MIT Premed Recommended Course List

REQUIRED BY MOST U.S. MEDICAL SCHOOLS	RECOMMENDED CORRESPONDING MIT SUBJECTS	FOR MCAT PREP
	□ Introductory Biology - 7.012, 7.013 <u>OR</u> 7.014 →	✓
Biology 2 semesters with lab work	□ Introduction to Experimental Biology and Communication - 7.02, Laboratory Fundamentals in Biological Engineering – 20.109, Introductory Experimental Biology and Communication - 10.702 <u>OR</u> Experimental Molecular Neurobiology - 9.12	
Chemistry	In the past, the courses listed in the four bullets below have been sufficient for admission to medical school by MIT applicants.	
2 semesters Inorganic and 2 semesters Organic	 Principles of Chemical Science - 5.111 <u>OR</u> 5.112 <u>OR</u> Introduction to Solid -State Chemistry - 3.091 Laboratory Chemistry - 5.310 <u>OR</u> Introduction to Experimental 	✓
with lab work	Chemistry – 5.35 Organic Chemistry I - 5.12	✓
	Organic Chemistry II - 5.13 OR Principles of Inorganic Chemistry I - 5.03 OR Thermodynamics and Kinetics - 5.60	✓
	 Notes: Courses for Use toward Inorganic Requirements: 5.111, 5.112, 3.091, 5.03, 5.60, 5.310, 5.35 Courses for Use toward Organic Requirements: 5.12, 5.13, 5.36 (M-6), 5.37 (M-7) 	
Biochemistry	□ General Biochemistry - 7.05 <u>OR</u>	
1 semester recommended by many	Biological Chemistry I - 5.07J / 20.507J (Strongly recommended for Harvard – HST Program)	
	□ Physics I - 8.01, 8.01L, 8.011, <u>OR</u> 8.012	✓
Physics 2 semesters	□ Physics II - 8.02 <u>OR</u> 8.022 MIT does not have a full lab component for any Physics courses until the Junior Year (for Physics majors only). Please contact schools directly to find out if they will require you to take additional subjects that include lab.	
Calculus 2 semesters	 Calculus - 18.01 18.01A, <u>OR</u> Calculus with Theory - 18.014 Calculus - 18.02, 18.02A, 18.022, Calculus with Applications - 18.023, <u>OR</u> Calculus with Theory - 18.024 (Differential Equations - 18.03 is required for Harvard – HST Program) 	
English/ Humanities/ Writing 2 semesters	Two terms of Literature or writing subjects. We suggest taking a 9-12 unit 21W Exposition and Rhetoric course one term. The other term could include other 21W courses as well as 21L courses concentrating in Literature. Please note that CI-H courses may also be used to fulfill this requirement. For science and engineering majors, we suggest selecting courses that are not science focused to add breadth to academic record.	

Premed Recommended Courses Notes:

- All subjects should be taken on grades, except for those taken during freshman year pass no record.
- It is recommended that AP credit <u>not</u> be used toward fulfilling school requirements. Additional upper level coursework may be required in lieu of the use of AP credit.
- This list of recommended subjects is based upon the subjects most medical/health
 profession schools require. Individual schools may have additional requirements such as
 statistics, behavioral and social sciences, and languages. Please refer to the most recent
 edition of the Medical School Admission Requirements (MSAR) as well as individual
 schools' websites for further information.
- An academic packet of information is provided to all Health Profession Programs applied to by MIT applicants that explains the MIT curriculum and recommended MIT premed courses.

Prehealth Recommended Courses

In addition to the courses outlined in the "MIT Premed Recommended Course List" the following are additional course requirements for other health profession programs commonly applied to by MIT students.

Dentistry:

- Anatomy and Physiology
- Nutrition
- Fine Arts/Manual Dexterity: Sculpting, Painting, Ceramics (Available at MIT)
- Advanced Level Biology Courses (some schools)

Pharmacy:

Anatomy and Physiology

Public Health

Statistics

Veterinary Medicine:

- Zoology
- Mammalian anatomy and physiology
- Animal science
- Animal nutrition
- Advanced Level Biology Courses (some schools)

Prehealth Recommended Courses Notes:

- For courses not offered at MIT, applicants are encouraged to complete the courses at an accredited four-year degree granting institution. Applicants are responsible for investigating enrollment and registration restrictions for these courses.
- This list of recommended courses is based upon the courses most of these individual health profession schools require. Please refer to the each program's website and/or to the most recent edition of the following guides:
 - ➤ ADEA Official Guide to Dental Schools http://www.adea.org/publications/Pages/2009OfficialGuidetoDentalSchools.aspx
 - ➤ Veterinary Medical School Admissions Requirements Guide (VMSAR) http://www.aavmc.org/vmcas/VMSAR_publications.htm