

# How Well Do Physics Bachelor's Degree Recipients Perform on the MCAT and LSAT Exams?

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This Focus On uses data from the Association of American Medical Colleges (AAMC) and the Law School Admission Council (LSAC) to showcase that, as a group, recipients of physics bachelor's degrees tend to do well on two prominent standardized tests for medical school and law school admission. Although only a small percent of the physics bachelor's degree recipients each year (2–4%) pursue these two career paths, a physics degree provides a solid foundation for those making that choice.

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Multiple career paths are available to physics bachelor's degree recipients—including many outside the typical realm of physics. More than 9,000 physics bachelor's degrees were conferred to the class of 2020.<sup>1</sup> Historically, around half of the recipients continue on to graduate or professional school after receiving their degree. About two-thirds (65%) of those entering graduate school study physics or astronomy.<sup>2</sup> The other third (35%) study a variety of other fields, with one in six of those pursuing other graduate studies choosing medicine or law. In this Focus On, we examine the performance of physics bachelor's degree recipients on the admission tests for medical school and law school. While a degree in physics is not the typical preparation for medical or law school, students earning one who take either test tend to do well.

## The Medical College Admissions Test (MCAT)

The MCAT is a standardized exam administered by the Association of American Medical Colleges (AAMC). It was developed to “assess [candidates’] problem solving, critical thinking, and knowledge of natural, behavioral, and social science concepts,” which are prerequisites for studying medicine.<sup>3</sup> The MCAT is required for admission to almost all medical schools in the United States and many in Canada.

The MCAT consists of four sections. Scores on each section range from 118 to 132, and the overall total score ranges from 472 to 528.<sup>4</sup> **Table 1** displays the average total MCAT score for all medical school applicants for the 2021–22 academic year, as well as scores for several selected undergraduate fields of study. The fields displayed represent only 12 of the 100 total

fields provided by the AAMC.<sup>a</sup> These fields were selected for meeting at least one of the following criteria: the undergraduate concepts overlap with the field of physics, the undergraduate concepts are closely related to the medical discipline, the field yielded a large number of medical school applicants for the 2021–22 academic year, and/or test takers from the field earned high average MCAT scores for the 2021–22 academic year. The average total score for applicants with bachelor’s degrees in physics was higher than the average score across all fields of study (see bold rows in **Table 1**). If all 100 fields recorded by the AAMC were displayed solely by descending MCAT score, applicants with bachelor’s degrees in physics had the 10th highest average total score, biophysics had the 3rd highest, for admission in the 2021–22 academic year.

**Table 1**

The Average MCAT Score of US Medical School Applicants by Selected Undergraduate Degree Fields, 2021–22 Academic Year

Field of Undergraduate Degree	Average Total MCAT Score	Number of Applicants
Computer Science	513.8	200
<b>Biophysics</b>	<b>512.9</b>	<b>84</b>
Biomedical Engineering	511.2	1,535
Economics	510.5	510
<b>Physics</b>	<b>510.2</b>	<b>186</b>
Mathematics	509.8	347
Neuroscience	509.4	4,315
Biochemistry	508.1	4,403
Chemistry	507.4	2,126
<b>All</b>	<b>505.9</b>	<b>62,443</b>
Biology	504.2	18,636
Biomedical Science	503.5	2,187
Premedical	502.8	752

Note: The fields displayed represent a small number of the total fields provided by the AAMC. There are unlisted fields with scores falling between and below the presented fields. These fields were selected because the undergraduate concepts overlap with the field of physics, the undergraduate concepts are closely related to the medical discipline, the field yielded a large number of applicants for the 2021–22 academic year, and/or test takers from that field earned high average MCAT scores for the 2021–22 academic year. If all 100 fields recorded by the AAMC were displayed solely by descending MCAT score, applicants with bachelor’s degrees in physics had the 10th highest average total score, biophysics was the 3rd highest, for admission in the 2021–22 academic year.

If you are interested in learning more about the MCAT, visit the AAMC website: <https://students-residents.aamc.org/>.

<sup>a</sup> The average MCAT scores for both applicants and matriculants can be found by a broad category of undergraduate degrees on the AAMC website: <https://www.aamc.org/search?keys=A17> (Table A-17).

## **The Law School Admission Test (LSAT)**

The LSAT is a standardized exam administered by the Law School Admission Council (LSAC). The purpose of the exam is to assess the skills that are necessary for a student's success in law school, including reading, writing, and reasoning.<sup>5</sup> The LSAT is used by law schools to help determine prospective students' readiness for admission.

The LSAT is a two-part exam consisting of four sections of multiple-choice questions and a writing section. One of the four sections of multiple-choice questions is always an unscored variable section. The writing section, known as LSAT Writing, is also unscored. The LSAT score scale ranges from 120 to 180.<sup>6</sup> A total of 71,112 individuals across all undergraduate fields of study applied for admission to law school in 2021. The median high score of all applicants was 156. Approximately 68% of these applicants were offered admission to law school.

Information provided by LSAC stated that 148 undergraduate physics majors applied to start law school in 2021. The median high score of these applicants was 163. Furthermore, 73% of these individuals were accepted into law school. Therefore, much like the MCAT, physics bachelor's degree recipients tend to score above average on the LSAT. Law can be an option for physics degree recipients who want to study in another field.

If you are interested in learning more about the LSAT, visit the LSAC website:

<https://www.lsac.org/>.

## **Summary**

On average, physics bachelor's degree recipients who pursue careers in medicine and law (2–4%) tend to do well on the two unique admission tests. Although students should consider a wide variety of factors in choosing a major or career path—not simply prospective test scores—this Focus On suggests that studying undergraduate physics can provide students with the skills necessary to do well on the MCAT and LSAT exams.

## Acknowledgments

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## Methodology

Both the AAMC and LSAC were contacted directly in late 2021 and asked to provide data on testing scores for the MCAT and LSAT, respectively, for use in this report.

## References

- [1] Nicholson & Mulvey (2021). *Roster of Physics Departments with Enrollment and Degree Data: Results from the 2020 Survey of Enrollments and Degrees, 2020*. <https://www.aip.org/statistics/reports/roster-physics-2020>
- [2] American Institute of Physics (2022). Status of Physics Bachelors One Year After Degree, Classes 1996 through 2020. <https://www.aip.org/statistics/data-graphics/status-physics-bachelors-one-year-after-degree-classes-1996-through-2020>
- [3] American Association of Medical Colleges (2022). *Taking the MCAT Exam*. <https://students-residents.aamc.org/taking-mcat-exam/taking-mcat-exam>
- [4] American Association of Medical Colleges (2022). *The MCAT Exam Score Scale*. <https://students-residents.aamc.org/mcat-scores/mcat-exam-score-scale>
- [5] Law School Admission Council (2022). *The LSAT*. <https://www.lsac.org/lSAT>
- [6] Law School Admission Council (2022). *LSAT Scoring*. <https://www.lsac.org/lSAT/lSAT-scoring>

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