

There are two types of medical doctors, also known as physicians: MD (medical doctor) and DO (doctor of osteopathic medicine). Both types of physicians work to maintain, promote, and restore health by studying, diagnosing, and treating injuries and diseases. Their work includes examining patients, obtaining medical histories, ordering/performing/interpreting diagnostic tests, counseling patients about personal health and lifestyle factors, and prescribing medications. While there are many similarities between an MD and DO, doctors of osteopathic medicine focus more on holistic and preventive healthcare. It typically takes 11 to 17 years to become a physician, including a minimum of 4 years of undergraduate college, 4 years of medical school, and 3 - 5 years of medical residency. Some specialties may require additional training for up to 8 years (called “fellowships”).

## Degree

Physicians need either an MD (medical doctor) or DO (doctor of osteopathic medicine) degree. Both degrees require completing a bachelor’s degree first, then completing medical school. The first two years of medical school are focused in a classroom setting, while the last two years are focused on clinical skills in patient care settings. Additionally, physicians cannot practice independently until they have completed their residency. Physicians must also hold a professional license, and can choose to become board certified in their specialty.

*Note: Because the field of medicine is ever-changing with new advancements, research, and technology, physicians are expected to engage in continuing education throughout their careers.*

## Admission

Acceptance to medical school is highly competitive. Students are advised to complete a bachelor’s degree at an undergraduate institution with a reputation for academic excellence. Although students come from a variety of undergraduate degree programs, majoring in biology, chemistry, biochemistry or biomedical sciences is most common. It is important to contact a pre-health advisor at the four-year college you’re interested in for further information.

*MCC students are advised to prepare to transfer to a 4-year college or university for a science major such as Biology, Chemistry or Biomedical Sciences and then apply to medical school.*

Almost all U.S. medical schools and many Canadian schools require applicants to submit Medical College Admission Test (MCAT) exam scores. The MCAT is a standardized, multiple-choice examination designed to assess problem solving, critical thinking, and knowledge of natural, behavioral, and social science concepts and principles prerequisite to the study of medicine. Students will need to complete the AMCAS Application (or AACOMAS for Osteopathic Medicine) and supplemental applications for specific colleges if required.

## Typical Minimum Prerequisite Courses

Two semesters of general biology with labs; two semesters of physics with labs; four semesters of chemistry with labs, including organic; two semesters of English AND a bachelor’s degree. Keep in mind it is advised to take some of these courses at the 4-year college. Check individual school websites for specific/recommended courses.

## *Examples of MCC Courses*

- BIO 155 & 156 – Intro to Cell & Molecular Bio and Intro to Organismal Bio & Ecology
- CHE 151 & 152 - General College Chemistry I & II
- CHE 251 & 252 - Organic Chemistry I & II
- PHY 154 & 155 – General Physics I & II *or* PHY 161 & 261 – University Physics I & II

***Medical schools may prefer that some or all prerequisite courses be completed at a 4-year institution (AP and IB credit are not likely to be accepted for science coursework). It is not advisable to take prerequisite courses over the summer sessions. In addition, courses which tend to duplicate those offered in medical school may not be optimal selections.***

One of the sections on the MCAT focuses on critical reasoning and another on the psychological, sociological, and biological foundations of behavior. Therefore, courses in psychology, sociology, anthropology, and philosophy are important. Courses in biochemistry, statistics, genetics, and cell biology are strongly recommended. Courses dealing with building interpersonal communication skills are beneficial as well.

## Important Criteria Considered for Admission

- Undergraduate GPA (grade point average)
- Demonstrated ability to handle a rigorous course load
- Medical College Admission Test (MCAT) score
- Practical experience with patients (ex. volunteering at a hospital or as an EMT)
- Research activities
- Excellent communication skills
- Evidence of maturity, integrity, service to the community
- Work experience, extra-curricular activities, proven leadership ability
- Letters of recommendation from pre-health advisor and/or professors at the 4-year college
- Personal Statement
- Personal Interview (by invitation)

## Colleges in NYS Offering a Doctoral Degree in Medicine

- Albany Medical College
- Albert Einstein College of Medicine
- Columbia University Vagelos College of Physicians & Surgeons
- CUNY School of Medicine
- Icahn School of Medicine at Mount Sinai
- New York Institute of Technology College of Osteopathic Medicine
- New York Medical College
- NYU Grossman School of Medicine
- NYU Long Island School of Medicine
- Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, SUNY
- Renaissance School of Medicine at Stony Brook University
- SUNY Downstate Health Sciences University
- SUNY Upstate Medical University
- Touro College of Osteopathic Medicine
- University of Rochester School of Medicine and Dentistry
- Weill Cornell Medicine
- Zucker School of Medicine at Hofstra/Northwell

## Similar Career Options

Interested in medicine but not sure being a physician is the best fit? Check out these other related careers: physician assistant, nurse practitioner, nurse anesthetist, diagnostic medical sonographer, nuclear medicine technologist, midwife, genetic counselor.

## Additional Information

- [USBLS Occupational Outlook Handbook for Physicians and Surgeons](#)<sup>1</sup>
- [Association of American Medical Colleges \(AAMC\)](#)<sup>2</sup>

***Note:** While every effort is made to ensure that the information in this guide is accurate, students are advised to contact transfer institutions for specific course requirements and the most up-to-date information.*

---

<sup>1</sup> Occupational outlook for Physicians and Surgeons webpage: <https://www.bls.gov/ooh/healthcare/physicians-and-surgeons.htm>

<sup>2</sup> Association of American Medical Colleges website: <https://www.aamc.org/>