## Basic Academic Requirements for Medical School Admission

### Biology/Life Sciences

**one year, with laboratory experience**

**Caltech course options:**
- **B 1** The Biology & Biophysics of Viruses
- **B 8** Introduction to Molecular Biology
- **B 9** Cell Biology
- **B 10** Cell Biology Laboratory (students are advised to take this during their first or second years when they have priority in the Bi 10 lottery by nature of their year of study)

Other upper division courses which will provide a basic background for the study of molecular and cell biology and biochemistry in medical school are highly recommended. Some schools require biochemistry. Highly recommended upper division courses include: Bi 110, 115, 117, 122, 123 (lab), 188, and 190.

### Chemistry

**two years, with laboratory experience**

One year each general and organic chemistry or courses which will provide adequate background to study biochemistry and molecular biology.

**Caltech course options:**

**Inorganic Chemistry Requirement**
- **Ch 1 ab** General Chemistry
- **Ch 3 a** Fundamental Techniques of Experimental Chemistry

**Organic Chemistry Requirement**
- **Ch 41 abc** Organic Chemistry
- **Ch 3 b** Experimental Procedures of Synthetic Chemistry
- or **Ch 4 a** Synthesis & Analysis of Organic and Inorganic Compounds
- **Ch 4 b** (optional) Synthesis & Analysis of Organic and Inorganic Compounds

Recommended upper division courses include Bi/Ch 110, 111 and 113 or Ch 24 ab, Biophysical Chemistry.

### Physics

**one year, with laboratory experience**

**Caltech course options:**
- **Ph 1 abc** Classical Mechanics and Electromagnetism
- **Ph 2 ab** Statistical Physics, Waves, and Quantum Mechanics
- **Ph 3** Physics Laboratory (must take if Ph1b & c Analytical Track was taken)
  - or **Ph 8 bc** Experiments in Electromagnetism

### Mathematics

**one year**

**Caltech course options:**
- **Ma 1 abc** Calculus of one & Several Variables & Linear Algebra
- **Ma 2 ab** Differential Equations, Probability & Statistics

### Humanities & Expository Writing

**1 year (3 quarters) of English courses, such as 128, 133, 137, 138, 141, 181**

**Caltech course options:**
Any of the courses which meet the Caltech graduation requirements in humanities and writing. Some medical schools have very specific English and writing requirements.

### Special Note

If you are exempt from the introductory level courses in any of the divisions listed above, be sure to take more advanced level courses to meet the medical school requirements. Few medical schools do have other course requirements for admission. Please read the MSAR (Medical School Admissions Requirements) for the specific requirements for each school to which they plan to apply. There is no particular medical school requirement for a major in biology or chemistry, nor are courses in human biology a particular advantage either in the admissions process or in academic success once in medical school. Caltech graduates with majors in physics, engineering, chemical engineering, applied mathematics and literature have been accepted to medical school in the past.