WRIGHT STATE UNIVERSITY | COMPUTER SCIENCE AND ENGINEERING

Bachelor of Arts Computer Science

with Cyber Security Analytics Certificate

Graduation Planning Strategy

Total Program Hours: 120

*** Minimum grade of C required.**

Name & UID:

Year One

30 Total Credit Hours (Fall 15, Spring 15)

	Course	Sem.	Grade		Prerequisites
FALL	CS1030 Survey of CS & CEG			1	None (General Elective) Freshman Status Only
	CS 1180*/1180L Computer Science I			**4**	**MTH 1280 or MPL 40**
	ENG 1100* Academic Writing & Reading			**3**	
	CS 2200*/2200R Discrete Struct & Algorithms or			**4**	**CS1200 or (MTH 1280 or MPL40)**
	MTH 2570* Discrete Mth for Comp			**4**	**MTH 1280 or MPL 40**
	WSU Core Course			3	Suggested Element Global Traditions History
SPRING	EGR 1900 Exploring Engineering Internships			1	None (Recommended General Elective)
	CS 1181*/1181L Computer Science II			**4**	**CS 1180 and (MTH 1280 or MPL 40)**
	General Elective			3	
	CEG 2350/2350L Operating System Concepts and Usage			4	CS 1160 **or** CS 1180 **or** CEG 2170
	CS 1000 Tech & Society (WSU Core Global Traditions)			3	None

Make Full Major Admission Appointment with your advisor after successfully completing ENG1100, CS1180, CS1181, and MTH2570 or CS2200 with a 2.25 GPA and 24 or more semester hours. Must be a full major to take the following courses ERG 3350, CS 2210, CS 3200, or any 4000 level technical electives.

Year Two

31 Total Credit Hours (Fall 15, Spring 16)

	Course	Sem.	Grade		Prerequisites
FALL	CEG 3310/3310L* Computer Organization			4	CS 1181 **or** (CEG2170 **and**(CEG 3320 **or** EE2000))
	Natural Science			4	See list on back; suggested course is CS1150
	MTH 2240 Applied Calculus			4	MPL 40 **or** MTH 1280
	MTH 2280 Business Calculus			4	MPL 40 or MTH 1280
	CEG2400 Introduction to PC Networking			3	CS1150 **or** CS1160 **or** CS1180 **or** CEG2170
SPRING	CS 3100* Data Structures & Algorithms			3	CS1181 **and** CEG3310 **and** (MTH2570 **or** CS2200)
	Natural Science			4	See list on back
	CS 2800 Web Development I			3	CS 1160 **or** CS1180 **or** CEG2170
	WSU Core Course			3	suggested element Social Science
	CS3700 Introduction to Oracle/SQL Databases			3	CS1180 **or** CS1160 **or** CEG2170

Year Three

31 Total Credit Hours (Fall 16, Spring 15)

	Course	Sem.	Grade		Prerequisites
	CEG 4110 Indroduction to Software Engineering			3	CS 3100*
	STT1600 Statistical Concepts			4	MPL 30 **or** DEV0970 **or** DEV0990
	CS/CEG 2000/3000 level Tech Elective			3	
	CEG 3400 Introduction to Cyber Security			**3**	**CS 1181***
	ENG 2140 Research, Tech Wrting & Presentation for Sci & Eng or			3	ENG 1100 or ENG 1110 or ENG 1130 or ENG 1140
	EGR 3350 Technical Comm for Engineers and Comp Sci			3	ENG 1100
SPRING	CS/CEG 2000/3000 level Tech Elective			3	
	WSU Core Course			3	suggested element Social Science
	General Elective			3	
	WSU Core Course			3	Suggested Element Arts or Humanities
	CEG 4350 Operating System Internals and Design			3	CS 3100* and CEG 3310*

Year Four 28 Total Credit Hours (Fall 15, Spring 13)

	Course		Sem.	Grade		Prerequisites
FALL	CEG3120 Intro to the Design of Information Technology Systems				3	CS 1181
		General Elective			3	
		WSU Core Course			3	
	CEG 4430 Cyber Network Security				**3**	**CS 3100***
		CS/CEG 4000 level Tech Elective			3	
	CEG 4424 Security Attacks and Defenses				**3**	**CEG 4350 or CEG 4350 with concurrency or CEG 3400**
		CS/CEG 4000 level Tech Elective			**3**	**Cyber Security Analytics Elective - See list below**
		General Elective			3	
		General Elective			4	

Consult uAchieve for complete and updated course listings

Wright State Core

Element III

Global Traditions (6 credit hours)

One History: CLS1500, HST1100, 1200
and CS1000(IW)

Element IV

Arts or Humanities (3 credit hours)

One Course: ART2140, CLS1600, 2040(IW), ENG2040(IW), 2050(IW,MC), 2310(IW,MC), ML2020(MC), 2040(MC),2050(MC) MP1310, MUS1210, 2140, 2420(IW,MC), 2900(IW,MC), PHL2040(IW), 2050(IW), 2100, REL2040(IW), TH2140, UH2010(IW)

Element V

Social Science (6 credit hours)

Two Courses from Different Disciplines: ATH2200, EC2000(IW)/2040/2050/2500(IW,MC)/2900(IW,MC), FIN2050, PLS2000(MC after F15,IW), 2120(MC),PSY1010(IW), SOC2000(IW, MC after SU15), SW2720(IW,MC), UH2020(IW), WGS1000(MC)/2000(IW,MC)

Element VI

Natural Science (8 credit hours)

ATH2100, BIO1050, 1060, 1070, 1120, 1150, CHM1020, 1050, 1060, 1070(IW), 1210 & 1210L, 1220 & 1220L, CS1150, EES1030, 1050, 1070, 2510. 2550, KHN2500, PHY1050 & 1050L, 1060 & 1060L, 2400 & 2400L, 2410 & 2410L, SM1010(IW)

Cyber Security Analytics Electives Choose one course: CEG 4410, 4420, 4422, 4750, 4426, 4324, 4440. This list is subject to change for most up to date information go to wright.edu/cse and see the Undergraduate Cyber Security Analytics certificate.

Additional Core Courses (7 credit hours)

STT1600 and one additional course from **Element I** COM1010, **Element III** AFS2000(IW,MC),ATH2150(IW,MC), 2500(MC), CLS1500, EC2100, 2500(IW,MC), 2900(IW,MC), ED2100(MC), EES2600(MC), ENG2310(IW,MC), 2320(MC), GEO2210(IW,MC), ML2020(MC), 2030, MUS2420(IW,MC), PPH2000(IW,MC), PLS2510(IW,MC), REL2320(IW,MC), RST2610(IW,MC), 2620(IW,MC), 2710(IW,MC), 2810(IW,MC), 2910(IW,MC), 2920(IW,MC), URS2000(IW,MC), HST100, 1200 **Element IV** ART2140, CLS1600, 2040(IW), ENG2040(IW), 2050(IW,MC), ML2040(MC),2050(MC) MP1310, MUS1210, 2140, 2420(IW,MC), 2900(IW,MC), PHL2040(IW), 2050(IW), 2100, REL2040(IW), TH2140, UH2010(IW), **Element V** ATH2200, EC2000(IW), 2040, 2050, 2500(IW,MC), 2900(IW,MC), FIN2050, PLS2000(MC after F15,IW), 2120(MC),PSY1010(IW), SOC2000(IW, MC after SU15), SW2720(IW,MC), UH2020(IW), WGS1000(MC), 2000(IW,MC), **Element VI** ATH2100, BIO1050, 1060, 1070, 1120, 1150, CHM1020, 1050, 1060, 1070(IW), 1210 & 1210L, 1220 & 1220L, CS1150, EES1030, 1050, 1070, 2510. 2550, KHN2500, PHY1050 & 1050L, 1060 & 1060L, 2400 & 2400L, 2410 & 2410L, SM1010(IW)

A minimum of two core courses in the major must be designated as MC and IW.

Computer Science or Computer Engineering Tech Electives (24 credit hours) 9 credit hours of 2000/3000 level and 15 credit hours of 4000 level classes from CS or CEG

General Electives (16 credit hours) Including CS 1030 and EGR 1900

Notes

Technical Electives: Some technical electives require additional pre-requisites please check specific course descriptions.

General Elective courses may be any course taken for credit. **KNH courses are excluded**

MTH 2570 is the entry level math course for the BA degree program. Prerequisite math courses may be necessary for student with math skills below this level