GEODESIGN

Graduate Program Head  Eliza Pennypacker
Program Code        GEODZ
Campus(es)          World Campus (M.P.S.)
Degrees Conferred   Master of Professional Studies (M.P.S.)
The Graduate Faculty View (https://secure.gradsch.psu.edu/gpms/index.cfm?searchType=fac&prog=GEODZ)

Geodesign is a rapidly emerging and powerful approach to spatial problem-solving that requires the synthesis of geographic knowledge and scientific data with the best practices of environmental design. Graduates from the Master in Professional Studies (M.P.S.) in Geodesign program will be prepared to take leadership roles in addressing complex environmental design problems in settings ranging from urban design to conservation planning.

The M.P.S in Geodesign program’s goal is to provide practicing professionals with an advanced skill set in geodesign. They will learn to capitalize on the power of spatial knowledge and evolving technologies, identify opportunities that emerge to better inform the design, understand their relevance to particular situations, and assist communities in designing alternative futures based on a unique process that brings all this information into focus.

The M.P.S in Geodesign program is intended specifically for professionals who are able to participate principally on a part-time basis and at a distance. It is offered exclusively through the World Campus.

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (http://gradschool.psu.edu/prospective-students/how-to-apply). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions (http://gradschool.psu.edu/graduate-education-policies).

To be admitted to the program, applicants must be able to meet the following requirements:

1. A completed online Graduate School application (http://gradschool.psu.edu/prospective-students/how-to-apply) and payment of the application fee.
2. Personal statement of background and interest in the program, including an outline of possible topic for the individual capstone project (maximum 3-pages).
3. Official transcripts from all post-secondary institutions attended (http://www.gradschool.psu.edu/prospective-students/how-to-apply/new-applicants/requirements-for-graduate-admission)
4. TOEFL scores (see below)
5. Three (3) letters of recommendation

Scores from the Graduate Record Examinations (GRE), or from a comparable substitute examination, will be considered, but are not required for admission.

Students with a 3.00 junior/senior average (on a 4.00 scale) will be considered for admission. The best-qualified applicants will be accepted up to the number of spaces available for new students. Exceptions to the minimum 3.00 grade-point average may be made for students with special backgrounds, abilities, and interests.

The language of instruction at Penn State is English. English proficiency test scores (TOEFL/IELTS) may be required for international applicants. See GCAC-305 Admission Requirements for International Students (http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-305/gcac-305-admission-requirements-international-students) for more information.

Degree Requirements

Master of Professional Studies (M.P.S.)

Requirements listed here are in addition to Graduate Council policies listed under GCAC-700 Professional Degree Requirements (http://gradschool.psu.edu/graduate-education-policies).

Students earn the M.P.S. in Geodesign degree by successfully completing a minimum 35 credits of course work, including a supervised individual study project. Course requirements include a minimum of 18 credits at the 500 level or above, with a minimum of 6 credits at the 500 level. Note that because most of the available elective courses are worth 3 credits, many students are likely to take at least 36 credits (9 elective credits) to complete their degree program.

The individual study capstone project is the culminating experience for the graduate degree and requires the student to apply the geodesign framework to a real-world challenge, of his/ her choosing, in order to demonstrate aptitude in analytic, design, and collaborative skills. For most students the project will culminate in a formal public presentation, attended by the student’s adviser, who is member of the Graduate Faculty at Penn State. If the adviser is unable to attend, the department will send a representative from the Graduate Faculty. The presentation will take place at an appropriate professional conference, approved in consultation with the project adviser. Typically the presentation will be at an annual conference (at the national, regional or state level) of professional organizations, such as the American Planning Association, American Society of Landscape Architects, the Urban and Regional Information Systems Association, ESRI User Conferences, or other suitable professional organization- affiliated venues. The final venue selection will be one that is mutually agreeable between the student and adviser as to location and appropriate level of professional rigor. Alternatively, students who will be unable to attend a conference, or have other professional objectives, may work with their adviser to get approval to write and submit a project report as an article for an appropriate peer-reviewed journal. The student will provide the adviser with the article, who will in turn recommend final submission to the journal. This will provide an alternative path to successfully complete the culminating experience. Presentations and papers are preceded by dress rehearsals that are open to all students in the program through Web and audio conferencing. As part of his or her individual studies, every student is expected to contribute a formal peer review of one other student’s rehearsal.

An Advisory Board consisting of accomplished design, geography and planning professionals in government and industry, as well as Penn State faculty members in a variety of disciplines, guides the ongoing development of the curriculum. Based on taking courses on a part-time basis and at a distance, the curriculum will take at minimum two-and-a-half years to complete.

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<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEODZ 511</td>
<td>Geodesign History, Theory, Principles</td>
<td>3</td>
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### Geodesign (GEODZ) Course List

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEODZ 822</td>
<td>GeoDesign Models I: Evaluation and Decision</td>
<td>3</td>
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<tr>
<td>GEODZ 824</td>
<td>GeoDesign Models II: Process and Impact</td>
<td>3</td>
</tr>
<tr>
<td>or GEODZ 826</td>
<td>GeoDesign Models III: Representation and Change</td>
<td></td>
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<tr>
<td>GEODZ 842</td>
<td>Geodesign Studio I: Rural/Regional Challenges</td>
<td>6</td>
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<tr>
<td>GEODZ 852</td>
<td>Geodesign Studio II: Urban/District-scale Challenges</td>
<td>6</td>
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### Electives

Select three courses (at least 8 credits) of GEOG courses at the 400 level or higher; courses must be approved in advance by the student's adviser. A list of acceptable electives is maintained by the program office.

### Culminating Experience

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>GEODZ 596A</td>
<td>Individual Studies--Geodesign Capstone Project Proposal and Peer Review</td>
<td>3</td>
</tr>
<tr>
<td>GEODZ 596B</td>
<td>Individual Studies--Geodesign Capstone Project Dissemination</td>
<td>3</td>
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**Total Credits:** 35

### Student Aid

World Campus students in graduate degree programs may be eligible for financial aid. Refer to the Tuition and Financial Aid section (http://www.worldcampus.psu.edu/tuition-and-financial-aid) of the World Campus website for more information.

### Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Geodesign (GEODZ) Course List (https://bulletins.psu.edu/university-course-descriptions/graduate/geodz)

### Contact

**Campus**
World Campus

**Graduate Program Head**
Eliza Pennypacker

**Director of Graduate Studies (DGS) or Professor-in-Charge (PIC)**
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**Program Website**
View (http://www.worldcampus.psu.edu/degrees-and-certificates/geodesign-masters/overview)