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

Student name: ID #:

Sample Pathway to Bachelor of Science in *Data Science and Economics*, 135 total credits **FALL 2026**

Semester 1	Semester 2	Semester 3
☐ **CIS 1501** (4) *Computer Science for DS I* (MATH 115*)	☐ **CIS 2001** (4) *Computer Science for DS II* (CIS 1501 'C-', MATH 115)	☐ **MATH 215** (4) *Calculus III* (MATH 116 'C-')
☐ **COMP 105** (3) *Writing & Rhetoric I* DDC GEWO	☐ **MATH 116** (4) *Calculus II* (MATH 115 'C-')	☐ **ECON 202** (3) GESB
☐ **MATH 115** (4) *Calculus I* (MATH 105 'C-' or placement); DDC GEQT	☐ **ECON 201** (3) GESB	☐ **Foreign Language (4)** Options-ARC 101, CHIN 101, FREN 1O1, GER 101, LAT 101 OR SPAN 101
☐ **DDC course** (3) GEHA See DDC master list for options	☐ **DDC course** (3) GEHA See DDC master list for options	☐ **CIS 275** (4) *Discrete Structures I* (MATH 115, CIS 200*), or **MATH 276** (4) *Discrete Math* (MATH 116 'C-'), or
Semester 4	**Semester 5**	**Semester 6**
☐ **STAT 305** (3) *Intro to Data Science*	☐ **STAT 325** (4) *Applied Statistics* (MATH 115 'C-'), or **IMSE 317** (3)** *Probability & Statistics* (MATH 116)	☐ **ENT 400** (3) *Entrepreneurship* (55 credits); DDC GEIN, or **ENGR 400** (3) *Applied Business Techniques* (85 credits); DDC GEIN
☐ **MATH 227** (3) *Intro to Linear Algebra* (MATH 116 'C-')	☐ **COMP 270** (3) *Technical Writing* (COMP 105 or placement); DDC GEWO	☐ **ECE 3100** Fall (4) *Data Science I* (CIS 1501, MATH 227, STAT 325* or IMSE 317*)
☐ **Foreign Language** (4) Options-ARC 102, CHIN 102, FREN 1O2, GERM 102, LAT 102 OR SPAN 102	☐ **CIS 350** (4) *Data Structures* (MATH 115**,** CIS 2001 'C-', and 275)	☐ **CIS 422** Fall (4) *Big Data Management* (CIS 350)
☐ **ECON 301** (4) Intermediate Economics (ECON 201, ECON 202, MATH 105)	☐ **ECON Elective (3-4)** *See note*	☐ **ECON Elective** (3-4) *See note*

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

Semester 7	Semester 8	Semester 9
☐ **CIS 375** (4) *Software Engineering I* (COMP 270, CIS 350) ☐ **STAT 430** Fall (3) *Applied Regression Analysis* (STAT 325 or IMSE 317) ☐ **ECONOMICS FOUNDATIONS** *(4)* *See FNDS/CPBL List* ☐ **ECON 302** (4) Intermediate Economics (ECON 201, ECON 202, MATH 105)	☐ **HHS 470** Winter (3) *Info Science & Ethics* ☐ **CIS 3200** Winter (4) *Data Science II* (CIS 2001, ECE 3100) ☐ **Intersections** (3) GEIN ENGR 400, ENT 400, or IMSE 421 See individual courses for pre-reqs ☐ **Lab Science Sequence I** (4) Choose from: BIOL 130, GEOL 118, CHEM 134, PHYS 125, PHYS 150; DDC GENS	☐ **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 ☐ **DDC course** (3) GESB See DDC master list for options ☐ **ECON Elective** (3-4) *See note* ☐ **ECON Elective** (3-4) *See note*

Semester 10	Semester 11	ECON Elective Notes
☐ **CIS 4971** (2) *Senior Design I* (CIS 3200 and STAT 325 or IMSE 317); DDC GEWI, GECT, GECE ☐ **ECON Elective** (3-4) *See note* ☐ **ECON Elective** (3-4) *See note* ☐ **Data Science Elective** (3-4) See Data Science Elective List for course options and check course descriptions for prereqs	☐ **CIS 4972** (2) *Senior Design II* (CIS 4971); DDC GEWI, GECT, GECE ☐ **ECON Elective** (3-4) *See note*	**ECON Electives**–Take a total of 20 credit hours of ECON 300/400/4000 electives, **not counting** the core classes ECON 301, ECON 302, ECON 305. Only 4 credits of ECON 398 can count towards electives.

Notes	Notes	Notes
DATA SCIENCE ELECTIVES (3-4 credits required) Approved Electives: CIS 306 (4) CIS 411 (3), CIS 412 (3), CIS 425 (4), CIS 439 (3), CIS 446 (3), CIS 449 (3) CIS 479 (3) CIS 481 (3), CIS 482 (3), CIS 483 (3), CIS 489 (3), CIS 4851 (3), DS 426 (3), ECE 427 (4), ECE 428 (3), ECE 434 (4), ENGR 299 (1), ENGR 399 (1), ENGR 499 (1), ENGR 492 (1-3), ENGR 493 (1-3), IMSE 3005 (4), IMSE 421 (3), IMSE 440 (3), IMSE 4585 (4), IMSE 4795 (4), MATH 325 (3), MATH 420 (3), MATH 423 (3), MATH 425 (3), MATH 435 (3), MATH 462 (3), MATH 472 (3), STAT 327 (3), STAT 431 (4), STAT 440 (3), STAT 450 (3), STAT 460 (3)	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.	The sample pathways were created with Fall and Winter semester enrollment in mind. Summer semesters 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 See link above for GESB/GEHA option