

SYRACUSE UNIVERSITY

College of Arts & Sciences

Advising & Career Services

Optometry

Optometry as a Career

Doctors of Optometry (ODs) are independent primary health care professionals for the eye. Optometrist exam, refraction, diagnoses, treatment and management of diseases, injuries and disorders of the visual system falls into their scope of practice. They also identify related systematic conditions affecting the eye. They counsel patients regarding surgical and non-surgical options to meet their visual needs. In cases involving surgery, they provide pre-operative and post-operative care. Optometrists should not be confused with ophthalmologists or dispensing opticians. Ophthalmologists are physicians who perform eye surgery in addition to diagnosing and treating eye conditions. Dispensing opticians fit eye glasses and eye contacts following prescriptions written by the Ophthalmologist or Optometrist.

Optometry School

According to the Association of Schools and Colleges of Optometry there are 21 accredited Optometry programs in the United States. After completing your bachelor's degree, Optometry school will take an additional four years to earn the OD degree. The coursework will vary from one program to another, but in general have similar characteristics of preparing primary-care doctors in protecting patients' overall health and wellness. In the first and second year of the professional program, courses will concentrate in the basic health sciences, optics, and vision science. Students beginning their clinical experience in a clinical simulation laboratory then proceed to clinical training with real patients. This training includes taking case histories, performing examinations and learning diagnostic techniques including refractions and retinal examinations. During the third year, students spend part of their time in the classroom and part of their time in the clinic examining patients. Fourth year students continue their clinical training, which may include off-campus externship rotations. The lengths of each external rotation will vary from eight to 16 weeks, with a wide variety of settings.

Students graduating from schools and colleges of optometry have access to numerous resources that provide optometry practice opportunities. Students may obtain information from individual schools and colleges of optometry, state optometry associations and the Optometry Career Center, which is available on the [American Optometric website](#). Upon graduation Optometrists need to be licensed by the National Board of Examiners in Optometry (NBEO) in each state that they wish to practice. Licensing assures optometrists have met established standards of knowledge and are able to provide patient care.

The general Pre-Optometry Curriculum

Academic Prerequisites

One Year General Biology and Labs (BIO 121, 123/124)
One Year General Chemistry and Labs (CHE 106/107, 116/117)
One Year Organic Chemistry and Labs (CHE 275/276 and CHE 325/326)
One Year Physics (PHY 101, PHY 102 or PHY 221/221, PHY 212/222)

One Semester Calculus (MAT 285 or MAT 295)
One Semester of Statistics (MAT 221)
Microbiology (BIO 409)
Biochemistry (BCM 475)
Psychology (PSY 205)
Sociology (SOC 101)
Writing (WRT 105, 205)

Additionally recommended courses

Vibrations, Waves and Optics (PHY 360)
Genetics (BIO 326)
Cell Biology (BIO 327)
Anatomy/Physiology (BIO 216, 217 or 316,317)
Ethics and Bioethics (PHI 191, 593, 594)
Introduction to Sensation and Perception (PSY 321)

Nonacademic Prerequisites

Clinical Experience
Research
Leadership
Community & Public Service
Two to three Letters of Recommendation
Interviewing Skills

Entrance Exam and Application

Optometry Admission Test (OAT)

Students should plan to take the OAT by the fall of the year prior to their anticipated matriculation year. The OAT is designed to measure general academic ability, comprehension of scientific information and perceptual ability. The OAT consists of four tests: Survey of Natural Sciences, Reading Comprehension, Physics and Quantitative Reasoning. Preparation should begin early and should consist of both study/review and practice exams. It is important to note that all programs require the OAT. For more information about the exam and to register for the Optometry Admission Test (OAT) visit the [Association of Schools and Colleges of Optometry](#).

Optometry Centralized Application Service (OptomCAS)

Students should plan to start their application one year prior to their anticipated matriculation to Optometry school and submit their application as soon as their OAT score becomes available. Deadlines may vary so students should check with the programs. For more information about the centralized application and to register for the exam visit the [Association of Schools and Colleges of Optometry website](#).