

## **Computer Science**

GENERAL EDUCATION – 48 credits	COMPUTER SCIENCE MAJOR I	
I. Skills/Processes for Literacy (4 courses)	COMPUTER SCIENCE CORE REQUIREMENTS – 24 credits	
	COSC 130 Intro to Programming (3)	COSC 300 Operating System (3)
A. INTD 101 University Seminar	COSC 150 Intro to JAVA Programming (3)	COSC 231 Project Management (3)
B. ENGL 101 Composition: Theme Writing	COSC 151 Computer Science I (3)	COSC 350 Data Structures & Algorithms
C. ENGL 104 Composition: The Essay	COSC 220 Database Design (3)	(3) COSC 498 Capstone Project (3)
D. SPCH 110 Oral Communication	COMPUTER SCIENCE TRACK REQUIREMENTS — 36 CREDITS  Must complete one track plus additional credits in COSC, DSCI, ISYS, MATH, or  SWDV to reach a minimum of 60 credits in major courses. Recommended to  complete two tracks.	
II. HUMANITIES (5 courses)	Data Science (18 credits)	Software Development (18 credits)
A. Fine Arts (1 course):Art Music, Performance, Aesthetics	DSCI 304 Intro to SQL (3)	SWDV 220 Computer Systems and Programming Languages (3)
B. Literature/Language (1 course):	DSCI 314 Natural Language Processing	SWDV 226 Software Development
ENGL or Foreign Language C. Philosophy (1 course)	DSCI 408 Machine Learning (3)	Methods and Tools (3)  SWDV 420 Foundations of Web Application Development (3)
D. Humanities Electives (2 courses)	DSCI 417 Big Data (3)	SWDV 430 Object Oriented Application and Design (3)
ENGL, The Arts/ Aesthetics, Foreign Language, HUM,PHIL,REL	DSCI 419 Deep Learning (3)	SWDV 460 DevOps (3)
	MATH 316 Linear Algebra (3)	SWDV 497 Special Topics in Advanced and Emerging Technologies (3)
III. SOCIAL SCIENCE (3 courses)	Artificial Intelligence (18 credits)	Cyber Security (18 credits)
Social Science Electives (3 courses from 2 areas in ECON, GEOG, HIST, PSCI, PSYC, SOC)	DSCI 314 Natural Language Processing (3)	ISYS 280 – Cyber Security Principles (3)
	DSCI 408 Machine Learning (3)	ISYS 470 – Ethical Hacking (3)
IV. Natural Science/Quantitative Reasoning (4 courses)	DSCI 419 Deep Learning (3)	ISYS 474 – Networks & Security (3)
A. Science	DSCI 421 Introduction to Robotics (3)	ISYS 484 – Digital Forensics (3)
B. Quantitative Reasoning	DSCI 423 Computer Vision (3)	ISYS 485 – Incident Response and Malware Analysis(3)
MATH 102 Everyday Data	MATH 316 Linear Algebra (3)	ISYS 481 – Virtualization & Cloud Security (3)
MATH 125 College Algebra & Trigonometry	User Experience (18 credits)	Blockchain (18 credits)
MATH 311 Discrete Mathematics	ISYS 120 Storyboarding App (3)	COSC 140 Introduction to Blockchain (3)
Recommended Math Electives	ISYS 220 App Development (3)	COSC 290 Blockchain Networks (3)
MATH 151 – Calculus I (4)	ADDM 200 Designing for Meaning (3)	COSC 305 Cryptography and Cryptocurrencies (3)
MATH 152 – Calculus II (4)	ADGD 265 Introduction to Digital Media (3)	COSC 315 Ethics and Legal Aspects of Blockchain (3)
MATH 333 – Intro to Probability & Statistics (3)	ADGD 310 Website Design I (3)	COSC 375 Applications of Blockchain Technology (3)
	ADDM 450 UX/UI Design (3)	COSC 497 Special Topics in Advanced and Emerging Topics in Blockchain (3)