

APPLIED COMPUTER SCIENCE/DATA SCIENCE CURRICULUM SHEET

FRESHMAN (33)

FALL		SPRING			
MATH 141	Calculus I	4	MATH 142	Calculus II	4
CSCI 125	Introduction to Computer Science	3	ENGL 102	Rhetoric & Composition	3
ENGL 101	Critical Reading & Comp.	3	CSCI 145	Algorithmic Design I	4
GEN ED	HIST 101 or 102	3	STAT 509	Statistics	3
MATH 174	Discrete Math	3	GEN ED	Soc./Behavioral Science.	3
		16			17

SOPHOMORE (30)

FALL		SPRING			
CSCI 146	Algorithmic Design II	4	CSCI 220	Data Structures & Algorithms	3
MATH 344	Linear Algebra for CS and Eng.	3	CSCI 185	Computer Applications & Prog.	3
CSCI 165	Data Science with Python	4	CSCI 360	Software Engineering	3
College Req.	Free Elective	4	College Req.	Fine Arts	3
			CSCI 345	Data Mining and Machine Learning	3
		15			15

JUNIOR (31)

FALL		SPRING			
CSCI 385	Advanced Machine Learning	3	CSCI 400	Special Topics in Data Science	3
GEN ED	COMM 201/241	3	CSCI 320	Object-Oriented Programming	3
GEN ED	Humanities	3	CSCI 415	Computer Network	3
CSCI 255	Introduction to Information Security	3	GEN ED	Humanities	3
College Req.	Free Elective	4	GEN ED	POLI 201, HIST 201/202	3
		16			15

SENIOR (26)

FALL		SPRING			
CSCI 520	Database System Design	3	CSCI 592	Capstone Seminar II	3
CSCI 591	Capstone Seminar I	3	ELECTIVE	CSCI Technical Elective	3
ELECTIVE	CSCI Technical Elective	3	College Req.	Natural Science	4
GEN ED	Natural Science	4	ELECTIVE		3
		13			13

Total Hours	120
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TECHNICAL ELECTIVES

Departmental Approval

ADDITIONAL REQUIREMENTS

Three Writing Intensive Courses (at least one in major)

One 3-Credit Non-Western World Studies Course

GEN ED Courses: ENGL 101(3)

ENGL 102(3)

HIST 101(3) or HIST 102(3)

COMM 201(3) or 241 (3)

MATH 141(4)

Social/Behavioral Science (3)

Humanities (6), two courses

API: POLI 2011(3) or HIST 201(3) or HIST 202(3)

Natural Science with Lab (4)

Total: 32 Credit Hours

College Requirements: MATH 141(4)

Fine Arts (3)

Natural Science with Lab (4)

Free Electives (7)

Total: 17 Credit Hours

Technical Electives: Two courses of CSCI that are not part of the Data Science program.

DATA Science Courses:

CSCI 165 Data Science with Python

CSCI 345 Data Mining and Machine Learning

CSCI 385 Advanced Machine Learning

CSCI 400 Special Topics in Data Science

Total: 12 Credit Hours