COLLEGE OF ENGINEERING & COMPUTER SCIENCE
DEARBORN | UNIVERSITY OF MICHIGAN-DEARBORN

Student name: ID #:

Sample Pathway to Concurrent Bachelor of Science CIS-*Information Systems* and *CIA-Cybersecurity & Privacy*, 138 total credits **Fall 2026**

Semester 1	Semester 2	NOTES
☐ **CIS 150** (4) *Computer Science I,* or (MATH 115*) ☐ **COMP 105** (3) *Writing & Rhetoric I* DDC GEWO ☐ **MATH 115** (4) *Calculus I* (MATH 105 'C-' or placement); DDC GEQT ☐ **CRJ 200** (3) GESB	☐ **CIS 200** (4) *Computer Science II,* or (CIS 150 'C-', MATH 115) ☐ **MATH 116** (4) *Calculus II* (MATH 115 'C-') ☐ **CIS 275** (4) *Discrete Structures I* (MATH 115, CIS 200*) ☐ **PHIL 240** (3) GEHA	The sample pathways were created with Fall, Winter and Summer semester enrollment in mind. Summer semesters are not required, but can be used to lessen the workload, and/or participate in co-op or research. For DDC requirements, please see the University's guidelines Each student's pathway is unique and may differ slightly from this one
Semester 3	**Semester 4**	**NOTES**
☐ **CIS 316** (3) *Practical Aspects Comp Security* (CIS 200 'C-') ☐ **CIS 350** (4) *Data Structures* (MATH 115, CIS 200 'C-', CIS 275) ☐ **MATH 227** (3) Intro to Linear Algebra (Math 116 'C-') ☐ **Lab Science Sequence I** (4) Choose from: BIOL 130, GEOL 118, CHEM 134, PHYS 125, PHYS 150; DDC GENS	☐ **CIS 310** (4) *Assembly Language* (MATH 115, CIS 200, CIS 275) ☐ **COMP 270** (3) *Technical Writing* (COMP 105 or placement); DDC GEWO ☐ **IMSE 317** (3) *Probability and Statistics* (MATH 116) ☐ **IMSE 3005** Fall (4) *Operations Research* (MATH 227, IMSE 317*) ☐ **Lab Science Sequence II** (4) Choose from same subject area as Sequence I: BIOL 320, GEOL 218, CHEM 136, PHYS 126, PHYS 151; DDC GENS	Approved Electives: 7 credits required **Cannot** be the same courses counted towards your concentration: CIS 285 (3), CIS 316 (3), CIS 376 (4), CIS 381 (4), CIS 387 (4), CIS 411 (3), CIS 412 (3), CIS 436 (3), CIS 437 (3), CIS 439 (3), CIS 446 (3), CIS 447 (3), CIS 449 (3), CIS 467 (4), CIS 482 (3), CIS 487 (3), CIS 4851 (3), CIS 489 (3), ENGR 399 (1), ENGR 492 (1), ENGR 493 (1)

* denotes a corequisite course
Courses listed in parentheses () are prerequisites for the listed course

Semester 5	Semester 6	NOTES
☐ **CIS 421** (4) *Database Mgmt Systems* (CIS 350) ☐ **CIS 375** (4) *Software Engineering I* (COMP 270, CIS 350) ☐ **CIS 447** Fall (3) *Comp Network Security* (CIS 450*) ☐ **CIS 450** (4) *Operating Systems* (CIS 310, CIS 350, IMSE 317*)	☐ **CIS 427** (4) *Comp Networks* (IMSE 317, CIS 350) ☐ **MATH 396** Winter (3) *Intro to Cryptography* (MATH 227 'C-') ☐ **CRJ 409** (4) *Intelligence and Homeland Security* (CRJ 200) ☐ **CIS 449** Winter (3) *Dig Content Protection* (CIS 350)	A course may have multiple requirements; however, **credit is only applied once**. Using one course to multiple requirements may result in a deficiency in total credits.
Semester 7	**Semester 8**	**NOTES**
☐ **CIS 425** Fall (4) *Information Systems* (CIS 375, CIS 421*) ☐ **CIS 435** (3) *Web Technology* (CIS 375*) ☐ **CIS 296** Fall (3) *Java,* or **CIS 297** Winter (3) *Intro to C#,* or **CIS 298** Winter (3) *Intro to Python* (CIS 200) ☐ **CIS 4851** Fall (3) *Data Security and Privacy* (CIS 200)	☐ **ACC 298** (3) *Financial Accounting* (MATH 105, 25 credits) ☐ **OB 354** (3) *Organizational Behavior* (55 credits); DDC GESB ☐ **CIS 446** (3) *Wireless and Mobile Computing Security* (CIS 200) ☐ **CIS 479** (3) *Artificial Intelligence* (CIS 350); DDC GEIN	

* denotes a corequisite course
Courses listed in parentheses () are prerequisites for the listed course

Semester 9	Semester 10	NOTES
☐ **CIS 4951** (2) *Senior Design I* (CIS 310, CIS 375, CIS 450 and CIS 427) ☐ **CIS 476** (3) *Software Architecture and Des Patterns* (CIS 375) ☐ **ECON 201** (3) *Macroeconomics,* or **ECON 202** (3) *Microeconomics* (MATH 105 recommended); DDC GESB ☐ **DDC Course** (3) GEHA	☐ **CIS 4952** (2) *Senior Design II* (CIS 4951) ☐ **ENGR 400** (3) *Applied Business Technique* (86 credits), or **ENT 400** (3) *Entrepreneurship* (55 credits); DDC GEIN ☐ **CIA Elective** (3-4) See individual courses for prereqs ☐ **CIA Elective** (3-4) See individual courses for prereqs	

* denotes a corequisite course
Courses listed in parentheses () are prerequisites for the listed course