

# BACHELOR OF SCIENCE WITH A MAJOR IN PSYCHOLOGICAL AND BRAIN SCIENCES

The bachelor of science in psychological and brain sciences is a degree program committed to teaching the fundamental theories, methods, and results involved in clinical and social psychology, cognitive neuroscience, and the study of complex behavior. The major takes an integrated and rigorous approach that emphasizes convergence between the various subfields within psychological and brain sciences. Students with sufficient interest and skill will be assisted in participating in undergraduate research and external internships. The major is based on GW's BA program in psychological and brain sciences but adds science, mathematics, and biology courses. This program is well-suited to students interested in medical, law, and STEM careers.

## ADMISSIONS

For information about the admission process, including deadlines, visit the Office of Undergraduate Admissions website (<https://undergraduate.admissions.gwu.edu/>). Applications can be submitted via the Common Application (<https://go.gwu.edu/commonapp/>).

Supporting documents not submitted online should be mailed to:

Office of Undergraduate Admissions  
The George Washington University  
800 21st St NW Suite 100  
Washington, DC 20052

For questions visit [undergraduate.admissions.gwu.edu/contact-us](http://undergraduate.admissions.gwu.edu/contact-us) (<http://undergraduate.admissions.gwu.edu/contact-us/>).

## REQUIREMENTS

The following requirements must be fulfilled:

The general requirements stated under Columbian College of Arts and Sciences, Undergraduate Programs (<http://bulletin.gwu.edu/arts-sciences/#degreeregulationstext>).

The following program-specific requirements:

Code	Title	Credits
<b>Required</b>		
Introductory natural science (8 credits):		
BISC 1111	Introductory Biology: Cells and Molecules	
BISC 1112	Introductory Biology: The Biology of Organisms	
Basic analysis (6 credits)		
STAT 1127	Statistics for the Biological Sciences	

MATH 1231	Single-Variable Calculus I
Basic computation	
One course (3 credits) selected from the following:	
CSCI 1012	Introduction to Programming with Python
STAT 1129	Introduction to Computing
Research methods (3 credits):	
PSYC 2101	Research Methods in Psychology
Gateway courses	
Two courses (6 credits) selected from the following:	
PSYC 2011	Abnormal Psychology
or PSYC 2011W	Abnormal Psychology
PSYC 2012	Social Psychology
PSYC 2013	Developmental Psychology
One course (3 credits) selected from the following:	
PSYC 2014	Cognitive Psychology
PSYC 2015	Biological Psychology
BISC 2220	Developmental Neurobiology
BISC 2320	Neural Circuits and Behavior
SLHS 2106	Neural Substrates of Speech, Language, and Hearing
Upper-level breadth	
One course (3 credits) selected from the following:	
PSYC 3112	Psychology of Adolescence
PSYC 3115	Developmental Psychopathology
PSYC 3125	Cross-Cultural Psychology
PSYC 3126	Multicultural Psychology
or PSYC 3126W	Multicultural Psychology
PSYC 3128	Health Psychology
PSYC 3132	Social and Personality Development
PSYC 3170	Clinical Psychology
PSYC 3173	Community Psychology
One course (3 credits) selected from the following:	
PSYC 3116	Brain and Language

PSYC 3118	Neuropsychology
PSYC 3119	Cognitive Science in the District
PSYC 3120	Neuroscience of Consciousness
PSYC 3121	Memory and Cognition
PSYC 3122	The Cognitive Neuroscience
PSYC 3123	Neuroscience of Consciousness
PSYC 3124	Visual Perception
PSYC 3180	Seminar in Cognitive Science
SLHS 3133	Autism
BISC 3320	Human Neurobiology

Advanced research lab

One course (4 credits) selected from the following:

PSYC 4106W	Research Lab in Sensation and Perception
or PSYC 4107W	Research Lab in Cognitive Neuroscience
PSYC 4107W	Research Lab in Cognitive Neuroscience
PSYC 4201W	Research Lab in Clinical/Community Psychology
or PSYC 4202W	Research Lab in Applied Social Psychology
or PSYC 4203W	Research Lab in Developmental Psychology
PSYC 4202W	Research Lab in Applied Social Psychology
PSYC 4203W	Research Lab in Developmental Psychology

### Electives

Four elective Psychology (PSYC) courses (12 credits) numbered 2100 or above.

Two advanced breadth courses (6 credits) numbered 3000 or above from any of the following departments: ANTH, BISC, CSCI, DATS, PUBH, and SHLS.

## GENERAL EDUCATION

In addition to the University General Education Requirement (<http://bulletin.gwu.edu/university-regulations/general-education/>), undergraduate students in Columbian College must complete a further, College-specific general education curriculum—Perspective, Analysis, Communication (G-PAC) (<https://advising.columbian.gwu.edu/general-education-curriculum-gpac/>) as well as the course CCAS 1001 First-Year Experience. Together with the University General Education Requirement, G-PAC engages students in active intellectual inquiry across the liberal arts. Students

achieve a set of learning outcomes that enhance their analytical skills, develop their communication competencies, and invite them to participate as responsible citizens who are attentive to issues of culture, diversity, and privilege.

**Coursework (<http://bulletin.gwu.edu/university-regulations/general-education/#generaleducationtext>) for the University General Education Requirement is distributed as follows:**

- One course in critical thinking in the humanities.
- Two courses in critical thinking, quantitative reasoning, or scientific reasoning in the social sciences.
- One course that has an approved oral communication component.
- One course in quantitative reasoning (must be in mathematics or statistics).
- One course in scientific reasoning (must be in natural and/or physical laboratory sciences).
- UW 1020 (<https://bulletin.gwu.edu/search/?P=UW%201020>) University Writing (4 credits).
- After successful completion of UW 1020, 6 credits distributed over at least two writing in the discipline (WID) courses taken in separate semesters. WID courses are designated by a "W" appended to the course number.

**Coursework for the CCAS G-PAC requirement is distributed as follows:**

- Arts—one approved arts course that involves the study or creation of artwork based on an understanding or interpretation of artistic traditions or knowledge of art in a contemporary context.
- Global or cross-cultural perspective—one approved course that analyzes the ways in which institutions, practices, and problems transcend national and regional boundaries.
- Local or civic engagement—one approved course that develops the values, ethics, disciplines, and commitment to pursue responsible public action.
- Natural or physical science—one additional approved laboratory course that employs the process of scientific inquiry (in addition to the one course in this category required by the University General Education Requirement).
- Humanities—one additional approved humanities course that involves critical thinking skills (in addition to the one course in this category required by the University General Education Requirement).
- CCAS 1001 First-Year Experience

**Certain courses are approved to fulfill GPAC requirements in more than one category.**

Courses taken in fulfillment of G-PAC requirements may also be counted toward majors or minors. Transfer courses taken prior to, but not after, admission to George Washington University may count

toward the University General Education Requirement and G-PAC, if those transfer courses are equivalent to GW courses that have been approved by the University and the College.

Lists of approved courses in the above categories are included on each undergraduate major's (<http://bulletin.gwu.edu/arts-sciences/#majorstext>) page in this Bulletin.

## SPECIAL HONORS

In addition to meeting general requirements stated under University Regulations, to be admitted to the GWU Psychological & Brain Sciences (PBS) Undergraduate Honors Program, the student must 1) have taken at least five graded GWU PBS courses with a minimum PBS grade-point average (GPA) of 3.50, and a minimum GWU GPA of 3.00, and 2) submit a completed application and unofficial GWU transcript from the Registrar's Office (which will have the student's name on it) to the PBS Department within the first week of their senior year. In addition to meeting other University and Departmental requirements, to graduate with PBS Departmental Honors, the student must also 3) maintain the minimum GWU and PBS GPAs, 4) complete at least one semester of PSYC 3591 Supervised Research Internship or PSYC 4591 Independent Research, 5) complete PSYC 4997 Honors Seminar, and 6) complete a graduate-level (PSYC 8000s) PBS course.