BACHELOR OF SCIENCE WITH A MAJOR IN ASTRONOMY AND ASTROPHYSICS

In the bachelor of science in astronomy and astrophysics program students become well versed in different aspects of modern astronomy and astrophysics. Coursework includes quantum physics, mechanics, and astrophysics, as well as a range of electives in computer science and physics topics. Classes incorporate hands-on experience with state-of-the-art telescopes, satellites, and data analysis.

All students in the astronomy and astrophysics major complete a capstone project as well as a symposium course in which they learn to present their research findings and review their peers’ projects. Students leave the program ready to begin graduate-level education in astronomy, astrophysics, physics or a related field, and they are able to apply their scientific and problem-solving skills in a variety of workplaces.

Visit the program website (https://physics.columbian.gwu.edu/undergraduate/) for additional information.

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/).

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/#degreeregulationtext).

Program-specific curriculum:

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td></td>
<td><strong>Required</strong></td>
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<td>Introductory courses (26 credits)</td>
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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) (http://bulletin.gwu.edu/arts-sciences/gpac/) as well as CCAS 1001. 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 for the University General Education Requirement is distributed as follows:

- Writing—4 credits in UW 1020 University Writing and 6 credits taken in at least two writing in the disciplines (WID) courses in two or more separate semesters. WID courses are designated by a “W” appended to the course number.
- Humanities—one approved humanities course that involves critical thinking skills.
- Mathematics or statistics—one approved course in either mathematics or statistics.
- Natural or physical science—one approved laboratory course that employs the process of scientific inquiry.
- Social Sciences—two approved courses in the social sciences that employ critical thinking, quantitative reasoning, or scientific reasoning.

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.
- Oral communication—one approved course in oral communication.
- 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 G-PAC 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/#majortext) page in this Bulletin.