344	**Advanced Network Devices** *(3)*
NET 395	**Special Topics in NET** *(3)*
NET 454	**Wireless/WAN Security** *(3)*
† PLUS NINE (9) HOURS of CSC/CIS/INF courses (CSC 160 or higher), or (CIS 215 or higher), or (INF 130 or higher) *(concentration electives)*	
SUPPORTING COURSE REQUIREMENTS *(3-4)*	
ᴳ **ECO 120**	**Economic Reasoning and Issues** *(3)*
ᴳ **MAT 112A _and_**	**Algebra: Polynomials** *(1.5)*
ᴳ **MAT 112B**	**Algebra: Functions and Matrices** *(1.5)*
ᴳ **PHY 101**	**Conceptual Physics** *(3)*
STA 215 _or_	**Introduction to Statistical Reasoning** *(3)*
STA 270	**Applied Statistics** *(4)*
EXIT REQUIREMENT *(0)*	
NET 467	**Exit Exam for BS in NET** *(0)*
FREE ELECTIVES *(6-7)*	
Co-operative education, NET 349, recommended as free electives or NET 395 (Special Topics in NET) taken with a unique topic.	
M.S. TECHNOLOGY MANAGEMENT (CYBERSYSTEMS TECH SECURITY CONCENTRATION) REQUIREMENTS *(30)*	
CORE COURSE REQUIREMENTS *(15)* *(Three (3) credits from AEM 804 are counted in the undergraduate program and graduate program)*	
AEM 801	**Economics for Lean Operations** *(3)*
AEM 804	**Project Management** *(3)*
TEC 830	**Creative Problem Solving** *(3)*
PLUS SIX (6) HOURS of synthesis experience:	
TEC 860 _and_	**Research in Technology** *(3)*
(AEM 821 _or_	**Industrial Technology Project** *(3)*
AEM 839)	**Applied Learning in Tech Management** *(3)*
CYBER SYSTEMS TECH SECURITY CONCENTRATION REQUIREMENTS *(9)* *(Six (6) credits from NSM 815 and NSM 845 are counted in the undergraduate program and graduate program)*	
NSM 815	**Foundations of Network Security** *(3)*
NSM 845	**Advanced Server Security** *(3)*
NSM 895	**Special Topics in NSM: _____** *(3)*
SUPPORTING COURSE REQUIREMENTS *(6)*	
Consult with advisor to choose appropriate courses.	
EXIT REQUIREMENT *(0)*	
GRD 867c _or_	**MS Applied Engineering and Technology Management Written Comprehensive Exam**
GRD 868b	**MS Applied Engineering and Technology Management Oral Comprehensive Exam**

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