

YOUR INDUSTRY LANDSCAPE IS EVOLVING AND YOU NEED EXPERTS

PURDUE GEODATA IS THE SOLUTION

Purdue University's Geodata Science for Professionals (GDSP) master of science program is at the forefront of geodata teaching and technology. The goal of this program, the first of its kind in the nation, is to bridge the widening gap between current college curricula and the needs of industry leaders like you.

From mathematics and statistics to geodata computing and analytics, Purdue GDSP graduates are fully prepared to apply the skills and deploy the technologies necessary to meet the diverse geoscientific needs of our industry partners. Foundationally grounded yet decidedly nimble, our concentrated, holistic and interdisciplinary program stands apart by:

- Merging data science and geoscience in unprecedented ways.
- Pairing top scholars with enterprising students in an agile, intimate teaching and learning environment.
- Capitalizing on Purdue's cutting-edge computer technology and unmatched access to data resources.
- Discovering and teaching the newest and most productive technologies.
- Applying the University's proven scientific rigor and innovative culture to the changing needs of industry.

Bolstered by customized curricula, challenging courses, collaborative research experience and personalized guidance, our graduates emerge from this master's program with a certificate in one or more of the following areas: applied statistics, geodata analytics, and computational science and engineering.

Our graduates enter the workforce with a full set of immediately applicable skills in areas such as:

- Hadoop and Spark systems for big data.
- GPU computing for machine learning.
- Remote sensing and GIS data analytics for geoinformatics.
- Weather and climate risk assessment.
- Data-driven environmental hazard mitigation.
- Seismic inversion and imaging for geophysical studies and resource exploration.
- Machine learning for geophysical inversion and parameter estimation.



PHOTOGRAPHY



STRENGTHS

Widely praised for its engineering prowess, scientific acumen and academic rigor, Purdue also pioneered data science at the university level. The GDSP program, housed in the College of Science's Department of Earth, Atmospheric, and Planetary Sciences, merges these assets with the University's geoscientific knowledge and innovative environment in a truly revolutionary way.

The GDSP program also features top instructors determined to stay on the cutting edge of emerging technologies and pass this knowledge on to students. This personalized approach provides students with career-focused enrichment through individual guidance, group-immersion courses and diverse electives.

REACH OUT

Wen-wen Tung, GDSP program director, and faculty coordinator Robert Nowack are your gatekeepers for more information about Purdue's dynamic GDSP program and its students. They can be reached via email at wwtung@purdue.edu and nowack@purdue.edu.

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College of Science



“ In GDSP, we train practical researchers in weather, climate, environmental science, geology and geophysics with the capacity of a data analyst or a data scientist. We also foster the growth mindset to learn from data while broadening students' subject-matter knowledge as they rise in organizations. ”

Wen-wen Tung, PhD

Associate professor of earth, atmospheric, and planetary sciences
Director, GDSP program



“ Geodata science has become important in solid earth geophysics, where huge volumes of data are now being recorded to study the Earth. GDSP at Purdue provides a unique environment for students to learn techniques in data science and machine learning to access, manage, interpret and image large geophysical datasets. ”

Robert Nowack, PhD

Professor of geophysics
GDSP program