CMDA Major Requirements

Cryptography & Cybersecurity Option
available to students graduating in 2022 and later

For all students, taking either the Integrated Path or the Traditional Path:

Freshman

- BIT/CS/PSCI 2164 Foundations of Contemporary Security Environments
- CS 1114 Intro to Software Design
- CS 2114 Software Design & Data Structures
- MATH 1225 Calculus of a Single Variable I
- MATH 1226 Calculus of a Single Variable II
- MATH 2204 Intro to Multivariable Calc
- STAT 3005 Stat Methods I

Sophomore

- MATH 2204 Intro to Multivariable Calc
- CS 2114 Intro to Software Design
- CS 2505 Intro to Computer Organization
- CMDA 2005 Integrated Quantitative Science I
- CMDA 2006 Integrated Quantitative Science II
- MATH 2114 Intro to Linear Algebra
- STAT 3006 Stat Methods II

Junior

- CMDA 3605 Math Modeling I
- CMDA 3606 Math Modeling II
- CMDA 3654 Intro Data Analytics & Visualization
- CMDA 4654 Intermediate Data Analytics & ML

Senior

- BIT/CS/PSCI 4164 Future of Security
- CS 4175 Cryptography
- CMDA 4864 CMDA Capstone Project
- CMDA 4864 (CMDA Capstone) requires the prerequisite of CMDA 3605, 3634, and 3654. Students are strongly encouraged to also take CMDA 3606 and 4654 before the CMDA Capstone.

+6 credits of restricted electives

BIT 4624 (Cybersecurity Analytics)
CS 4264 (Principles of Computer Security)
FIN 4014 (Cyberlaw and Policy)
MATH 3124 (Modern Algebra)
MATH 3134 (Applied Combinatorics)
PHYS 4254 (Quantum Information Tech)

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