

CYBERSECURITY MAJOR
Program Tracking Sheet
Effective for students entering AY 2026-2027

Name:	Class Year:
Advisor:	2 nd Major:

NOTES: Minimum total academic credit = 15 units
Residency Req.: Min. of 8 units must be completed at WPI

HUMANITIES AND ARTS (6/3 units)

All 5 HUA courses must be completed before beginning the Inquiry Seminar or Practicum.

Only 1 AP/IB course can be used towards HUA requirements.

Depth Component

Students must complete at least three thematically-related courses prior to the culminating Inquiry Seminar or Practicum in the same thematic area. At least one of the three courses should be at the 2000-level or above.

	Course	Term	Grade	Units
1				1/3
2				1/3
3				1/3

Breadth Component

Students must take at least one course outside the grouping in which they complete their depth component. To identify breadth, courses are grouped in the following manner.

- i. art/art history, drama/theatre, and music (AR, TH, MU);
 - ii. modern languages (AB, CN, ISE, GN, SP);
 - iii. literature and writing rhetoric (EN, WR);
 - iv. history, humanities, and international and global studies (HI, HU, INTL);
 - v. philosophy and religion (PY, RE).
- Exception: May take all six courses in a modern language.

4				1/3
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Humanities Elective (any humanities course)

5				1/3
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Inquiry Seminar or Practicum

6	HU 3900 or HU 3910			1/3
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WELLNESS AND PHYSICAL EDUCATION (4 WPE classes = 1/3 unit)

7				1/12
				1/12
				1/12
				1/12

SOCIAL SCIENCE (2/3 unit) ECON, ENV, GOV, PSY, SD, SOC, SS, STS, DEV and ID2050

8				1/3
9	ID 2050 or other Social Science			1/3

THE INTERACTIVE QUALIFYING PROJECT (3/3 unit)

10	IQP			1/3
11	IQP			1/3
12	IQP			1/3

FREE ELECTIVES (3/3 unit)

13				1/3
14				1/3
15				1/3

MATHEMATICS (6/3 units)

Must include 1/3 unit of probability and 1/3 unit of linear algebra.

16				1/3
17				1/3
18				1/3
19				1/3
20	MA 2621 or 2631			1/3
21	MA 2071			1/3

BASIC SCIENCE AND/OR ENGINEERING SCIENCE (5/3 Units)

BASIC SCIENCE (3/3 units)

Courses from BB, CH, GE, or PH, with 2/3 coming from the same discipline.

22				1/3
23				1/3
24				1/3

ADDITIONAL BASIC AND/OR ENGINEERING SCIENCE (2/3 units)

Courses from BB, BME (excluding BME 1004), CH, CHE, ES, GE, ME, PH, or RBE (excluding RBE 3100).

25				1/3
26				1/3

FOUNDATION CURRICULUM (10/3 units) (Note 1, 3) (Table A, B, C)

COMPUTER SCIENCE FOUNDATION (5/3 units) (Table A)

27				1/3
28				1/3
29				1/3
30				1/3
31				1/3

ELECTRICAL AND COMPUTER ENGINEERING FOUNDATION (5/3 units) (Table B)

32				1/3
33				1/3
34				1/3
35				1/3
36				1/3

CYBERSECURITY CURRICULUM (9/3 units)

CYBERSECURITY CORE (3/3 units) (Note 2, 3) (Table B)

37	CS			1/3
38	ECE			1/3
39	CS or ECE			1/3

CYBERSECURITY ELECTIVES (2/3 units) (Note 2, 3) (Table C)

40	CS			1/3
41	ECE			1/3

SOCIAL IMPACTS (1/3 unit)

Chosen from CS/SS 3043, GOV/ID 2314, GOV 2315

42				1/3
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THE MAJOR QUALIFYING PROJECT (3/3 units) (Note 4)

43	MQP			1/3
44	MQP			1/3
45	MQP			1/3

Note 1: 5/3 units of Computer Science and 5/3 units of Electrical and Computer Engineering Foundation Courses, satisfied by courses listed in Tables A and B, or any course listed for the Cybersecurity Core or Cybersecurity Elective requirements (Tables C and D) not used to satisfy those requirements.

Note 2: Must include at least 1/3 in CS and at least 1/3 in ECE.

Note 3: Graduate-level courses, independent studies, or other relevant courses may be used to fulfill the core requirements, provided approval is obtained from the cybersecurity program director.

Note 4: The MQP must be advised by a faculty member with a formal appointment in the Cybersecurity Program and must have a clear cybersecurity focus.

TABLES

Table A – Computer Science Foundation Courses

Must complete 5/3 units from the list below.

- CS 1101/1102 - Introduction to Program Design
- CS 2102/2103 - Object Oriented Design Concepts
- CS 2303 - Systems Programming Concepts
- CS 2011 - Machine Organization & Assembly Lang
- CS 2022/MA 2201 - Discrete Math
- CS 3013 - Operating Systems
- CS 3404 - Introduction to Security
- CS 3516 - Computer Networks
- CS 4241 – Webware: Computational Technology for Network Information Systems
- CS 4513 - Distributed Computing Systems
- CS 4515 - Computer Architecture
- CS 4516 - Advanced Computer Networks
- Any CS course listed for the Cybersecurity Core or Cybersecurity Elective requirements (Tables C and D) not used to satisfy those requirements

Graduate-level courses, independent studies, or other relevant courses may be used to fulfill the core requirements, provided approval is obtained from the cybersecurity program director.

Table B – Electrical and Computer Engineering Foundation Courses

Must complete 5/3 units from the list below.

- ECE 2010 - Introduction to Electrical and Computer Engineering
- ECE 2029 - Introduction to Digital Circuit Design
- ECE 2039 - Computational Engineering
- ECE 2049 - Embedded Computing in Engineering Design
- ECE 3829 - Advanced Digital Systems Design
- ECE 3849 - Real-time Embedded Systems
- ECE 4801 - Computer Organization & Design
- Any ECE course listed for the Cybersecurity Core or Cybersecurity Elective requirements (Tables C and D) not used to satisfy those requirements

Graduate-level courses, independent studies, or other relevant courses may be used to fulfill the core requirements, provided approval is obtained from the cybersecurity program director.

Table C – Cybersecurity Core Courses

Must complete 3/3 units from:

- CS 4401 - Software Security
- CS 4404 -Network Security
- CS 4801/ECE 4802 – Introduction to Cryptography and Communication Security
- ECE 4576 – Introduction to Hardware Security
- ECE 576 - Applied Cryptography and Physical Attacks
- ECE 579 - Physical Security of Microelectronic Systems

Must include at least 1/3 in CS and at least 1/3 in ECE.

Graduate-level courses, independent studies, or other relevant courses may be used to fulfill the core requirements, provided approval is obtained from the cybersecurity program director.

Table D – Cybersecurity Elective Courses

Must complete 2/3 units from:

- CS 4405 - Digital Forensics
- CS 4403 - Web Application Security
- CS 4402 - Reverse Engineering
- ECE 4803 – Machine Learning in Cybersecurity
- Any course listed for the Cybersecurity Core requirement (Table C) not taken for that requirement

Must include 1/3 in CS and 1/3 in ECE.

Graduate-level courses, independent studies, or other relevant courses may be used to fulfill the core requirements, provided approval is obtained from the cybersecurity program director.