

Computer Science - Data Analytics Concentration

Declared Minor:

School of STEM | Effective Fall 2022 | Modified 3/2022

NAME SSID PHONE ADVISOR START DATE	Transfer Information (If applicable) *TC=Transfer Credits		Total Credits Transferred:
	Institution Name:		
	Institution Name:		
	Institution Name:		
			Overall Transfer Credit Total:
			0

MAJOR REQUIREMENTS (69 Credits)	STAGE: GATEWAYS FOR EXCELLENCE (30 Credits)
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REQUIRED CORE (39 credits)			
Course	Description	Semester or TC	Credits
CS 101	Intro to Computational Thinking		
CS 150	Computer Science I		
CS 250	Computer Science II		
CS 270	Computer Architecture		
CS 320	Ethics in a Technological Society		
CS 350	Data Structures & Algorithm Analysis		
CS 360	Human Computer Interaction		
CS 380	Networking & System Security		
CS 420	Database Management Systems		
CS 435	Operating Systems & Embedded Systems		
CS 450	Software Engineering		
CS 485	Web Programming		
CS 490	Senior Project		

Required Math (9 Credits)			
Course	Description	Semester or TC	Credits
MATH 109	Applied Calculus		
MATH 120	Statistics		
MATH 308	Discrete Math I		

REQUIRED NATURAL SCIENCES (6 credits)
Choose from ASTR, BIO, CHEM, KIN, FS, PHY, or SCI

Data Analytics Concentration (15 Credits)			
Course	Description	Semester or TC	Credits
CS 301	Artificial Intelligence		
CS 310	Cyber Security		
CS 424	Data Mining		
CA 240	New Media Communications		
CA 340	Social Media Marketing		

FOUNDATIONS (9 Credits)			
Course	Description	Semester or TC	Credits
STAGE 101	First Year Seminar		
WRT 101	Academic Writing		
WRT 102	Academic Writing II		
	Quantitative Literacy (met by MATH 109)	met by major	
	Scientific Reasoning (met by Natural Sci)	met by major	

BREADTH AND PROFICIENCY DEVELOPMENT (15 Credits)			
5 courses: one from each content area; another from any of the four.		Semester or TC	Credits
	Global Cultures and Languages		
	Literature and Creative Arts		
	Philosophy and Religious Studies		
	History and Social Sciences		
	Repeated Content Area Course		

GATEWAY: GLOBAL LEARNING & SOCIAL RESP. (6 Credits)			
Students must complete all Foundation courses and 3 Breadth and Proficiency courses before taking Gateway courses. Each Gateway course must be from a different prefix.			
Course	Description	Semester or TC	Credits
CS 320	Ethics in a Technological Society	met by major	

MINOR OR FREE ELECTIVES (22 Credits)			
Course	Description	Semester or TC	Credits
STAC 101	STAC 101		

	Required	Completed	Needed
Credits Summary			
Major Requirements	69	0	69
Foundations Credits	9	0	9
Breadth & Proficiency Credits	15	0	15
Global Learning Credits	6	0	6
Minor or Free Electives	22	0	22
Total Credits	121	0	121

Transfer credits are formally accepted only when official transcripts from previous colleges are received indicating a grade of "C-" or better. TC denotes Transfer Credit. Most Minors are 18 credits. Digital Badges are 9 or 12 credits. For a list of STAGE courses, click the link in the title. For a Major Degree Map, click on the name of the major. This is not an official document, see BANNER for the most up to date information.

Computer Science - Data Analytics Concentration

Declared Minor:

School of Arts & Sciences | Effective Fall 2019 | Modified 5/2019

NAME	Transfer Information (If applicable) *TC=Transfer Credits		Total Credits Transferred:
SSID	Institution Name:		
PHONE	Institution Name:		
ADVISOR	Institution Name:		
START DATE			Overall Transfer Credit Total: 0

MAJOR REQUIREMENTS (72 Credits)	STAGE: GATEWAYS FOR EXCELLENCE (39 Credits)
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REQUIRED CORE (39 credits)			
Course	Description	Semester or TC	Credits
CS 101	Intro to Computational Thinking		
CS 150	Computer Science I		
CS 250	Computer Science II		
CS 270	Computer Architecture		
CS 320	Ethics in a Technological Society		
CS 350	Data Structures & Algorithm Analysis		
CS 360	Human Computer Interaction		
CS 380	Networking & System Security		
CS 420	Database Management Systems		
CS 435	Operating Systems & Embedded Systems		
CS 450	Software Engineering		
CS 485	Web Programming		
CS 490	Senior Project		

Required Math (10 Credits)			
MATH 109*	Applied Calculus		
MATH 120	Statistics		
MATH 308	Discrete Math I (4 credits)		

Required Natural Sciences** (8 credits: Choose one area)			
Physics 201 & 211, Physics 202 & 212			
Biology 171 & 173, Biology 172 & 174			
Chemistry 171 & 173, Chemistry 172 & 174			

Data Analytics Concentration (15 Credits)			
CS 301	Artificial Intelligence		
CS 310	Cyber Security		
CS 423	Data Mining		
CA 240	New Media Communications		
CA 340	Social Media Marketing		

Notes:

Notes: Transfer credits are formally accepted only when official transcripts from previous colleges are received indicating a grade of "C" or better. Courses identified in the schedule as "general education requirement" courses will fulfill the Humanities, Natural Science and Social Science areas.

FOUNDATIONS (9 Credits)			
Course	Description	Semester or TC	Credits
STAGE 101	First Year Seminar		
WRT 101	Academic Writing		
WRT 102	Academic Writing II		
	Quantitative Literacy (met by MATH 109)	met by major	
	Scientific Reasoning (met by Natural Sci)	met by major	

BREADTH AND PROFICIENCY DEVELOPMENT (15 Credits)			
One from each area (Global Culture & Languages, Literature & Creative Arts, Philosophy & Religious Studies or History & Social Sciences, another from any area)			
		Semester or TC	Credits
	GCL:		
	LCA:		
	PRS: (met by CS 320)	met by major	
	HSS:		
	Choice:		

GATEWAY: GLOBAL LEARNING & SOCIAL RESP. (9 Credits)			
Students must complete all Foundation courses and 3 Breadth and Proficiency courses before taking Gateway courses. Each Gateway course must be from a different prefix			
		Semester or TC	Credits

MINOR OR FREE ELECTIVES (18 Credits)			
STAC 101	STAC 101		

Credits Summary	Required	Completed	Needed
Major Requirements	72	0	72
Foundations Credits	9	0	9
Breadth & Proficiency Credits	12	0	12
Global Learning Credits	9	0	9
Free Electives	18	0	18
Total Credits	120	0	120