The Master of Science in Global Sustainability Science (MS-GSS) is a two-year collaborative degree program offered jointly by Arizona State University in the United States and Leuphana University of Lüneburg, Germany. Students collaborate throughout the program with their counterparts at the other institution and spend one semester together at Leuphana University and one semester together at ASU.

This unique program gives students the opportunity to engage with sustainability problems and develop solutions in an international setting. They will develop the academic and technical skills and ethical insights that enable them to understand, research and develop solutions to complex sustainability challenges at local, national and global levels. The program culminates with research writing in the form of a scientific paper.

Course requirements
This list of requirements applies specifically to students enrolled in the ASU cohort of the MS-GSS program. The program of study includes a minimum of 41 credit hours. In summary:

<table>
<thead>
<tr>
<th>Course category</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Core Courses</td>
<td>13</td>
</tr>
<tr>
<td>Global Sustainability Research Seminars</td>
<td>4</td>
</tr>
<tr>
<td>Leuphana University Coursework</td>
<td>10</td>
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<tr>
<td>General Electives</td>
<td>8</td>
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<tr>
<td>Scientific Paper</td>
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<tr>
<td><strong>Total Credits Required</strong></td>
<td><strong>41</strong></td>
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Core courses
- **SOS 510: Perspectives on Sustainability** employs case studies from engineering, architecture, social sciences and natural sciences to facilitate discussion about the major challenges faced in forming a sustainable future at local, national and global levels.
- **SOS 511: Advanced Sustainability Problem Solving** conveys advanced procedures to identify and analyze sustainability problems and develop solutions.
- **SOS 525: Social-Ecological-Technical Systems (SETS) Domains & Interfaces** guides students in thinking about complex systems in a sustainability context. Students use a sustainability problem or theme to explore the concepts presented in the course.
- **SOS 559: GSS Perspectives Seminar** exposes students to sustainability research perspectives and projects of ASU researchers as students explore research topics for their master’s projects.
- **SOS 581: Synthesis for Sustainability Research** challenges students to link their own research and writing to other disciplines and the broader field of sustainability research.

Global sustainability research seminars
- **SOS 557: Global Sustainability Research Preparation** initiates collaboration on the group research project and provides a foundation for the individual or collaborative scientific paper.
- **SOS 558: Global Sustainability Research Project** concludes the group research project and guides students toward completion of their individual or collaborative scientific paper.
Leuphana University coursework

Students in the ASU cohort of the MS in Global Sustainability Science will spend their second semester at Leuphana University taking courses with their international colleagues. Coursework taken at Leuphana University of Lüneburg will transfer back to Arizona State University as 10 credit hours. Students continue work on their Global Sustainability Research project and enroll in two elective courses, in addition to the required courses:

• **Methods in Sustainability Science** introduces methodologies and concepts of problem- and solution-oriented, transformational sustainability research.

• **Sustainability Governance** provides an overview of governance for environmental sustainability such as participatory, collaborative, and multi-level governance, transitions management or evidence-based policymaking.

General electives

The selection of these courses is left to the discretion of students and their supervisory committees. These courses should give students depth of knowledge in the domains, interfaces, and competencies needed to conduct their research.

Scientific paper

Students will devote six credit hours to writing either a thesis or a publishable scientific paper. During the semester(s) in which the culminating experience credits are taken, students work with their supervisory committees to research, write and revise their document and prepare for a final, public defense of the work.

Careers

Alumni of the MS in Global Sustainability Science are employed in government, private industry and academia. Many pursue a doctoral degree after completing the master's program. Due to the small size of the program, graduates are included in the employment data for all MA/MS alumni.

**Employment data (2019) for MA/MS alumni:**

- Private Industry 24%
- Nonprofit/NGO 24%
- Academia/Education 24%
- Government 29%

100% of master's degree alumni are employed. 86% of those employed are working in a sustainability-related role.