College of Information and Cyberspace (CIC)
Data Analytics and Visualization Concentration Program
August 2020

A. Description

The NDU CIC Data Analytics and Visualization (DAV) Concentration Program examines the emerging need for information superiority and decision making through data and big data concepts, and data analytics to support National Security and mission needs of Joint Warfighters and Operations, the Department of Defense, U.S. government, civilian agencies, the international community, and the private sector. Over ninety percent of "data" to include media, globally has been generated over the last few years. Adversaries, governments and businesses are collecting, processing and analyzing the abundant and chaotic digital information produced by individuals, technologies, and organizations providing a unique basis for greater insight into decision-making. With a foundational understanding of the big data environment and its opportunities and challenges, military leaders are positioned gain greater situational awareness and understanding to inform decision-making.

B. Concentration Learning Outcomes
1. Apply appropriate tools, concepts, models, and platforms to address the vast and diverse data needs anticipated for the future;
2. Present and communicate data results in a way that enables stakeholders to value data analytics as a transformative means of decision making;
3. Incorporate key ethical concerns regarding the collection and application of Big Data and Analytics

C. Description of Options

NDU CIC DAV concentration is a two course program with offerings over the fall and spring semester.

Elective Courses: Fall Semester
6004   Big Data to Decisions – Mondays, 0900 – 1100, 09/14/2020 - 12/07/2020

Electives Courses: Spring Semester
6037   Data Analytics for Decision Makers – Tuesday 0900-1100, 01/04/2021-03/22/2021

Total of 2 courses.