Data Science and Analysis BS, Computer Science Emphasis Area

Code	Title	Hours
CMP SCI 2250	Programming and Data Structures	3
~~CMP SCI 2261~~	~~Object-Oriented Programming~~	~~3~~
CMP SCI 3130	Design and Analysis of Algorithms	3
CMP SCI 3411	Introduction to Data Visualization	3
CMP SCI 4151	Introduction to Statistical Methods for Data Science	3
CMP SCI 4340	Introduction to Machine Learning	3
ENGL 3130	Technical Writing	3
MATH 1900	Analytic Geometry and Calculus II	5
MATH 3000	Discrete Structures	3
Choose ~~three~~ six of the following:		~~9~~ 18
CMP SCI 2261	Object-Oriented Programming	
CMP SCI 2751	File Systems, Operations, and Tools	
CMP SCI 3260	C/C++ for Advanced Programming	
CMP SCI 3010	Web Full Stack Development	
CMP SCI 3702	Introduction to Cyber Threats and Defense	
CMP SCI 4030	Introduction to Intelligent Web	
CMP SCI 4300	Introduction to Artificial Intelligence	
CMP SCI 4320	Introduction to Evolutionary Computation	
CMP SCI 4370	Introduction to Biological Data Science	
CMP SCI 4390	Introduction to Deep Learning	
CMP SCI 4610	Database Management Systems	
CMP SCI 4750	Introduction to Cloud Computing	
MATH 2450	Elementary Linear Algebra	
Total Hours		**~~35~~ 44**

Other Data Science courses may be included as electives with prior approval of the program coordinator.

If other departments are affected by this proposal, please secure "sign-offs" and indicate for each department the following:

Department	Contact Person	Phone #	Objections
Mathematics	Erika Gibb		No
	Jim Craig		No

Justification for request:
The department is changing the introductory language, these changes are are the impact on the DS degree/CS emphasis. No changes in the interdisciplinary core.