Contents

1. BACS Program:

B.A.C.S. Courses		
Introduction to Data Science and Analytics	CAP 4773	3
Computer Logic Design	CDA 3203	3
Principles of Software Engineering	CEN 4010	3
Software Engineering Project	CEN 4910	3 **or**
Mobile App Project	COP 4655	3
Introduction to Programming in Python	COP ~~2034~~ 3035	3
Data Structures and Algorithm Analysis with Python	COP 3410	3
Introduction to Database Structures	COP 3540	3
Introduction to Internet Computing	COP 3813	3
Python Programming	COP 4045	3
Object-Oriented Design and Programming	COP 4331	3
Computer Operating Systems	COP 4610	3
Advanced Database Systems	COP 4703	3
Foundations of Computing	COT 2000	3
Subtotal		**39**

2. CS Minor:

Python Track		
Introduction to Programming in Python	COP ~~2034~~ 3035	3
Data Structures and Algorithm Analysis with Python	COP 3410	3
Select three upper-division courses from the Electives table.		9
Total*		**15**

3. AI Minor:

Applications Track - 15 credits (Not open to undergraduate students in the Department of Electrical Engineering and Computer Science.)		
Core Courses - 9 credits		
Computer Programming and Data Literacy for Everyone	COP 1031C	3 **or**
Introduction to Programming in Python	COP ~~2034~~ 3035	3
Applications of Artificial Intelligence	CAP 2603	3
Applied Machine Learning and Data Mining	CAP 4612	3
Elective Courses - 6 credits - Select two courses from the Electives Table		

4. AI Certificate:

Applications Track - 15 credits (Not open to undergraduate students in the Department of Electrical Engineering and Computer Science.)		
Core Courses - 9 credits		
Computer Programming and Data Literacy for Everyone	COP 1031C	3 **or**
Introduction to Programming in Python	COP ~~2034~~ 3035	3
Applications of Artificial Intelligence	CAP 2603	3
Tools for Data Science	CAP 2751	3 **or**
Applied Machine Learning and Data Mining	CAP 4612	3
Elective Courses - 6 credits - Select two courses from the Electives Table		

5. BSDSA:

Data Science and Engineering Concentration

Concentration Core Requirements		
Introduction to Data Science and Analytics	CAP 4773	3
Take all courses from either Group 1 or Group 2		

Group 1		
Introduction to Programming in C (if applicable*)	COP 2220	3
Foundations of Computer Science	COP 3014	3
Data Structures and Algorithm Analysis	COP 3530	3
Group 2		
Introduction to Programming in Python	COP ~~2034~~ 3035	3
Data Structures and Algorithm Analysis with Python	COP 3410	3