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1	Computing Science Prerequisites 2026-27	
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4	Course Title	Prerequisites
5	CSCI 1226 Intro to Computing Science and Programming	N/A
6	CSCI 1227 Computer Programming and Problem Solving	N/A
7	CSCI 1228 Advanced Computer Programming & Problem Solving	CSCI 1226 with a minimum grade of C
8	CSCI 2227 Introduction to Data Analytics	CSCI 1227 or CSCI 1228
9	CSCI 2228 Foundational Concepts for Data Analytics	CSCI 1227 or CSCI 1228
10	CSCI 2307 Theoretical Found of Computing Science	CSCI 1228 and MATH 2305
11	CSCI 2308 Intro to Numerical Analysis	MATH 1211 and CSCI 1226
12	CSCI 2327 Digital Logic and Computer Architecture	CSCI 1228
13	CSCI 2341 Data Structures and Algorithms I	CSCI 1228
14	CSCI 2355 Intro Internet Technologies and Web Programming	CSCI 1226 or CSCI 1227
15	CSCI 2356 Mobile App Development	CSCI 1226
16	CSCI 3309 Advanced Numerical Analysis	CSCI 2308 [MATH 2308] with a grade of at least C
17	CSCI 3328 Assembly Level Machine Organization and Language	CSCI 2327
18	CSCI 3342 Data Structure & Algorithms II	CSCI 2341
19	CSCI 3355 Advanced Internet Technologies and Web Programming	CSCI 2355 or CSCI 2356
20	CSCI 3380 Information Visualization and Interaction	CSCI 2341 and CSCI 2355 or CSCI 2356
21	CSCI 3421 Data Communications & Network	MATH 1216, CSCI 2327
22	CSCI 3428 Software Engineering	CSCI 2341
23	CSCI 3430 Principles of Programming Languages	CSCI 2341
24	CSCI 3431 Operating Systems	CSCI 2327
25	CSCI 3451 Theory of Computation	CSCI 2341 and CSCI 2307 [MATH 2307]
26	CSCI 3461 Database Systems	CSCI 2341 and MATH 2305 or CSCI 2227 and CSCI 2228
27	CSCI 3470 Introduction to Machine Learning	CSCI 2227 and either: CSCI 2341 and MATH 2301 or CSCI 2228
28	CSCI 3475 Human Computer Interaction	CSCI 1227 or CSCI 1228 or MISA 2320 (formally Cisy 2320)
29	CSCI 3479 Intro Virtual/Augment Reality	CSCI 2341 or CSCI 2327
30	CSCI 3482 Artificial Intelligence	CSCI 2341 and MATH 2305 or CSCI 2227 and CSCI 2228
31	CSCI 4301 Systems Security	CSCI 2341 and CSCI 2327
32	CSCI 4408 Numerical Solution Initial Value ODE	CSCI 2308 [MATH 2308] with a grade of at least C
33	CSCI 4409 Numerical Solution of Boundary Value ODE	CSCI 2308 [MATH 2308] with a grade of at least C, or permission of instructor
34	CSCI 4423 Cryptography	CSCI 2341 and MATH 2305
35	CSCI 4427 Computational Methods in Graph Theory	MATH 2305 with a grade of at least C, or permission of instructor
36	CSCI 4430 Complex Networks	MATH 1216, MATH 2305
37	CSCI 4452 Algorithm Analysis	CSCI 2341 and MATH 2305
38	CSCI 4463 Numerical Software	CSCI 2341 and CSCI 2308 [MATH 2308]
39	CSCI 4471 Computer Graphics	MATH 1211, MATH 2301 and CSCI 2341
40	CSCI 4472 Deep Learning for Computer Vision	MATH 2301 and CSCI 1228
41	CSCI 4474 Text Mining and Social Network Analysis	CSCI 2227 and CSCI 2228, or CSCI 2341
42	CSCI 4476 Digital Image Processing	CSCI 2341
43	CSCI 4478 Machine Learning for Graphs	CSCI 2227 and either: CSCI 2341 and MATH 2301 or CSCI 2228
44	CSCI 4479 Introduction to Health Informatics	CSCI 2227 and either: CSCI 2341 or CSCI 2228
45	CSCI 4480 Big Data MGMT Visualization	CSCI 2227 and either CSCI 2341 or CSCI 2228
46	CSCI 4500 Research Thesis	Honours Standing
47	CSCI 4551 Current Computing & Data Science I	CSCI 2355 or CSCI 2356, CSCI 3461 or CSCI 4477, and CSCI 3431
48	CSCI 4552 Current Computing & Data Science II	CSCI 2355 or CSCI 2356, CSCI 3461 or CSCI 4477, and CSCI 3431