

Data Science and Engineering (BS)

Catalog Year 2025-2026

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) (TOI 6)	Lab Science (4 credits) (TOI 6)
ENGR 1000: Orientation to Engineering (1 credit)	ENGL 1007: Writing and Composition (4 credits)
ENGR 1195: AI4All (2 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) (TOI 6)	MATH 2210Q: Applied Linear Algebra (3 credits)
TOI Course (3 credits)	TOI Course (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 (3 credits)	DSE Elective (3 credits)
TOI Course (3 credits)	TOI Course (3 credits)
TOI Course (3 credits)	Free Elective (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 credits)	DSE Elective (3 credits)
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

Total Credits: 120