

BACHELOR OF SCIENCE IN HEALTH SCIENCES WITH A MAJOR IN CLINICAL EMBRYOLOGY AND ASSISTED REPRODUCTIVE TECHNOLOGY

The bachelor of science in health sciences with a major in clinical embryology and assisted reproductive technology program is designed to prepare graduates with the theoretical knowledge and practical skills for positions in assisted reproductive technology laboratories, biotechnology companies, research institutes and hospitals. In addition, program graduates will be eligible to take the embryology and andrology board of certification examination (ELS and ALS) offered by the American Association of Bioanalysis (AAB). The curriculum will also ensure that graduates will be prepared to pursue an advanced degree beyond the baccalaureate if they so choose.

Visit the program website (<https://bls.smhs.gwu.edu/programs/bshs-clinical-embryology-and-assisted-reproductive-technology/>) for more information.

ADMISSIONS

Admission Deadlines

Fall: July 15

Spring: November 15

Summer: March 15

Standardized test scores

Recommendation letter required
 One letter of recommendation from an academic instructor who can strongly attest to your academic ability, and/or an Individual who served in a supervisory capacity for you, and who can strongly attest to your work ethic.

Prior academic records
 Transcripts are required from all colleges and universities attended (including via dual enrollment), whether or not credit was earned, the program was completed, or the credit appears as transfer credit on another transcript. Transcripts must be forwarded in their original sealed envelopes. Official transcript may also be sent electronically directly from the institution.

Applicants may receive credit for college-level coursework through International Baccalaureate (IB) or College Board Advanced Placement (AP) examinations. Official score results must be forwarded directly from the College Board.
 # Please refer to GW Undergraduate Admissions (<https://undergraduate.admissions.gwu.edu/>) for information on maximum credits, minimum scores, and GW course equivalents for AP and IB credits.

Non-traditional credit sources may be considered on a case-by-case basis (i.e. military coursework, credit-by-exam, and non-college based health programs). Information on transfer credit eligibility may be found in the Bulletin under Regulations (see Transfer Credit/Advanced Standing for Undergraduates), including minimum letter grade requirements.

Statement of purpose
 All applicants are required to submit a 250-500 word essay describing your reasons for undertaking study at the George Washington University. Focus on your academic objectives, career goals and related qualifications, including collegiate, professional, and extra-curricular activities relevant to your program of interest. Include any substantial accomplishments not already mentioned on the application form as well as obstacles you have overcome that influenced your desire to pursue this program of study.

Additional requirements
 All students must meet Essential Functions requirements, and successfully meet the criminal background check and drug screen requirements. (<https://smhs.gwu.edu/academics/health-sciences/academics/admissions/background-checks-and-drug-screenings> (<https://smhs.gwu.edu/academics/health-sciences/academics/admissions/background-checks-and-drug-screenings/>))

Transfer coursework must be earned with a C or better (C- grades and lower do not transfer to GW SMHS).

A resumé or curriculum vitae is required.

Prerequisites
 At least 45 semester hours of college with a minimum cumulative and science GPA of 2.5 from a regionally accredited institution of higher learning. Students applying under a Guaranteed Admission Agreement must have a cumulative GPA of 2.75. All should include the following coursework:

- English Composition (3 credits)
- General Biology (lecture and 'hands-on' lab) (8 credits)
- Chemistry (lecture and 'hands-on' lab) (8 credits)
- College Mathematics (algebra, statistics, or higher 3 credits)

International applicants only
 This hybrid program is not visa eligible. Permanent Residents or those with a valid visa (e.g. work), if eligible, may apply.

Official transcripts from institutions outside the U.S. must be accompanied by an official transcript evaluation from an accredited independent evaluating agency. Please be sure you request a detailed evaluation that includes all course titles, credit hours, grades, U.S. degree equivalency, grade-point averages (GPA), and date of degree conferral. For a list of acceptable foreign credential evaluation services, please click here (<https://www.naces.org/members.php>).

Applicants who are not U.S. citizens are required to submit official test scores for either Test of English as a Foreign Language (TOEFL) or Pearson's Test of English (PTE) Academic or the academic International English Language Testing System (IELTS). The following are the minimum scores for admission consideration: TOEFL: 250 computer-based or 100 Internet-based, PTE: overall score of 68, or IELTS: an overall band score of 7.0, with no individual band score below 6.0

International applicants who meet the following conditions may be considered for admission without submitting TOEFL, PTE or IELTS or scores: They are a citizen of countries where English is the official language (as identified by GW ISO list of Exempt countries) OR; They hold at least a bachelor's degree from a country where English is the official language as well as language of instruction OR; They hold at least a bachelor's degree from an institution accredited by a U.S. regional accrediting agency.

Supporting Documents not Submitted Online should be Mailed to:

Office of Admissions
 Health Sciences Programs
 The George Washington University
 2600 Virginia Avenue
 Suite 104
 Washington, DC 20037

Alternatively, official electronic transcripts can be sent to hsphora@gwu.edu

Contact for Questions:

hsphora@gwu.edu ~ 202-994-0384 (phone) ~ 202-994-0870 (fax)
 9:00am - 5:00pm, Monday through Friday

REQUIREMENTS

Code	Title	Credits
------	-------	---------

The following requirements must be fulfilled: 120 credits, including a minimum of 60 credits in required courses completed at GW and up to 60 transfer credits in courses completed elsewhere. Eligible students admitted through approved SMHS Guaranteed Admission Agreements partnerships may complete a minimum of 52 required credits at GW; eligibility is determined on a case-by-case basis. *

General Education Requirement

- 3 credits in English composition
- 8 credits in biology with lab
- 8 credits in general or inorganic chemistry with lab
- 3 credits in college math (algebra, statistics, or higher)
- 3 credits in humanities
- 6 credits in social sciences

Required for the major

- | | |
|-----------|---|
| MLS 3000 | Clinical Laboratory Mathematics |
| MLS 3001W | Professional Ethics for Medical Laboratory Scientists |
| MLS 3003 | Biochemistry for Laboratory Science |
| MLS 4141 | Immunology and Serology |
| MLS 4151 | Molecular Diagnostics |
| MLS 4251 | Molecular Diagnostics Laboratory |
| MLS 4158 | Laboratory Management and Operations |
| MLS 4171 | Human Genetics |
| CERT 3004 | Endocrinology for Health Sciences |
| CERT 3005 | Topics in Biomedical Science |
| CERT 4010 | Clinical Human Embryology |
| CERT 4011 | Human Embryology Laboratory |
| CERT 4012 | Clinical Human Andrology |
| CERT 4013 | Human Andrology Laboratory |
| CERT 4014 | Human Reproductive Cryobiology |
| CERT 4015 | Human Cryobiology Laboratory |

And one course selected from the following:

HSCI 2112W	Writing in the Health Sciences
HSCI 4112W	Research and Writing in Health Sciences
MLS 2007W	Microbes and Society

*For details visit the Guaranteed Admission Agreements (<https://smhs.gwu.edu/academics/health-sciences/academics/guaranteed-admission-agreements/>) website.

Additional school-specific requirements and electives

Depending on their prior academic record, students complete additional coursework to fulfill school-specific requirements in consultation with their academic advisor. Such courses, as well as appropriate elective selections, are taken from the following list. Alternative electives may be approved by the program director. **

Clinical and laboratory sciences

HSCI 2102	Pathophysiology
HSCI 3501	Human Anatomy and Physiology I
HSCI 3502	Human Anatomy and Physiology II
MLS 4170	Introduction to Molecular Biology
MLS 4172	Molecular Diagnostics Capstone
MLS 4217	Molecular Techniques
MLS 4242	Applications of Molecular Testing
MLS 4252	Applications of Molecular Testing Laboratory
MLS 4266	Molecular Diagnostics Practicum

Health Data Analytics

HSCI 3117	Principles of Biostatistics for Health Sciences
-----------	---

Topics in healthcare

COHM 4110	Strategic Communication for Healthcare Professionals
HSCI 1106	Introduction to Biotechnology for Health Sciences
HSCI 3114	Management of Health Science Services
HSCI 2105	Current Issues in Bioethics
HSCI 4106	Introduction to Epidemiology for Health Sciences
MLS 2005	Plagues, Pandemics, and Epidemics

**Alternative electives may be selected from any undergraduate MLS, HSCI or CERT course or those approved by the program director. Advanced standing from eligible transfer credit may also be considered.