## MINOR IN COMPUTING APPLICATIONS

As computing applications are present in virtually all aspects of our lives, we have seen a drastic increase in the number and types of opportunities that creatively merge computing technologies with existing non-computational practices and professions. To meet this demand, the Computing Application Minor offers pathways to learning to build effective computing applications, such as for web and mobile platforms, through an interdisciplinary curriculum geared towards non-CS major students. Students will be introduced to computer programming and web application development and build engineering, scientific, and creative applications.

Please review course descriptions for prerequisite courses and consult with a computer science department advisor for further information.

## **Computing Applications Minor – 15 units**

A minimum of 6 upper-division units are required to complete the minor.

All coursework used to satisfy the requirements of the minor must be completed with a minimum grade point average of 2.0.

Code	Title	Units
CSC 306	An Interdisciplinary Approach to Computer Programming	3
Select One:		3
CSC 220	Data Structures <sup>1</sup>	
CSC 311	Data Structures for Data Science Application Development <sup>2</sup>	
CSC 408	Machine Learning and Data Science for Personalized Medicine	3
CSC 411	Introduction to Machine Learning for Interdisciplinary Data Scientists	3
CSC 509	Data Science and Machine Learning for Medical Image Analysis	3

<sup>1</sup> Recommended for non-life science majors.

<sup>2</sup> Recommended for life science majors.