## **COMPUTER SCIENCE MAJOR**

## **Artificial Intelligence and Data Science Concentration**

This worksheet is a guide to <u>supplement</u> your degree audit in Degree Works. All students need 32 FSU course-credits to graduate. For students who change majors or enter FSU with transfer credits your degree audit may appear differently, as previous coursework could fulfill Domains and Free Electives. Please see your Advisor and/or The Advising Center with any questions.

### **DOMAIN GENERAL EDUCATION (11 Courses Required):**

The FSU General Education consists of 11 requirements. In the Computer Science major Domain II-A is satisfied through completion of the major (X). An additional two (2) subdomains are met by specific courses in the major (see below), leaving *eight (8) courses to be completed* to satisfy the remaining General Education subdomains through courses taken outside the major department. Only courses designated (Gen. Ed. Domain) after the course title will meet General Education requirements. Please refer to the catalog (p. 281) for full information.

<b>Common Core</b>	
	A. ENWR 110 Composition II
	B. MATH/STAT XXX (credit-bearing): MATH 206*
Domain I	
	A. Creative Arts:
	B. Humanities:
	C. Language:
Domain II	
X	A. Analysis, Modeling, Problem-Solving
	B. Natural Sciences (2): Non-Lab Science:
	Lab Science: Science Requirement*
Domain III	
	A. Perspectives on the Past:
	B. Perspectives on Contemporary World:
	C. Global Competency, Ethical Reasoning,
	and/or Human Diversity:

### MAJOR COURSES (20 courses, 19.5 course-credits):

Required Core Courses (8 courses, 7.5 course-credits):		
CSCI 120	Introduction to Information Technology	
CSCI 130	Computer Science I Using Java	
CSCI 200	Computer Science Professional Exploration	
· · · · · · · · · · · · · · · · · · ·	Seminar (0.5 credits)	
CSCI 215	Computer Science II Using Java	
CSCI 258	Introduction to Operating Systems Using UNIX	
CSCI 360	Database Management	
MATH 206	Discrete Math I (CC-B) **	
STAT 157	Probability and Statistics	
** Fulfills a General Education r	requirement.	

#### **AI & Data Science Concentration Courses (12):**

Required Courses (9)	) <b>:</b>		
CSC	CI 163	Discovering AI: Applications, Ethics & Beyond	
CSC	CI 271	Data Structures	
CSC	CI 300	Artificial Intelligence	
CSC	CI 308	Python Programming	
CSC	CI 326	Machine Learning	
CSC	CI 367	Data Science with Python	
CSC	CI 444	Natural Language Processing	
MA	TH 219	Calculus I	
MA	TH 226	Linear Algebra and Applications	
Computer Science Electives (choose 2):			
CSC	CI 333	Object-Oriented Programming Using C++	
CSC	CI 340	UNIX System Administration	
CSC	CI 345	Computer & Network Security	
CSC	CI 347	Analysis of Algorithms	
CSC	CI 362	Software Engineering	
CSC	CI 373	Advanced Web Technologies	
CSC	CI 376	Network Technologies	
CSC	CI 386	Data Mining	
CSC	CI 400	Special Topics in Computer Science	
CSC	CI 490	Independent Study in Computer Science	
CSC	CI 495	Internship in Computer Science	

Continued on next page

Rev. 9.20.24 2024-2025 Catalog

X = Fulfilled through completion of major

<sup>\* =</sup> Required course in the major

# **COMPUTER SCIENCE MAJOR**

# **Artificial Intelligence and Data Science Concentration**

## Continued from previous page

Additional Elective (Choose 1):				
BIOL 218/218L	Introduction to Bioinformatics with Lab			
ENVS 202	Data Analysis for Scientists			
ENVS 333	Digital Field Methods: Drones, Data, & AI			
GEOG 111	Visualizing Social and Environmental Justice			
PSYC 236	Psychology of Learning			
PSYC 263	Cognitive Psychology			
PHIL 102	Introduction to Ethics: Why Be Moral?			
PHIL 222	Bioethics			
STAT 307	Intermediate Statistics			
FREE ELECTIVES (1-5): May be used toward a minor				
<del></del>				

Rev. 9.20.24