Wright State University

Bachelor of Arts

College of Engineering and Computer Science Department of Computer Science & Engineering

COMPUTER SCIENCE with Cyber Security Analytics Certificate

| Name & UID | | | | | |
|---|-----------------|--|--|-----------------|---|
| Term One, Fall | Credit Hours | Pre-Requisites | Term Two, Spring | Credit Hours | Pre-Requisites |
| CS1180 Comp Sci I* | 4 | MTH1280 or Level 40 | CS1181 Comp Sci II* | 4 | (CS1180 or CS1161) & (MTH1280 or Level 40) |
| ENG1100 Academic Writing & Reading* | 3 | | General Elective | 2 | |
| MTH2570 Discrete Mth for Comp or CS2200 Discrete Struct & Algorithms* | 4 | For MTH2570 - MTH1280 or Level 40 For CS2200 - CS1200 | EGR1900 Intro to Co-Op and Internship | 1 | Recommended |
| CS1030 Survey of CS & CEG | 1 | | CEG2350 OS Concepts & Usage | 4 | CS1180 or CS1160 or CEG2170 |
| CS1000 Tech & Society | 3 | WSU Core Global Traditions | WSU Core | 3 | |
| Total Hours | 15 | | Total Hours | 14 | |
| Term Three, Fall | Credit Hours | Pre-Requisites | Term Four, Spring | Credit Hours | Pre-Requisites |
| CEG3310 Comp Org* | 4 | CS1181* | CS3100 Data Struct & Algorithms* | 3 | CS1181 & CEG3310 & CEG2350 & (MTH2570 or CS2200*) |
| Natural Science | 4 | See list on back (CS1150 recommended) | Natural Science | 4 | See list on back |
| MTH2240 Applied Calc or MTH2280 Bus Calc | 4 | MTH1280 or MTH1350 or Level 40 | CS2800 Web Design Fundamentals | 3 | CS1180 or CS1160 or CEG2170 |
| CEG2400 Intro to PC Networking | 3 | CS1180 or CS1160 or CEG2170 or CS1150 | CS3700 Intro to Oracle or SQL Databases | 3 | CS1180 or CS1160 or CEG2170 |
| | | | WSU Core | 3 | |
| Total Hours | 15 | | Total Hours | 16 | |
| Term Five, Fall | Credit Hours | Pre-Requisites | Term Six, Spring | Credit Hours | Pre-Requisites |
| CS or CEG Tech Elective 2000/ 3000 level (6 crdt hrs) | 3 | | CEG3120 Intro to the Design Tech Sys | 3 | CS1180 or CS1161 |
| CEG4110 Intro to Software Engineering | 3 | CS3100* | WSU Core (6 crdt hrs) | 3 3 | |
| STT1600 Stat Concepts | 4 | DEV0970 or Level 30 | CS or CEG Tech Elective 2000/3000 level | 3 | |
| EGR3350 Tech Comm Eng/Sci or ENG 2140 | 3 | ENG1100 | CEG 4350 OS Internals & Design | 3 | CS3100 |
| CEG 3400 Intro to Cyber Security | 3 | CS1181* | | | |
| Total Hours | 16 | | Total Hours | 15 | |
| Term Seven, Fall | Credit Hours | Pre-Requisites | Term Eight, Spring | Credit Hours | Pre-Requisites |
| General Elective | 3 | | CEG 4424 Attacks & Defenses | 3 | |
| WSU Core | 3 | | General Elective (8 crdt hrs total) | 3 3 2 | |
| CS or CEG Tech Elective 4000 level (9 crdt hrs total) | 3 | | Cyber Security Tech Elective Choose 1:CEG4410, 4420, OR | 3 | Varies based on class chosen |
| General Elective | 3 | | 4422 | | |
| CEG 4430 Network Security | 3 | CS3100* | | | |
| Total Hours | 15 | | Total Hours | 14 | |

Wright State Core

Element III. Global Traditions (6 hours)

One Global Traditions: AFS2000, ATH2500, CS1000, CST2210, 2310, 2320, 2410, 2420, 2430, 2510, EC2100, 2500, 2900, RST2610, 2620, 2710, 2810, 2910, 2920, URS2000

One History: CLS1500, HST1100, 1200

Element IV. Arts or Humanities (3 hours)

One Course: ART2140, CLS2040, CST2310, 2420, ENG2040, 2050, MP1310, MUS1210, 2140, 2900, PHL2040, REL2040, UH2010

Element VI. Natural Science (8 hours)

Select two of the following laboratory science courses: ATH2100, BIO1050, 1060, 1070, 1120, 1150, CHM1020, 1050, 1060, 1070, 1210 &1210L, 1220 & 1220L, **CS1150**, EES1030, 1050, 1070, 2510, 2550, KNH2500, PHY1050 & 1050L, 1060 & 1060L, 2400 & 2400L, 2410 & 2410L SM1010

Additional Core Courses (7 hours)

STT1600 Statistical Concepts, must select one additional course from Areas 1-6. *Additional courses* in MTH, STT, CHM, BIO, PHY, or EES appropriate for Computer Science or Engineering majors

Element V. Social Science (6 hours)

Two Courses from Different Disciplines: ATH2200, EC2100, 2040, 2050, 2500, 2900, PLS2000, PSY1010, SOC2000, UH2020, WMS2000

A minimum of two courses must be designated as MC and IW.

Consult DARS for complete and updated course listing

Computer Science or Computer Engineering Tech Electives: (24 hours)

Upper Level (15 hours) - 4000 level courses from CS or CEG

Notes:

- 1 Technical Electives: Some technical electives require additional pre-requisites please check specific course dcriptions.
- 2 MTH2570 is the entry level math course for the BA degree program. Pre-requisite math courses may be necessary for students with math skills below this level.
- 3 General Elective courses may be any course taken for credit and for a grade. KNH courses are excluded