Arizona State University (West Valley Campus)

Biological Data Science, MS

Study details

Course type: Master's degree
Degree: Biological Data Science, MS ASBDSMS
Study mode: Full time
Duration: 24 Month

Cost of study

Cost : 44 286 USD
Reg. fee : 115 USD
Scolarship :
Insurance : 2 765 USD

Intake/s

Jan/Aug

Requirements
Admission requirements

- Applicants must fulfill the requirements of both the Graduate College and the New College of Interdisciplinary Arts and Sciences.
- Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree in a related field such as biology, mathematics, statistics or computing, as well as unrelated fields from a regionally accredited institution.
- Applicants must have a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in the last 60 hours of their first bachelor's degree program or a minimum cumulative GPA of 3.00 (scale is 4.00 = "A") in an applicable master's degree program.

All applicants must submit:

1. graduate admission application and application fee
2. official transcripts
3. statement of purpose
4. two letters of recommendation
5. professional resume
6. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide proof of English proficiency *(TOEFL 80 (no band below 20) (IELTS 6.5 at least 6.0 in all skills))* regardless of their current residency.

It is preferred that letters of recommendation be from faculty members who know the applicant's work well; if these are not available, letters of recommendation from individuals in supervisory or professional roles will be accepted.

The statement of purpose should describe the applicant's educational background, scholarly interests, and academic and professional goals.

Depending on the applicant's educational background, deficiency courses may be required.

Accommodation

Provided by partner agencies;

On-campus housing and meals $18,933

Speciality
STEM-OPT for international students on F-1 visas

This program may be eligible for an Optional Practical Training extension for up to 24 months. This OPT work authorization period may help international students gain skills and experience in the U.S. Those interested in an OPT extension should review ASU degrees that qualify for the STEM-OPT extension at ASU's International Students and Scholars Center website.

The OPT extension only applies to students on an F-1 visa and does not apply to students completing a degree through ASU Online.

Also available online

Additional information

Program description

Degree awarded: MS Biological Data Science

The MS degree program in biological data science provides students with a foundation in biology and computational methods along with hands-on training through practical projects at the interface of the natural and mathematical sciences.

Students learn to manipulate big data, including the generation and analysis of data using statistical and computational toolsets. They use their analytical skills in ecological, environmental, toxicological and other biological applications. The program incorporates multiple levels of experiential learning to ensure students gain critical thinking skills in addition to core competencies.

Accelerated program options

This program allows students to obtain both a bachelor's and master's degree in as little as five years. It is offered as an accelerated bachelor's plus master's degree with:

- Applied Computing, BS
- Applied Mathematics, BS
- Biology, BA

- Biology, BS
- Environmental Science, BA
- Environmental Science, BS
- Pharmacology and Toxicology, BS
- Statistics, BS

Acceptance to the graduate program requires a separate application. Students typically receive approval to pursue the accelerated master's during the junior year of their bachelor's degree program.

Career opportunities

The proliferation of big data sets generated in biological science fields has dramatically increased the demand for individuals with the solid skill sets they need to manipulate and interpret this data.

Graduates are ready to enter one of the fastest-growing job markets to work with consulting firms and government agencies as well as nongovernmental organizations, in data science, informatics, data analytics, database development and mathematical modeling of biological systems that are relevant to a variety of industries. They are well suited for employment in positions such as:

- bioinformatics data scientist
- chemical biology data scientist
- clinical data analyst
- computational biologist
- data engineer or data mining engineer
- database developer
- fisheries scientist, dairy scientist or animal scientist
- genomic scientist
- natural resources data scientist
- pharmaceutical scientist

Graduates also are ready to seek advanced professional or graduate degrees, such as in medical, dental, veterinary and public health fields.