Data Science and Engineering (BS)

Catalog Year 2024-2025

Note: This is a recommended sequence and shifts are likely to occur due to prerequisite completion and course availability.

Semester One	Semester Two
CSE 1010: Intro to Computing for Engineers (3 credits)	CSE 2050: Data Structures & O.O. Design (3 credits)
MATH 1131Q: Calculus I (4 credits)	MATH 1132Q: Calculus II (4 credits)
Lab Science (4 credits)	Lab Science (4 credits)
Gen Ed (3 credits)	ENGL 1007: Writing and Composition (4 credits)
14 credits	**15 credits**

Semester Three	Semester Four
CSE 2500: Intro. To Discrete Systems (3 credits)	CSE 3140: Cybersecurity Lab (2 credits)
CSE 2600: Intro to Data Science & Engin. (3 credits)	CSE 3500: Algorithms and Complexity (3 credits)
MATH 2110Q: Multivariable Calculus (4 credits)	STAT 3025Q: Statistical Methods (3 credits)
Lab Science (4 credits)	MATH 2210Q: Applied Linear Algebra (3 credits)
Gen Ed (3 credits)	Gen Ed (3 credits)
17 credits	**14 credits**

Semester Five	Semester Six
CSE 4701: Principles of Databases (3 credits)	CSE 4502: Big Data Analytics (3 credits)
CSE 4820: Intro to Machine Learning (3 credits)	CSE 3000: Contemporary Issues in CSE (1 credit)
DSE Elective #1 (3 credits)	DSE Elective #2 (3 credits)
PHIL 1104: Philosophy & Social Ethics (CA 1) (3 credits)	CSE Elective (3 credits)
Free Elective (3 credits)	Ged Ed (3 credits)
	Free Elective (3 credits)
15 credits	**16 credits**

Semester Seven	Semester Eight
CSE 4939W: CSE Design Project I (3 credits)	CSE 4940: CSE Design Project II (3 credits)
DSE Elective #3 (3 credits)	DSE Elective #4 (3 credits)
Gen Ed/Free Elective (3 credits)	Free Elective (3 credits)
Free Elective (3 credits)	Free Elective (3 credits)
Free Elective (3 credits)	Free Elective* (2+ credits)
15 credits	**14+ credits**

*as needed to reach total degree credits

See reverse for important general education and major specific information.

Total Credits: 120

Updated 3/25/2024

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Qualifying MPE Score: _____ *22+ need to register for MATH 1131Q and MATH 1132Q

Competencies:

☐ Language (waived; or complete through Elementary II; or Intermediate I if 2 years of same language in HS): _____

☐ ENGL 1007 or 1010 or 1011

☐ Writing (W course in major): CSE 4939W

☐ Writing (W course): _____

☐ Environmental Literacy (E course): _____

*W's and E's may also count at CA1, CA2, CA4 - Not considered "double dipping"

Content Area One: Arts and Humanities:

☐ PHIL 1104

☐ CA1 (not a PHIL course): _____

Content Area Two: Social Sciences:

☐ CA2: _____

☐ Second CA2 (different department): _____

Content Area 4: Diversity and Multiculturalism:

☐ CA4 International: _____

☐ One additional CA4 course: _____

Double Dipping

Single course counts as a CA1&CA4 OR CA2&CA4
Only allowed to double dip ONCE
Double dipping is not required
If double dipping, you are responsible for taking an additional 3 credit free elective

Double Dipped course: _____

Important Gen Ed/Competency Notes:

- Appropriate courses may be found at: https://catalog.uconn.edu/general-education/
- Can search by general education requirement in College Scheduler found in Student Admin
- Content Area 3 met by lab sciences required for your major

DSE Major Requirements:

☐ Lab Science Sequence: _____+_____

Options: PHYS 1501Q+1502Q or CHEM 1127Q+1128Q

☐ Third Lab Science: _____

Options: CHEM 1127Q or PHYS 1501Q (if not used for sequence), BIOL 1107/1108/1110, ERTH 1050

☐ Probability & Statistics Course: _____

Options: MATH 3160, STAT 3025Q, STAT 3345Q, STAT 3375Q

☐ You are required to have at least 45 CSE credits. You may need to take additional CSE electives to meet this requirement. This box will be checked if you have met your CSE credit requirement.

Please visit https://www.cse.uconn.edu/undergraduate/major-programs/data-science-engineering/ for the current list of DSE elective courses.

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