

# Environmental Social Science (Complex Adaptive Systems Science), PhD

LAESSCPHD

If you like to analyze the big picture, the complex adaptive systems science concentration is the perfect addition to your studies in environmental social science. You'll examine dynamic socio-natural systems such as agriculture, urban growth, water rights and natural disasters, and use your findings to create sustainable policies and solutions.

## Program description

### **Degree awarded: PHD Environmental Social Science (Complex Adaptive Systems Science)**

The PhD program in environmental social science is one of the few doctoral degree programs in the U.S. that draws on the premise that reducing human impacts and developing more sustainable environmental practices is difficult, if not impossible, to achieve without a focus on the social dynamics of environmental issues using critical social science perspectives.

The program is organized around theoretically based conceptual domains:

- culture and the environment
- environmental hazards and vulnerability
- environmental justice
- human environment impacts
- political ecology
- science and technology studies

These are the bases for addressing various topical foci, including urban environments, technologies and their consequences, landscapes, institutions, and health and the environment.

Students work with faculty who have expertise in a broad range of fields, including:

- archaeology
- community resources
- cultural and medical anthropology

- demography
- environmental history
- geographic information systems
- human and physical geography
- planning
- public affairs
- science and technology studies
- sociology

Coursework for the degree is focused on developing practical skills and a solid grasp of complex social science approaches to environmental issues. Students work closely with their committee to develop a curriculum appropriate to their chosen interests and career goals.

The complex adaptive systems science doctoral concentration trains the next generation of scientists in advanced concepts and methods needed for approaching diverse phenomena in the social and life sciences. The program is tightly integrated with diverse, ongoing, university-wide research on complex adaptive systems science at Arizona State University, and it emphasizes the value of a complex adaptive systems perspective to give students better insight and a more active role in seeking solutions to a broad array of critical issues facing society today. Students become fluent in the common language of complexity while also receiving a solid foundation in the domain knowledge of existing academic disciplines.

## At a glance

- **College/School:** [The College of Liberal Arts and Sciences](#)
- **Location:** [Tempe](#)

## Degree requirements

84 credit hours, a written comprehensive exam, a prospectus and a dissertation

### Required Core (9 credit hours)

### Concentration (12 credit hours)

### Electives or Research (51 credit hours)

### Culminating Experience (12 credit hours)

### Additional Curriculum Information

When approved by the student's supervisory committee and the Graduate College, this program allows 30 credit hours from a previously awarded master's degree to be used for this degree. If students do not have

a previously awarded master's degree, the 30 hours of coursework will be made up of electives or research.

Students entering the program without a master's degree must earn an additional 30 hours of graduate credit, produce a research portfolio that is formally evaluated by a faculty committee, and present that research in a public forum before continuing in the later stage of the doctoral program.

All students must maintain an average GPA of 3.20 (scale is 4.00 = "A") in their courses and complete degree requirements per the program's satisfactory progress policy.

Student doctoral dissertations should include the application of complex adaptive systems concepts and methods in their field of study, and students typically have a member of the complex adaptive systems science graduate faculty as a member of their doctoral supervisory committee.

Students should see the academic unit for a complete list of approved electives and concentration courses.

## **Admission requirements**

Applicants must fulfill the requirements of both the Graduate College and The College of Liberal Arts and Sciences.

Applicants are eligible to apply to the program if they have earned a bachelor's or master's degree from a regionally accredited institution. Undergraduate coursework in the social sciences (e.g., geography, political science, sociology, anthropology, planning or history) is not a prerequisite for admission but is generally advisable. Students may be admitted without such a background and may be required to acquire knowledge of the social sciences in a manner to be specified at the time of admission.

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. personal statement outlining educational and professional goals
4. current 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 English proficiency regardless of their current residency.

Applicants may include in their application materials an optional scholarly writing sample, not to exceed 30 double-spaced pages.

## Tuition information

When it comes to paying for higher education, everyone's situation is different. Students can learn about [ASU tuition and financial aid](#) options to find out which will work best for them.

## Application deadlines

Fall

[expand](#)

## Career opportunities

The program trains students to move into teaching and research positions or to assume leadership roles in government, industry and nongovernmental organizations.

There is a demand in the job market for people with keen thinking skills who can manage, evaluate and interpret large amounts of data. As the many spheres of human interaction expand globally, people trained in this degree are increasingly sought for their broad, holistic knowledge and perspectives. Some career opportunities include:

- analyzing and proposing policies
- conducting postgraduate academic research
- consulting for private and public organizations
- curating cultural resources
- directing nonprofit organizations
- directing programs in the private or public sector
- managing culture or heritage resources in private or public sectors
- planning communities
- teaching

## Contact information

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[Admission deadlines](#)