Science and technology are powerful forces in the modern world. You can become an expert in creating and understanding innovative and inclusive futures that draw on diverse perspectives and methods, and shape the debates around innovation and public values.

**Program Description**

*Degree Awarded: PHD Human and Social Dimensions of Science and Technology*

The PhD program in human and social dimensions of science and technology is an intellectually rigorous program with problem-oriented research. It prepares students to teach and conduct research using humanistic and social science methods on the social, historical, philosophical and policy foundations of science and technology as well as on their current and future interactions with society.

The curriculum responds to growing demand for transdisciplinary research in the humanities, information sciences and social sciences that can provide insights into the dynamic relationship between science, technology and society.

The program is flexible, combining a strong, integrated, first-year experience with substantial freedom for students who, in conjunction with their advisors, design carefully crafted plans of study relevant to their own areas of specialization and expertise. Unique among programs of this kind in the nation, students also learn to communicate and work with scientists, engineers, policymakers, business and community officials, or the public in conducting and applying research.

**At a Glance**

- **College/School:** [College of Global Futures](#)
Degree Requirements

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

Required Core (8 credit hours)
HSD 601 HSD I: Human Dimensions of Science and Technology (4)
HSD 602 HSD II: Science, Power and Politics (4)

Culminating Experience (12 credit hours)
HSD 799 Dissertation (12)

Additional Curriculum Information
This is a research degree, culminating in a dissertation, which must draw on multiple disciplinary perspectives.

Students may apply up to 30 credit hours from a prior master's degree toward the total hour requirement, upon approval of the steering committee. Each student, with his or her supervisory committee, develops a unique plan of study, which the student's supervisory committee approves.

Each student completes a yearlong core seminar, a second-year research project, two major fields, one minor field, methods training, electives and research. Students also regularly attend the program colloquia. There are no foreign language or statistics requirements, except as needed for a particular student's selected dissertation project.

Comprehensive Examination
The written dissertation prospectus and its oral defense constitute the written and oral comprehensive examinations required by the Graduate College for advancement to candidacy. Each student develops a written dissertation prospectus, including a bibliography and discussion of relevant research skills. The student makes an oral defense of the dissertation prospectus to his or her supervisory committee, which must approve the prospectus. Students normally complete the dissertation prospectus and its defense in the fifth semester.

Dissertation
The dissertation represents an original body of research that contributes to existing knowledge in a significant way.

Final Examination
Upon completing the dissertation, the student makes an oral defense of the dissertation to the supervisory committee, which must approve the dissertation. The doctorate is granted upon successful completion of the oral defense and any revisions to the dissertation required by committee members.
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 applicants must have 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. HSD academic record form
4. a curriculum vitae or resume
5. a personal statement
6. a writing sample
7. general GRE scores
8. three letters of recommendation
9. proof of English proficiency

Additional Application Information

An applicant whose native language is not English must provide proof of English proficiency regardless of current residency. In order to meet English proficiency students must have an IELTS overall band score of at least 6.5 with no band below 6.0, or Pearson Test of English score of at least 60, or a TOEFL score of at least 550 (PBT) or 80 (iBT). ASU’s institutional code is 4007. ASU only accepts electronic copies of the TOEFL score report.

Preference is given to students with demonstrated interest and competence in relevant areas of intellectual work.

The personal statement should be one or two single-spaced pages. It must be a statement of proposed research that clearly explains why the student feels ASU is the appropriate place to pursue their doctorate, identifies one or more faculty members whose interests or work are relevant to the student's proposed research, and describes the goals for pursuing the degree.

The writing sample should be a 10- to 25-page sample of academic writing, such as a course paper, an undergraduate thesis, or an excerpt from a master's thesis.

Students should see the program website for application deadlines.

Application Deadlines

Fall
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:

- Evaluate foundational theories and existing literature in humanistic and social studies of science and technology and identify gaps and opportunities for future research
- Design a comprehensive research proposal to critique, analyze, and/or explore a key issue or theme in the human and social dimensions of science and/or technology

Global Opportunities

Global Experience
Study abroad is possible for graduate students, with more than 50 program opportunities spanning all seven continents. Faculty-directed programs tend to be the best fit for graduate students; taking courses over the summer or during academic breaks with ASU professors offers close mentorship and professional network growth in many fields of study while earning ASU credit. Exchange program participation is also possible with careful planning. Students can find more information on the Global Education website at https://goglobal.asu.edu/students/graduate-students.

Career Opportunities

Professionals with expertise in the human and societal dimensions of science, technology and innovation are in high demand across many sectors. From the School for the Future of Innovation in Society's 2021 alumni employment survey, 100% of doctoral program respondents are employed. Of those respondents employed, 75% have jobs directly related to their degree.

Most graduates have careers in academia, but a number also work in nonprofits, think tanks and government. Skills in foresight, technology assessment, implications and values of innovation, and science policy are critical for guiding businesses, institutions, governments and societies in considering and shaping the role of science, technology and innovation in their futures.

Career examples include:

- director of operations
- energy social scientist
- executive director
- information security manager
- professor
- research and development associate
- research strategist