Biomimicry, MS

LABMYMS

Advance your skills by exploring the connection between biology and design, engineering, business and sustainability. By utilizing biomimicry principles, you can implement creative solutions to human problems. Join a network of researchers and practitioners who are transcending traditional academic and institutional boundaries.

Program description

Degree awarded: MS Biomimicry

The world's only MS program in biomimicry is offered in conjunction with <u>The Biomimicry Center</u>, in cooperation with Biomimicry 3.8, the internationally recognized leader in the field.

Biomimicry, the practice of emulating nature's strategies for human designs, empowers change agents passionate about a world mentored by life's genius to work toward innovative and sustainable solutions to pressing global challenges, exploring the way business is conducted, buildings and products are designed, governments operate, health care is provided, goods are manufactured and how future generations will be educated --- all inspired by nature's time-tested sustainable solutions developed over the last 3.8 billion years.

The program's curriculum focuses on this emerging field, with a sustainability emphasis. It is designed to prepare students to facilitate the practice of biomimicry across corporate, government, education and nongovernment organization sectors. In addition to core content and electives, students gain biomimicry experience in biome-based applications, business case studies, biological strategy research and in each participant's self-designed biomimicry project in the student's chosen career field.

At a glance

• College/School: College of Global Futures

• Location: Online

Degree requirements

30 credit hours and a portfolio

Required Core (14 credit hours)

BMY 501 Essentials of Biomimicry (1)

BMY 502 Life's Principles (4)

BMY 503 Biology Taught Functionally (4)

BMY 504 Biomimicry Thinking (4)

BMY 505 The Ethos of Biomimicry: A Pathway from Practice to Philosophy (1)

Electives or Research (10 credit hours)

Other Requirements (6 credit hours; choose 3)

BMY 530 Virtual Design Lab Practicum (2)

BMY 580 Topic: BioBrainstorm Practicum (2)

BMY 580 Topic: Biomimicry Case Study Practicum (2)

BMY 580 Topic: Biomimicry Genius of Place Practicum (2)

Culminating Experience

portfolio

Additional Curriculum Information

For electives or research, students should contact the academic unit for the approved course list.

Admission requirements

Applicants must fulfill the requirements of both the Graduate College and the College of Global Futures.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree 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.

Applicants must submit the following:

- 1. graduate admission application and application fee
- 2. official transcripts
- 3. questionnaire (to be filled out and uploaded)
- 4. curriculum vitae or resume
- 5. three letters of recommendation
- 6. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide proof of <u>English proficiency</u> regardless of their current residency.

Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about <u>ASU tuition and financial aid</u> options to find out which will work best for them.

Attend online

ASU Online

ASU offers this program in an online format with multiple enrollment sessions throughout the year. Applicants may view the program's ASU Online page for program descriptions and to request more information.

Application deadlines

Fall

Spring expand

Summer expand

expand

Global opportunities

Global experience

The biomimicry program offers a distinct global network of participants (approximately 30% are international students). In addition to multiple collaboration opportunities across the program with a diverse set of peers, one has the ability to custom design one or more of their practicum courses to include studying abroad.

Studying abroad is encouraged for graduate students. Nearly all of the College of Global Futures faculty-directed programs offer graduate credit. In addition, the Global Education Office offers more than 50 program opportunities, with programs on every continent.

Faculty-directed programs tend to be the best fit for graduate students; taking courses with ASU professors over the summer or during academic breaks offers students close mentorship and professional network growth in many fields of study while they earn ASU credit. Exchange program participation is also possible with careful planning.

Students can find programs specific to their interests on the <u>College of Global Futures Study Abroad</u> webpage, and additional opportunities and information on the <u>ASU Global Education Office</u> website. These sites also include additional information about applying for funding to support global travel.

Graduate students are also encouraged to apply for funding for international research, study and professional development through <u>ASU's Lorraine W. Frank Office of National Scholarships Advisement</u>.

Career opportunities

Training in biomimicry offers a toolkit of transferable skills that enhance work in any field, especially STEM, design, business and sustainability. Graduates engage and lead others within their organization or communities by practicing and demonstrating world-class biomimicry. Opportunities include leading research groups focused on biomimicry thinking, developing in-house training and biomimicry tools for companies, becoming a biologist at the design table, directing sustainability efforts, and leading public engagement initiatives for communities seeking sustainable solutions.

The knowledge and skills gained can also lead to initiating or transforming a consulting practice into the field of biomimicry. Biomimicry helps set professionals apart, brings about positive change and complements any career path.

As a transdisciplinary, transformative field, the unprecedented challenges the world faces today demand new thinking, perspectives, tools and solutions. Training in biomimicry distinctly positions one for careers and opportunities that don't yet exist but which the world is demanding.

From the School of Complex Adaptive System's 2022<u>alumni employment survey</u>, 100% of the biomimicry graduates that responded are employed or pursuing continuing education.

Contact information

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