

PRE-ANESTHESIOLOGIST ASSISTANT

An anesthesiologist assistant holds a similar role to physician assistants who aide doctors. Anesthesiologist assistants specifically help anesthesiologists during pre-op, surgery, and post-op. Common job duties include taking health histories from patients, performing physical exams, diagnostic testing, catheterization, administering and monitoring anesthesia, post-op monitoring, life support, documentation, and reporting.

To become an anesthesiologist assistant, students must complete a four-year bachelor's degree with a rigorous science and math curriculum that is very similar to a pre-med path. After college, students must be admitted to an anesthesiologist assistant master's program which takes an additional two years to complete. The master's program includes advanced course work in physiology, pharmacology, anatomy and biochemistry and how that knowledge is applied when working with the cardiovascular, respiratory, renal, nervous and neuromuscular systems of the human body. In addition, clinical training is provided within the master's program that includes training and practice in patient care.

Admission to these graduate programs is very competitive. There are only 12 accredited programs in the U.S. and most schools bring in fewer than 20 students per year. Typically students will have earned a 3.6 GPA or higher while in college, and will have scored above the 70th percentile on the standardized test for graduate school. Some anesthesiologist assistant schools require the MCAT exam, while others require the GRE, either of which is usually taken the latter half of junior year.

In addition to strong academic credentials, most anesthesiology assistant programs will require students to have completed a number of hours of job shadowing. Other related healthcare experience through volunteer work, part-time jobs, or research internships can also enhance a student's application to anesthesiologist assistant school. Students who declare an intention to take a pre-anesthesiologist assistant track will be assigned an advisor who specializes in advising pre-health students and can assist with finding these types of opportunities.

Anesthesiologist assistant schools do not require any specific major but do expect that students will have taken the necessary preparatory math and science coursework needed to succeed in their program. This includes multiple courses in chemistry, organic chemistry, and biochemistry; multiple classes in biological sciences including genetics and anatomy; math, generally through the first semester of calculus; and statistics. Some physics is also required. Because of the heavy emphasis on biology and chemistry, many students choose to major in biology, chemistry, or biochemistry, but that is not a requirement. As long as a student takes the required preparatory coursework, he/she can major in any subject area.

Because science coursework is very sequential and must be taken in a specific order, students interested in pre-anesthesiologist assistant should express their intentions early so that the advisor can help the student with course selection. Taking the right courses beginning in freshman year is vital to staying on track and avoiding a delay in graduation.

Requirements

Entrance to an anesthesiologist assistant program is very competitive – there are only 12 programs in the United States. Students are advised

to work closely with the advisor for the pre-anesthesiologist assistant program to ensure they are able to present the strongest possible application packet with exceptional grades, standardized test scores, and experiential learning.

Nearly all anesthesiologist assistant schools require that applicants take the Medical College Admission Test (MCAT). Students normally should arrange to take this test at the end of their junior year. The advisor can provide information regarding the administration of this test.

Minimal coursework preparation while in college would include:

- One year of English
- Math through one semester of calculus
- Two to two and one-half years of chemistry, including inorganic, organic, and biochemistry
- Two years of biology, including anatomy and physiology
- One year of physics

Effective 2015, the MCAT added a social/behavioral science component and additional chemistry. To be well prepared for the MCAT, students are advised to complete PSYCH 101, SOCIOL 101, and PH 101 (as well as other courses selected in consultation with the pre-anesthesiologist assistant advisor) and CHEM 501. Other classes, such as Communication, are more frequently being strongly recommended by various graduate healthcare programs.

Code	Title	Credits
<i>Recommended Science Courses</i>		
BIO SCI 150	Foundations of Biological Sciences I	4
BIO SCI 152	Foundations of Biological Sciences II	4
BIO SCI 202	Anatomy and Physiology I	4
BIO SCI 203	Anatomy and Physiology II	4
BIO SCI 315	Cell Biology	3
BIO SCI 325	Genetics	4
BIO SCI 383	General Microbiology	4
CHEM 102	General Chemistry	5
CHEM 104	General Chemistry and Qualitative Analysis	5
CHEM 343	Organic Chemistry	3
CHEM 344	Organic Chemistry Laboratory	2
CHEM 345	Organic Chemistry	3
CHEM 501	Introduction to Biochemistry	3
PHYSICS 120	General Physics I (Non-Calculus Treatment)	4
PHYSICS 121	General Physics Laboratory I (Non-Calculus Treatment)	1
PHYSICS 122	General Physics II (Non-Calculus Treatment)	4
PHYSICS 123	General Physics Laboratory II (Non-Calculus Treatment)	1

Although the courses listed above are mandatory for admission to almost all anesthesiologist assistant schools, the rest of the program can be whatever the student wishes. Students are not required to major in biology, chemistry, or biochemistry in order to gain admission to anesthesiologist assistant school, though many choose to do so.