### Foundational Courses

- **MATH 140 (4)**  
- **MATH 141 (4)**  
- **MATH 220 (2)**  
- **MATH 230 (4)**  
- **MATH 250 (3) or MATH 251 (4)**  
- **MATH 311W (3)**  
- **MATH 312 (3)**  
- **CMPSC 101 or 131 or 201 (3)**  
- **STAT 200 (4)**

### Option Requirements

- **MATH 141 (4)**  
- **MATH/STAT 414 (3)**  
- **MATH/STAT 415 (3)**  
- **MATH 455 (3)**  
- **MATH 456 (3)**  
- **MATH 467 (3)**  
- **MATH 484 (3)**  

Choose 3 credits from the following:
- **MATH 411 (3)**  
- **MATH 412 (3)**  
- **MATH 417 (3)**

Choose 6 credits of computational math:
- **MATH 310 (3)**  
- **MATH 468 (3)**  
- **MATH 485 (3)**

*Bold type indicates that courses require a grade of C or better.*

### Supporting Courses

- **Writing/Speaking Skills (GWS) (9 credits)**
  - **ENGL 15 or 30 (3)**
  - **ENGL 202 (3)**
  - **CAS 100 (3)**

- **Arts (GA) (6 credits)**
  - **Choose 6 credits from the following:**
  - **MATH 411 (3)**
  - **MATH 412 (3)**
  - **MATH 417 (3)**

- **Social and Behavior Sciences (GS) (6 credits)**
  - **Choose 6 credits from the following:**
  - **MATH 411 (3)**
  - **MATH 412 (3)**
  - **MATH 417 (3)**

- **Natural Science (GN) (9 credits)**
  - **Choose 9 credits from the following:**
  - **MATH 411 (3)**
  - **MATH 412 (3)**
  - **MATH 417 (3)**

- **Health and Wellness (GHW) (3 credits)**
  - **Choose 3 credits from the following:**
  - **United States Cultures (US)**
  - **International Cultures (IL)**
  - **First Year Seminar**

### General Education Requirements

- **Writing/Speaking Skills (GWS) (9 credits)**
- **Arts (GA) (6 credits)**
- **Social and Behavior Sciences (GS) (6 credits)**
- **Natural Science (GN) (9 credits)**
- **Health and Wellness (GHW) (3 credits)**
- **United States Cultures (US)**
- **International Cultures (IL)**
- **First Year Seminar**

Total Credits: 120

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**Computational Option**

The goal of this option is to train students in the areas of mathematics most relevant to scientific computations. These include the mathematical tools needed for analyzing algorithms (i.e. computational procedures) as well as those mathematical problem-solving methods which can be implemented on computers. The main mathematical tools needed are numerical analysis, matrix theory, differential equations, statistics, combinatorics, and linear programming.

https://math.psu.edu/undergraduate