Responsible Innovation in Science, Engineering and Society (Graduate Certificate)

Science and engineering hold the promise of enabling incredible positive change in our world, but innovation does not automatically make this happen. The flexible curriculum of this program focuses on approaches that allow you to make innovation and values work together to improve human lives.

Program description

Degree awarded: Certificate Responsible Innovation in Science, Engineering and Society (certificate)

The certificate program in responsible innovation in science, engineering and society is designed for scientists, engineers, social scientists, creatives, research managers, technology officers, public administrators and policy officials who seek to advance or use science and technology to improve societal outcomes and develop creative solutions to the fundamental global challenges of today’s world.

The program provides students with knowledge, skills and methods for analyzing innovation and technological systems and it addresses knowledge and uncertainty in decision-making; the regulation and governance of science and technology; the uptake of science and technology in complex societal settings; and interactions between science, technology and the public.

The certificate may be pursued by professionals in industry or government, or by students pursuing other Arizona State University graduate degree programs.

At a glance

- College/School: [College of Global Futures](#)
• Location: Tempe

Degree requirements
15 credit hours including the required capstone course (HSD 580)

Required Core (3 credit hours)
HSD 540 Responsible Innovation and Research (3)

Electives (9 credit hours)

Culminating Experience (3 credit hours)
HSD 580 Practicum (3)

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 in any field 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. two letters of recommendation
4. resume
5. personal statement
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.

Acceptable proof of English proficiency is an IELTS overall band score of at least 6.5 with no band below 6.0 (no institutional code needed); or a Pearson Test of English score of at least 60; or a TOEFL iBT score of at least 80. Students should note that the ASU institutional code for the TOEFL is 4007. Also, students should note that ASU only accepts electronic copies of the TOEFL score report.
International students who need an F1 or J1 visa first need to apply to and be accepted into a master's or doctoral program prior to being considered for the certificate program. International students residing in the U.S. on other types of visas must adhere to all Graduate College policies and procedures regarding admission to be considered for admission to this certificate program.

Applicants should see the program website for application deadlines.

**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**
- **Spring**

**Program learning outcomes**

Program learning outcomes identify what a student will learn or be able to do upon completion of their program. This program has the following program outcomes:

- Students will be able to identify, analyze and recognize an opportunity to justify and design a responsible innovation program within a science and technology initiative.
- Students will be able to communicate, in writing and verbally, how to implement a responsible innovation program within a science policy initiative.

**Global opportunities**

**Global experience**

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 College of Global Futures Study Abroad webpage, and additional opportunities and information on the ASU Global Education Office website. These sites also include additional information about applying for funding to support global travel.
Career opportunities

Recent graduates of this program have paired the certificate with technical graduate degrees to make themselves competitive for science policy jobs in the public sector. State legislatures, courts and agencies seek employees with the perspective and ability to understand and analyze how science and technology fit into social, political, environmental and economic contexts.

Career examples include:

- analyst
- environmental assessor
- federal agency staff
- government liaison
- law clerk
- legislative staff
- product designer
- science and technology communication specialist
- writer

Contact information

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