DASC - DATA SCIENCE (DASC)

DASC 3000 Data Visualization (3 Credits)
Visualization is crucial for understanding complex information and for enabling humans to act on information appropriately. For example, visualization is used in many application areas such as social and health sciences, business, the natural sciences and engineering. This course introduces the foundations of information visualization rooted in cognitive psychology and perception. This course also teaches retrieving information from data sources, such as data bases and the internet, preparing data for processing, as well as creating and presenting information visualizations using standard software.

DASC 3010 Data Mining (3 Credits)
This course introduces the foundations of applied data mining. There is a need for extracting useful information from raw data in fields such as social and health sciences, business, the natural sciences and engineering. This course covers the fundamental ideas and algorithms of data mining. Furthermore, it teaches applying data mining techniques in order to extract useful information from data. Standard software for data mining will be used. The course is intended for any student desiring an introduction to data mining. Prerequisite: MATH 0012 or appropriate placement.

DASC 3111 Text Mining (3 Credits)
A majority of data collected today is unstructured and therefore not immediately accessible to standard data mining techniques.#Much of that unstructured data comes in the form of text.#Analyzing textual data requires a specialized suite of tools, tools which collectively constitute the field of text mining.#This course introduces the foundations of text mining and provides techniques and ideas that demonstrate how text mining can be used to extract useful information from a large text corpus.#Applications include examples in the humanities, law, business, and the sciences.#Text processing and analysis will be carried out using standard software for text mining.#The course is intended for any student desiring an introduction to text mining.

DASC 4011 Intern in Visual Analytics (3 Credits)
This course provides credit for students participating in an internship experience through the Career Center. As part of the requirements, students are required to give a presentation about their experience in the departmental seminar. Students interested in the internship experience are required to consult the departmental internship adviser.

DASC 4021 Project in Visual Analytics (3 Credits)
Students participate in a project in data analytics under the guidance of a faculty member. The topic of the project is closely integrated with the learning experience in the students' data visualization and analysis curriculum. The topic is chosen in collaboration with the faculty member.