CMDA Major Requirements

**Standard Option**

**Freshman**
- CS 1114 Intro to Software Design

**Sophomore**
- CS 2114 Software Design & Data Structures
- CMDA 2005 Integrated Quantitative Science I
- MATH 1225 Calculus of a Single Variable I
- MATH 1226 Calculus of a Single Variable II
- MATH 2214 Intro to Linear Algebra

Students take either the Integrated Path or the Traditional Path

**Integrated Path**
- CMDA 2006 Integrated Quantitative Science II
- CMDA 3634 CS Foundations of CMDA
- CMDA 3654 Intro Data Analytics & Visualization
- CMDA 4654 Intermediate Data Analytics & ML

**Traditional Path**
- MATH 2204 Intro to Multivariable Calc
- STAT 3005 Stat Methods I

**Junior**
- STAT 3006 Stat Methods II
- CMDA 3605 Math Modeling I
- CMDA 3606 Math Modeling II
- CMDA 4654 Intermediate Data Analytics & ML

**Senior**
- 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.

+ 12 credits of CMDA electives

**Electives**
- Electives are drawn from CMDA, Computer Science, Mathematics, Statistics, and Physics courses at the junior and senior level.
- Students may also count 3 credits of Undergraduate Research or Field Study experiential learning.