

# NEUROSCIENCE

## What can I do with this major?

### AREAS

### EMPLOYERS

### STRATEGIES

#### HEALTH SCIENCES (some areas)

##### **Medicine/Healthcare**

Psychiatry  
Neurodiagnostic Technology  
Dentistry  
Pharmacy  
Physician Assistant  
Veterinary Medicine

##### **Psychology**

Neuropsychology  
Clinical  
Biological Psychology  
Healthcare

Hospitals  
Government  
National Institutes of Health  
Centers for Disease Control and Prevention  
Food and Drug Administration  
Armed Services  
Group or private practice  
Health clinics  
Health networks  
Nursing homes  
Rehabilitation centers  
Mental health institutions  
Correctional facilities  
Colleges or universities  
Medical schools  
Zoos or animal sanctuaries

**Medicine/Healthcare:** *Neuroscience can prepare one to enter a number of medical and healthcare fields.*

Meet with a pre-health advisor periodically to discuss curricular decisions.

Maintain a high grade point average, particularly in the sciences, to improve chances of admission to graduate or professional school.

Secure strong faculty recommendations.

Seek experience in health care settings through volunteer positions, research positions or internships to test interests and increase marketability.

Participate in service-oriented organizations, medical missions, remote healthcare clinics and professional societies in your target field.

Research accredited institutions. Check graduation rates, success rates on licensing exams, cost, location, etc. If possible, speak with current students.

**Psychology:** *Neuroscience can prepare one to enter master's and doctoral programs in psychology.*

Graduate programs in clinical psychology should be accredited by the American Psychological Association (APA).

Graduate programs in counseling should be accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP).

Research certifications through the American Academy of Clinical Neuropsychology and the American Board of Professional Neuropsychology.

*See What can I do with a major this major?  
Medical Fields, Healthcare Sciences, and Psychology*

AREAS	EMPLOYERS	STRATEGIES
<p><b><u>RESEARCH AND DEVELOPMENT</u></b></p> <p>Clinical Research</p> <p>Public Health Research</p> <p>Global Data Collection and/or Health Reporting</p> <p>Grants Specialist, Administrator, Reviewer</p> <p>Discovery Specialist (coordinate academic and biotechnology research to cure a specific disease)</p>	<p>Government</p> <p>Centers for Disease Control</p> <p>National Institutes of Health</p> <p>National Science Foundation</p> <p>USAID</p> <p>Public Health Organizations (state, local, international)</p> <p>World Health Organization</p> <p>Oxfam America</p> <p>Doctors Without Borders</p> <p>United Nations</p> <p>Research Foundations</p> <p>University Science Centers</p>	<p>Develop a solid background in statistics, mathematics and the software utilized for statistical analyses.</p> <p>Gain experience with research. Volunteer to assist professors with research or apply for summer programs and internships.</p> <p>Develop strong communication skills, knowledge of funding sources, grant writing techniques and submission procedures.</p> <p>Considering earning a graduate degree in clinical psychology, biological psychology or statistics.</p>
<p><b><u>LAW</u></b></p> <p>Public Policy</p> <p>Consultant</p> <p>Lobbying/Government Relations/Public Policy (advise on policy/science/health-related initiatives for the care of persons with psychiatric illnesses, neurodevelopmental diseases, intellectual disabilities, autism, epilepsy, etc.)</p> <p>Elected Official</p>	<p>Corporations (biotechnology)</p> <p>Trade and professional associations</p> <p>Political action committees</p> <p>Law firms</p> <p>Public interest advocacy groups</p> <p>Legal aid societies</p> <p>Government</p> <p>Congress</p> <p>Center for Disease Control</p> <p>Food and Drug Administration</p> <p>National Institute of Health</p>	<p>Develop strong research and writing skills.</p> <p>Enhance communication skills through public speaking courses, debate team or Toast Masters (a public speaking organization).</p> <p>Maintain current knowledge of industry trends, laws and policies specific to area of interest.</p> <p>Acquire internships in federal or state government. Utilize applicable websites and seek assistance from your college career center.</p> <p>Take courses in history, political science and/or legal studies to supplement science curriculum.</p> <p>To pursue a J.D., participate in mock trial and pre-law associations, and learn law school admissions process.</p>

AREAS	EMPLOYERS	STRATEGIES
<b><u>BUSINESS</u></b> Technical/Pharmaceutical Sales Customer Service Public Relations Marketing Advertising Management Insurance Claims Management Underwriting Real Estate Sales Property Management	Manufacturing companies: Biotechnology Neurotechnology Agricultural chemicals Pharmaceuticals Medical device and equipment Consulting firms	Develop excellent communication and interpersonal skills and demonstrate a high energy level. Take courses in anatomy, pharmacology and chemistry to supplement curriculum. Consider a business minor. Seek experience through part-time jobs and internships in business; experience in sales may be necessary for some positions. Be prepared to start in entry level positions, such as management trainee programs. Consider an MBA or Professional Science Master's to advance into higher levels of business management, consulting and brand management.
<b><u>EDUCATION</u></b> Teaching K-12 Post-secondary Non-classroom Settings Library Science (medical or other) Research Administration	Public and private schools, K-12 Two-year community colleges/technical institutes Four-year institutions Professional/Medical Schools Neuroscience, Biology, Chemistry, Pharmacy, Dentistry, Medicine, Veterinary Medicine Libraries (medical or other) Public Health Organizations Research Foundations University Science Centers	Complete a teacher preparation program for K-12 positions, which varies by state. A content area is required for secondary education licensure in most states. Master's degrees may be sufficient for teaching at community or two-year institutions. Seek Ph.D. in psychology, biology, neurosciences, etc. for teaching opportunities at colleges and universities. Conduct research or assist in research at the under graduate level and maintain a high GPA to secure strong personal recommendations. Pursue a master's degree in college student personnel, higher education administration for student affairs or administrative positions. Earn a master's degree in library or information sciences from a program accredited by the American Library Association (ALA) for medical library positions.

AREAS	EMPLOYERS	STRATEGIES
<b><u>MEDIA and DESIGN</u></b> Scientific Journalism, Editing, Blogging Graphic Design (scientific education materials) Web Design (scientific education materials) Medical Illustration Science Consulting (how the brain develops/ perceives spaces, color, texture, emotion, etc.)	Science/Education Journals Publishing companies Educational textbooks Blogs Websites Industry Architecture Toy design Film Media	Pursue courses in medical illustration or medical, neurological, biological or ophthalmic photography, depending on your goal. Develop strong writing skills and a portfolio of published works. Take advanced courses in technical writing or journalism classes or consider a minor in either. Join professional associations like the National Association of Science Writers or the Public Relations Student Society of America. Seek related volunteer or paid experiences with student/local publications or blogs to increase marketability. Consider earning an advanced degree in a communications field to specialize in scientific journalism.

### **GENERAL INFORMATION**

- Neuroscience is a growing field of study. An undergraduate degree can prepare students to enter a number of graduate and professional programs in neuroscience, psychology, medicine and healthcare.
- Some neuroscience specialties include:
  - Neurotechnology - combining engineering and technology with neuroscience including how to improve and repair brain function
  - Neuroprosthetics - the interface between man and machine
  - Neuroethics - the social, legal, and ethical consequences of advances in brain research
  - Neuroeconomics - risk-taking and decision-making that influence business and the economy
  - Neuroaesthetics - creativity and the brain
- Study in neuroscience may benefit those pursuing clinical careers like Nurses/Nurse Practitioners/Physician's Assistants who may specialize in neurology, neuro-oncology, pediatric neurology, etc.; Speech Language Pathologists who serve neurological patients with damage to left hemisphere, or children with neurodevelopmental disorders; Occupational Therapists who assist patients recovering from strokes, loss of basic function; Physical Therapists who teach how to compensate/alleviate developmental disorders i.e., Sensory Processing Disorder, autism, Attention Deficit Disorder, motor disorders; Audiologists who assess hearing function; Nutritionists who understand how nutrients and metabolism affect the nervous system; Social Workers who understand specific issues affecting neurological patients after hospitalizations.
- Seek laboratory experiences such as research projects, volunteering with professors, or internships related to your career concentration.
- Participate in research programs sponsored by organizations like the National Science Foundation and the National Institutes of Health. Seek guidance from career center staff for assistance for government internship and full-time employment searches.
- Earn a Ph.D. to direct to direct research projects, to enter high levels of administration, practice clinical psychology, and to teach at four-year post-secondary institutions. Postdoctoral fellowships may also be required. Earn a master's degree in counseling to pursue licensure.
- Meet with a pre-health advisor periodically to discuss curricular decisions if planning to pursue graduate and professional programs in healthcare.