



## Science Elective Options and Restrictions

Below is a list of courses applicable toward the science elective degree requirement for the Computer Science major, along with a description of cases when particular courses are not allowed (as a science elective, or otherwise).

### Science Elective Options

Valid science electives must qualify as General Education Elective courses, and may only be chosen from a set of courses identified from either the College of Science or the College of Health Sciences and Technology. You must also ensure that any selected course doesn't conflict with your chosen lab sequence (see restrictions below).

- From the College of Science:
  - Any General Education Elective-approved undergraduate course from the following disciplines:
    - BIOG, BIOL, CGNS, CHEM, CHMA, CHMB, CHMG, CHMI, CHMO, CLRS, ENVS, IMGS, ITDS, PHYS
  - The following MATH courses:
    - MATH-219 (Multivariable Calculus)
    - MATH-221 (Multivariable and Vector Calculus)
    - MATH-231 (Differential Equations)
    - MATH-233 (Linear Systems and Differential Equations)
    - MATH-252 (Probability and Statistics II)
    - MATH-311 (Linear Optimization)
    - MATH-312 (Nonlinear Optimization)
    - MATH-321 (Game Theory)
    - MATH-326 (Boundary Value Problems)
    - MATH-331 (Dynamical Systems)
    - MATH-341 (Advanced Linear Algebra)
    - MATH-351 (Graph Theory)
    - MATH-361 (Combinatorics)
    - MATH-367 (Codes and Ciphers)
    - MATH-371 (Number Theory)
    - MATH-381 (Complex Variables)
    - MATH-411 (Numerical Analysis)
    - MATH-412 (Numerical Linear Algebra)
    - MATH-431 (Real Variables I)
    - MATH-432 (Real Variables II)
    - MATH-441 (Abstract Algebra I)
    - MATH-442 (Abstract Algebra II)
    - MATH-461 (Topology)
    - MATH-505 (Stochastic Processes)

- The following STAT courses:
  - STAT-305 (Regression Analysis)
  - STAT-315 (Statistical Quality Control)
  - STAT-325 (Design of Experiments)
  - STAT-335 (Introduction to Time Series)
  - STAT-345 (Nonparametric Statistics)
  - STAT-405 (Mathematical Statistics I)
  - STAT-406 (Mathematical Statistics II)
  - STAT-415 (Statistical Sampling)
- From the College of Health Sciences and Technology:
  - The following MEDG courses:
    - MEDG-101 (Human Biology I)
    - MEDG-102 (Human Biology II)
    - MEDG-103 (Human Biology Laboratory I)
    - MEDG-104 (Human Biology Laboratory II)
    - MEDG-105 (Health Awareness)
    - MEDG-106 (Microbiology of Health and Disease)
  - The following MEDS courses:
    - MEDS-105 (Issues in Health Sciences and Technology)
    - MEDS-201 (Language of Medicine)
    - MEDS-250 (Human Anatomy and Physiology I)
    - MEDS-251 (Human Anatomy and Physiology II)
    - MEDS-355 (Introduction to Global Health)
  - The following EXSC course:
    - EXSC-205 (Sports Physiology and Life Fitness)
  - The following NUTR courses:
    - NUTR-215 (Contemporary Nutrition)
    - NUTR-300 (Sports Nutrition)

## Restrictions

- 1) Computer Science majors who choose to complete their lab science sequence using physics may not take PHYS 111 (College Physics I) or PHYS 112 (College Physics II) for credit, either as science, free, or General Education electives.
- 2) Computer Science majors who choose to complete their lab science sequence using chemistry may not take the following courses for credit, either as science, free, or General Education electives:
  - CHEM 151 (General Chemistry)
  - CHMG 111 (General-Organic-Biochemistry I)
  - CHMG 112 (General-Organic-Biochemistry II)
  - CHMG 121 (Chemical Principles & Applications)
  - CHMG 122 (Chemistry of Water & Wastewater)
  - CHMG 123 (Chemistry of Materials)
  - CHMG 131 (General Chemistry for Engineers)

- 3) Computer Science majors who choose to complete their lab science sequence using biology (BIOL 101-104 or BIOG 101-104) may not take additional courses from this set (BIOL 101-104, BIOG 101-104) for credit, either as science, free, or General Education electives.