Big Data to Decisions (CIC-6004)

Course Description:

This course explores the concepts of information orientation and data management as key components for improving mission effectiveness through the development of open, enterprise wide, and state-of-the-art data architectures. It examines management issues such as data governance and organizational information behaviors and values. In addition, the course covers key data management strategies, including big data, data analytics, their enabling information technologies including data warehousing, electronic archiving, data mining, neural networks, and other knowledge discovery methodologies. Case studies allow students to explore data management issues and implementation. While geared for managers, the course provides sufficient insight into the underlying technologies to ensure that students can evaluate the capabilities and limitations of data management options and strategies.

Learning Outcome:

Students will be able to assess an organization's current data architecture and implementation and to develop strategies to enhance them to improve agency mission performance.

Additional Information:

- The course does not assume familiarity with Data Management methods.
- This elective course supports two different concentrations Emerging Information Technology (EIT) and Data Analytics and Visualization (DAV).
- Student activities –
  - Read required readings and participate in class discussions.
  - There are no lesson assignments.
  - There is final student oral presentation on an emerging topic related to Data Management.