or

MATHEMATICS

- ☐ Differential Equations (MATH 215)

PHYSICS

- ☐ Modern Physics (PHYS 204)

CHEMISTRY/BIOLOGY (choose one course listed below.)

- ☐ Models of Chemical Systems (CHEM 121)
- ☐ Concepts of Biology: Biological Information, Reproduction, and Evolution (BIO 170)
- ☐ Concepts of Biology: Energy and Resources in Biology (BIO 180)

MATHEMATICS

- ☐ Differential Equations (MATH 215)
- ☐ Linear Algebra (MATH 261)

PHYSICS

- ☐ Modern Physics (PHYS 204)

BIOLOGY

- ☐ Concepts of Biology: Biological Information, Reproduction, and Evolution (BIO 170)
- ☐ Concepts of Biology: Energy and Resources in Biology (BIO 180)

CHEMISTRY

- ☐ Chemical Structure and Analysis (CHEM 162)

ELECTRICAL ENGINEERING

- ☐ *Introduction to Electrical Engineering (ELEN E1201)*

MATHEMATICS *(choose one course listed below)*

- ☐ Differential Equations (MATH 215)
- ☐ Linear Algebra (MATH 261)

CHEMISTRY

- ☐ Chemical Structure and Analysis (CHEM 162)
- ☐ Introduction to Organic Chemistry (CHEM 201)

COMPUTER SCIENCE

This program requires that you take a course in PYTHON, which is used in Computer Programming I (COMP 150).

MATHEMATICS

- Differential Equations (MATH 215)
- Linear Algebra (MATH 261)

GEOLOGY

- Physical Geography (GEOL 150)

COMPUTER SCIENCE

This program strongly recommends that you take a course in MATLAB, but will accept any language; COMP 150 provides the needed Introduction to Computer Science and Programming course in Python.

ENGINEERING MECHANICS

- *Mechanics (ENME E3105), which may be taken while at Columbia*

MATHEMATICS

- Discrete Mathematics (MATH 171)

COMPUTER SCIENCE

- Computer Programming II (COMP 250)

This program strongly recommends the course in Data Structures be taken in JAVA, which is used in Computer Programming II (COMP 250).

MATHEMATICS

- Differential Equations (MATH 215)
- Linear Algebra (MATH 261)

PHYSICS

- Modern Physics (PHYS 204)

COMPUTER SCIENCE

Computer Programming I (COMP 150) *provides the background necessary to take* Data Structures (COMS W3134 or W3136) *at Columbia.*

ELECTRICAL ENGINEERING

- *Introduction to Electrical Engineering (ELEN E1201) may be taken while at Columbia.*

MATHEMATICS

- Differential Equations (MATH 215)

ENGINEERING MECHANICS

- *Mechanics (ENME E3105) to be taken the summer before entering or while at Columbia*

MATHEMATICS

- Differential Equations (MATH 215)

PHYSICS

- Modern Physics (PHYS 204)

CHEMISTRY

- Chemical Structure and Analysis (CHEM 162)