



VISION SCIENCE

(Bachelor of Science: Pre-Optometry Pathway)

Rosenberg School of Optometry

Program Overview As the primary healthcare providers, optometrists diagnose, treat, and manage diseases, injuries, and disorders of the visual system. The University of the Incarnate Word Rosenberg School of Optometry (UIWRSO) offers a Bachelor of Science degree in Vision Science with a pre-optometry pathway. UIWRSO is one of only 23 Schools of Optometry in the United States, and the Vision Science Program is the only one of its kind. The Vision Science courses are instructed by Doctors of Optometry, many with Doctors of Philosophy in vision science and related fields as well as substantive research training. Students receive challenging, contemporary courses in applied vision science, neuroscience of the visual system, physiology and anatomy of the eye, pharmacology, as well as optics. Students also undergo a three-semester Clinical Internship which combines basic training in optometric techniques with clinical observation in the UIWRSO Eye Institute. Students will also have the opportunity to participate in outreach programs with the Professional School students. Additionally, Vision Science students are in a position to have direct access to a Professional Optometry School and accompanying resources.

Professional School Opportunities The B.S. in Vision Science provides students the opportunity to earn a degree which satisfies the prerequisite requirements for entrance into UIWRSO. Successful completion of the Vision Science degree does not guarantee entrance in the professional Doctor of Optometry but does provide a strong foundation for which to build a competitive application. Students who complete a B.S. in Vision Science will be prepared and well positioned to enter a number of areas: doctoral degree in optometry, degrees in other health-related areas, graduate degrees in vision science or other biomedical sciences, as well as varied employment within the field of optometry such as vision-science or ophthalmic-related specialists, employment with optical lens/frames manufacturers, or vision insurance companies.

Special Programs: Direct Admit The successful student will qualify to enter this program upon admission to the University with specific criteria (Phase I). The student will then need to meet and maintain additional requirements throughout their three years of undergraduate Vision Science coursework in order to be accepted into the O.D. program. Phase I Qualifications include: cumulative high school GPA of 3.7, high school math and science GPA of 3.7, combined math/verbal SAT of 1140 (New SAT: 1210 total score) or ACT of 25; or top 5% of high school class. Student must be prepared to begin in pre-calculus (1st semester, freshman year). Upon acceptance into the direct admit program via Phase I Entrance Qualifications, a student will be offered a seat in the professional Doctor of Optometry program provided they successfully meet Phase II Progression Qualifications.

Students enrolling through the Direct Admit program can consider 2 possible paths (3+4 or 4+4) to prepare for entry into the UIWRSO professional program. Selection of the 3+4 program, students will complete the Doctor of Optometry program in seven years and be retroactively granted a B.S. in Vision Science upon successful completion of the first year of the professional program. Enrolling in the 4+4 program option, students will earn a B.S. in Vision Science Degree and the Doctor of Optometry degree in a traditional eight year period. Successful completion of the fourth year of the Vision Science undergraduate curriculum will expose students to key concepts which integrate basic science with clinical optometric application providing a strong foundation for successful navigation of the professional program curriculum.

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Bachelor of Science in Vision Science
THE ROSENBERG SCHOOL OF OPTOMETRY
2015-2017

Freshman Year: Fall		Hrs.
CHEM 1301 Chemical Principles I		3
ENGL 1311 English Composition I		3
DWHP 1200 Dimensions of Wellness		2
MATH 2303 Statistics		3
MATH 1301, 1311 Math Elective		3
Total hours		14

Sophomore Year: Fall		
PHYS 2305 Physics I		3
PHYS 2105 Physics I Lab		1
PHIL 1381 Introduction to Philosophy		3
CHEM 2311 Organic Chemistry I		3
CHEM 2111 Organic Chemistry I Lab		1
Modern Language I		3
PEHP PE Activity		1
Total hours		15

Junior Year: Fall		
BIOL 2321 Anatomy & Physiology		3
BIOL 2121 Anatomy & Physiology Lab		1
CHEM 4351 Biochemistry		3
HIST 1311/1312/1321/1322		3
Religious Studies Core		3
VISC 3211 Applied Vision Science		2
VISC 3291 Clinical Internship I		2
Total hours		17

Senior Year: Fall		
VISC 4322 Overview of Immuno and Eye Disease		3
VISC 4311 Visual Optics		3
VISC 4291 Clinical Internship II		2
VISC 4211 Visual Pharmacological Science		2
NUTR 2341 Intro to Nutrition		3
Total hours		13

Freshman Year: Spring		Hrs.
CHEM 1302 Chemical Principles II		3
CHEM 1203L General Chemistry Lab		2
ENGL 1312 English Composition II		3
BIOL 1402 Unity of Life & Lab		4
MATH 2312 Calculus I		3
VISC 1112 Intro to Vision Sci. & Optometry		1
Total hours		16

Sophomore Year: Spring		
PHYS 2306 Physics II		3
PHYS 2106 Physics II Lab		1
Modern Language II		3
CHEM 2312 Organic Chemistry II		3
CHEM 2112 Organic Chemistry II Lab		1
PSYC 1301 Intro to Psychology		3
Fine Arts Core		3
Total hours		17

Junior Year: Spring		
SPCH 1311 Public Speaking		3
ENGL 2310 World Literature		3
BIOL 3471 General Microbiology & Lab		4
VISC 3292 Integrated Ocular Science		2
VISC 3212 Neuroscience of the Visual System		2
3000/4000 Religious Studies or Philosophy		3
Total hours		17

Senior Year: Spring		
BMGT 3340 Management Theory & Practice		3
VISC 4392 Clinical Internship III		3
VISC 4212 Public Health & Epidemiology		2
VISC 4312 Ophthalmic Lenses & Optical Dsgn.		3
VISC 4223 Ocular Disease		2
Total hours		13

Core Curriculum - Total Hours 43
Major - Total Hours 79
Degree - Total Hours 122