Data Science Curriculum Flowchart (120 credits)

Freshman Fall — 14 credits

DSC 101
Intro. To Data Science
[3] (Fall)

MTH 153 (or 151)
Calculus Appl Sci Engin I
[4] (Fall/Spring)

CIS 180
Object-Oriented Prog I
[4] (Fall/Spring)

ENL 101
Crit Writing and Reading I
[3] (Fall/Spring)

Freshman Spring — 17 credits

University Studies 4A Elective
[3] (Spring/Fall)

MTH 154 (or 152)
Calculus Appl Sci Engin II
[4] (Spring/Fall)

University Studies 3B Elective
[3] (Spring/Fall)

CIS 181
Object-Oriented Prog II
[4] (Spring)

ENL 102
Crit Writing and Reading II
[3] (Spring/Fall)

Sophomore Fall — 16 credits

University Studies 4B Elective
[3] (Fall/Spring)

MTH 181
Discrete Structures I
[3] (Fall)

MTH 231
Elem. Stats. I
[3] (Fall)

DSC 201
Data Analy. & Visual.
[3] (Fall)
See COIN for Prereqs

PHY/CHM/BIO
Laboratory Science Elective
[4] (Fall)

Sophomore Spring — 14 credits

MTH 221
Linear Algebra
[3] (Spring/Fall)

MTH 280
Intro to Sci. Computing
[3] (Spring)

CIS 280
Software Spec & Design
[4] (Spring)

PHY/CHM/BIO
Laboratory Science Elective
[4] (Spring)

Junior Fall — 15 credits

MTH 331
Probability
[3] (Fall/Spring)

Science Elective
University Science 2A
[3] (Fall/Spring)

CIS 360
Algorithms & Data Structure
[3] (Fall)

CIS 381
Social & Ethical Aspects
[3] (Fall)

ENL 266
Technical Communications
[3] (Fall/Spring)

Junior Spring — 15 credits

MTH 332
Mathem. Statistics
[3] (Spring)

DSC 301
Matrix Meth for Data Analys
[3] (Spring)

University Studies 3A Elective
[3] (Spring/Fall)

CIS 490
Machine Learning
[3] (Spring)

Free Elective
[3] (Spring/Fall)

Senior Fall — 15 credits

Technical Elective
See Approved List
[3] (Fall/Spring)

CIS 430 or 452
See COIN for Prereq.
[3] (Fall)

DSC 498
Capstone Design I
[3] (Fall)

Free Elective
[3] (Fall/Spring)

Free Elective
[3] (Fall/Spring)

Senior Spring — 14 credits

Technical Elective
See Approved List
[3] (Spring/Fall)

Technical Elective
See Approved List
[3] (Spring/Fall)

DSC 499
Capstone Design II
[2] (Spring)

University Studies 4C Elective
[3] (Spring/Fall)

Free Elective
[3] (Spring/Fall)