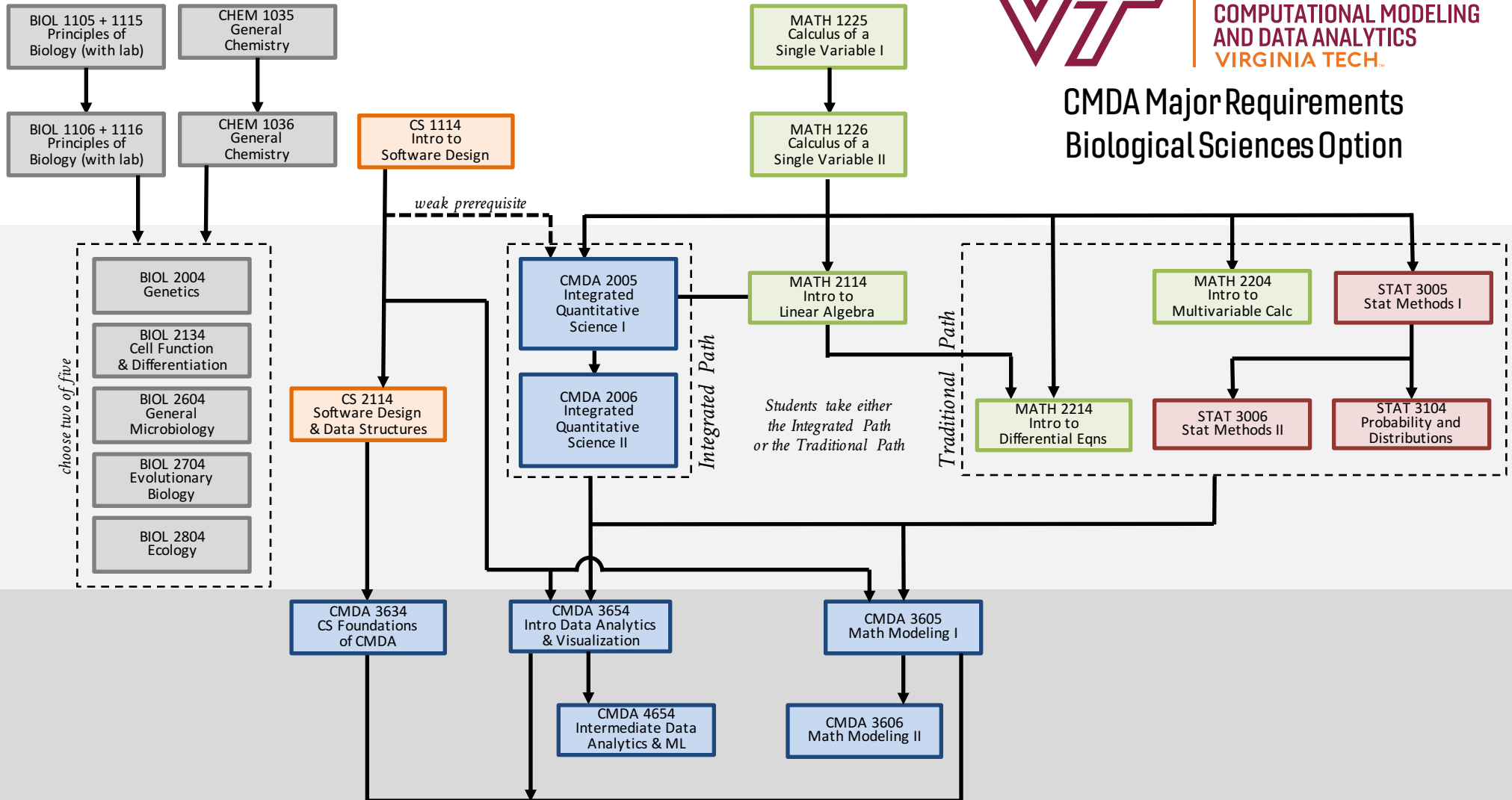




## CMDA Major Requirements Biological Sciences Option



choose two of five

**+ 3 elective courses**  
 (2 from the BIOL/SYSB list,  
 1 from the CMDA list)  
*At most 1 Undergraduate Research  
 course may be counted.*

- BIOL/SYSB* electives include the following:
- SYSB 3035 Systems Biology of Genes and Proteins (4 credits)
  - SYSB 3036 Systems Biology of Genes and Proteins (4 credits)
  - SYSB 3114 Network Dynamics and Cell Physiology (4 credits)
  - SYSB 3116 Network Dynamics and Cell Physiology (4 credits)
  - BIOL 4134 Evolutionary Genetics
  - BIOL 4564 Infectious Disease Ecology
  - BIOL 4114 Global Change Ecology
  - BIOL 4004 Freshwater Ecology (4 credits)
  - BIOL 4624 Microbial Genetics
  - BIOL 4664 Virology
  - BIOL 4874 Cancer Biology
  - BIOL/SYSB 4994 Undergraduate Research

**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.*

- CMDA* electives include the following:
- CMDA 4664 Computational Intensive Stochastic Modeling
  - CS 3824 Intro to Computational Biology and Bioinformatics
  - MATH 4454 Applied Mathematical Modeling
  - STAT 4364 Introduction to Statistical Genomics
  - CMDA 4994 Undergraduate Research