

PhD in Biopsychology and Neuroscience

كلية العلوم الصحية والحيوية
College of Health & Life Sciences

جامعة حمد بن خليفة
HAMAD BIN KHALIFA UNIVERSITY



PhD in Biopsychology and Neuroscience

The PhD program in Biopsychology and Neuroscience (BNS) is multidisciplinary and aims to train the next generation of leaders in Neuroscience. The BNS program is designed to enhance the research capacity and mental health care in Qatar by providing students with the necessary skills and knowledge to tackle complex problems related to mental health and behavior.

Through this degree, students will gain an advanced education that enables them to grasp the biological foundations of cognition, behavior, and aging of the nervous system. This training will equip them with a deep understanding of the neural mechanisms and brain disorders.

Program focus

The Biopsychology and Neuroscience PhD program has a strong focus on the application of innovative technologies and artificial intelligence to tackle brain development, function, and aging in both physiological and pathological conditions.

- ▶ The field of neuroscience is defined by the pursuit of understanding the function and dysfunction of the nervous system. The BNS program aims to equip neuroscience practitioners with the ability to synthesize, use, and advance knowledge in molecular and cellular biology, biochemistry, genetics, biophysics, and artificial intelligence applied to nerve cells.
- ▶ Graduates of our program will receive rigorous training in critical thinking, experimental design, and statistical analysis.

They will become fluent in these areas and be well-prepared to study brain disorders and behavior. The goal of the BNS program is to produce highly skilled professionals who are well-equipped to tackle the challenges of understanding the brain and its relationship to behavior and mental health.

Curriculum

A program with a minimum of 60 credits, taught in English, typically over 3.5 years, which includes:

- ▶ Two mandatory foundational courses (6 credits)
- ▶ A minimum of four elective courses (12 credits)
- ▶ Participation in departmental seminars (0 credits)
- ▶ Participation in the Journal Club
- ▶ Dissertation and laboratory training (42 credits)

PhD students are required to pass a qualifying examination after their second semester, and a candidacy examination after their fourth semester. The program will bring together developmental neurobiology, systems neuroscience, biology of aging, biology of behavior and psychology, and artificial intelligence to stimulate creativity and innovation.



Courses include:

- ▶ Advanced Neurosciences
- ▶ Development and Diseases of the Nervous System
- ▶ Molecular and Cellular Biology of Neurodegenerative Diseases
- ▶ Functional Human Neuroanatomy
- ▶ Artificial Intelligence (Joint course offered by CSE)
- ▶ Research Methods and Ethics in Biopsychology and Neuroscience
- ▶ Applied Behavioral Statistics (Joint course offered by CHLS)
- ▶ Advanced Molecular Biology
- ▶ Stem Cell Biology
- ▶ Scientific Communication and Professional Development
- ▶ Advanced Genetics
- ▶ Bioinformatics
- ▶ Epigenetics
- ▶ Pharmacogenomics
- ▶ Behavioral Aspects of Physical Activity

Admission and Application Requirements

Applicants seeking admission to the PhD in Biopsychology and Neuroscience program should have a master's degree. They should have a strong academic record (minimum 3.0 GPA out of 4) from a recognized university.

Applicants are required to submit a valid IELTS score of 6.5 or TOEFL score of 79 to demonstrate their proficiency in English. Further details about the language proficiency requirement and the process to seek exemption (if applicable) are available from admissions.hbku.edu.qa

Applicants with prior research experience are preferred, particularly for the PhD program.

Further information about admission requirements is available: admissions.hbku.edu.qa

Application requirements

A completed online application form:

admissions.hbku.edu.qa

Academic transcripts

Official electronic copies of transcripts should be submitted as part of the online application. Final transcripts and graduation statements are required for all previous university studies. All transcripts submitted should include an explanation of the grading system. For those who have not completed their current studies, transcripts must include results from the last completed semester of coursework. Transcripts in languages other than English or Arabic must be accompanied with an official translation. Applicants who are admitted to the program based on copies of or incomplete transcripts will be required to provide original transcripts upon enrollment in order to register for courses.

Standardized test results

Official copies of standardized test results must be sent directly to HBKU. Please refer to the institutional codes below:

- ▶ TOEFL: 4981
- ▶ IELTS: No code required. Students should ask the IELTS center where they tested to send the IELTS TRF to Hamad Bin Khalifa University.

Applicants should also submit copies of their test scores with the online application.

Letters of recommendation

Applicants should submit at least three letters of recommendation, preferably from academic referees.

Please visit admissions.hbku.edu.qa for further information about the submission process.

Personal statement of interest

Applicants should submit a personal statement (300-500 words) as part of the online application. The statement should explain why the candidate is applying to the program and how their studies will contribute to the achievement of their personal objectives, including information about the applicant's research interests and achievements.

Resume/Curriculum vitae

Applicants should submit a copy of their current resume or curriculum vitae as part of the online application.

This should include the following information:

- ▶ Academic qualifications
- ▶ Professional experience
- ▶ Publications
- ▶ Research projects
- ▶ Academic awards or honors
- ▶ Conference presentations

Identification document

All applicants should submit an electronic copy of their passport as part of the online application. Nationals and residents of Qatar should also submit their valid Qatari ID.

Student funding

CHLS provides opportunities for funding on a competitive basis. Further information will be provided to applicants who are admitted to the program.

Admission inquiries

admissions.chls@hbku.edu.qa