

Application Materials

Applications received by January 10th will receive priority consideration for funding

- GPA above a 3.0 on a 4.0 scale
- Unofficial transcripts
- Resume/cv
- Personal statement
- Three letters of reference
- GRE scores (optional)

Apply at: gradschool.wsu.edu/apply/



Washington State University

Founded in 1890, WSU is the state's original land grant institution. Today, WSU enrolls more than 30,000 students engaged in over 95 degree programs. One of 81 public universities with the Carnegie Foundation's Tier 1 Highest Research Activity designation, Washington State University is known for its high-ranking academic programs, life-changing research, and diverse student body.



Contact US

Departments of Mathematics & Statistics

Washington State University
PO Box 643113
Pullman, WA 99164-3113

Phone: 509-335-3926
E-mail: mathstat.gradinfo@lists.wsu.edu
Hours: M-F, 8-5:00
math.wsu.edu

www.math.wsu.edu

Pullman, Washington

Pullman, Washington is a pleasant, safe community of 31,000 residents in the southeastern part of the state of Washington.



With small-town comforts and cosmopolitan amenities, the town is home to excellent restaurants and provides a range of entertainment and cultural activities at an affordable cost of living. Pullman is surrounded by the beautiful rolling hills of the region known as the Palouse. Within a 100-mile range of five pristine National Forests, outdoor enthusiasts can easily participate in many recreational activities such as hiking, cross-country skiing, downhill skiing, whitewater rafting, fishing, climbing, and camping.

FINANCING YOUR GRADUATE EDUCATION

Mathematics and Statistics PhD students are supported by teaching or research assistantships, which include a tuition waiver, salary and health insurance. Applicants are automatically considered for these positions.

Vancouver, Washington

Some students may choose to pursue research with the faculty on our Vancouver, WA, campus where they may benefit from the resources in the greater Portland area. At one of the fastest growing cities in the region, students have easy access to both big city amenities and the natural beauty of the Pacific Northwest. Students from either campus (Pullman/Vancouver) can work with faculty from another campus on their research.



WSU Pullman

WSU Vancouver



The Department of Mathematics & Statistics Graduate Programs

PhD Mathematics

PhD Statistical Science

MS Mathematics

MS Statistics

math.wsu.edu

Graduate Degree Options

- | Master's Degree Options | Doctoral Degree Options |
|---|---|
| <ul style="list-style-type: none">• Mathematics• Applied Mathematics• Mathematics Teaching• Statistics | <ul style="list-style-type: none">• Mathematics• Applied Mathematics• Mathematics Education• Statistical Science |



Department of Mathematics & Statistics

A graduate degree from Washington State University prepares you for a broad range of careers and opportunities in mathematics, mathematics education, or statistics. We have over 30 graduate faculty who are committed to excellence in both teaching and research, providing personalized mentoring and research support for graduate students. The diverse research interests within our department expose students to multiple disciplines, and students often combine multiple areas into unique research projects. Students interested in applications can collaborate with other WSU departments such as biology, economics, engineering, sociology, or computer science.

With over 100 graduate students in our department, there are plenty of opportunities to exchange ideas with other students, creating a rich, supportive environment. We welcome applications from scholars of all interests and backgrounds, and hope you'll consider joining WSU!

Research Environment

Students study with faculty who are on the forefront of research in mathematics, statistics, and areas that bridge multiple disciplines:

Analysis and Geometric Measure Theory: Harmonic analysis and geometric measure theory with a parallel focus on applications to challenging data problems
B. Krishnamoorthy, A. Khapalov, C. Moore, K. Vixie

Bayesian Statistics: Theoretical and applied Bayesian techniques, hierarchical and non-hierarchical Bayes methods
Y. Wang

Biometrics: Bio-informatics, biometrics, environmetrics, biostatistics, biological and agricultural applications
X. Chen, J. Dasgupta, Y. Wang

Computational Statistics, Statistical Learning: Prediction, machine learning, model selection, supervised and unsupervised learning
X. Chen, A. Kaul

Data Analytics: Big data and high dimensionality applied to both numerical and categorical data analysis
X. Chen, J. Dasgupta, D. DeFord, A. Kaul, J. Pascual

Data Science: Interface of statistical learning, computational methods, and topology
T. Asaki, B. Krishnamoorthy, X. Chen, D. DeFord, A. Kaul, H. Li, A. Panchenko, E. Schwartz, M. Tsatsomeros, K. Vixie, Y. Wang

Design of Experiments, Simultaneous Inference and Large Scale Multiplicity: Optimal design, efficiencies, controlling error rates, family-wise error control, false discovery rates
X. Chen, J. Dasgupta, J. Pascual

Discrete Mathematics: Cryptography, combinatorics, and number theory
D. DeFord, M. Hudelson, S.C. Liu

Mathematical Modeling: Model development, inverse problems, and parameter identification in areas like engineering, physics, and the environment. Applications: flow of moisture and contaminants in soils, deformation of soils, physical and chemical systems from nano to continuum scale, fluid dynamics, optimal foraging theory, population ecology, predator-prey problems, forest modeling
S. Lapin, V.S. Manoranjan, L. Schreyer, E. Schwartz, N. Strigul, N. Voulgarakis

Mathematics Education: Mathematical discourse, math teacher professional development, critical transitions, and content specific teaching and learning such as algebra, calculus, and linear algebra
W. Hall, K. Lessieg, D. Slavitt

Matrix Algebra: Computational and theoretical analysis
M. Tsatsomeros, J. McDonald

Mathematical Biology: Infectious diseases, population genetics, neuroscience, biomolecular systems; biological tissue (e.g. cartilage, disks, lung), fluids, and bones
A. Dimitrov, S. Lapin, V.S. Manoranjan, A. Panchenko, L. Schreyer, E. Schwartz, N. Voulgarakis, X. Wang

Optimization: Problems on high performance environments, with nonsmooth functions and integer programming
T. Asaki, B. Krishnamoorthy

Partial Differential Equations: Analysis of PDEs with applications in materials research, microwave heating, environmental science, and sociology
A. Khapalov, C. Moore, A. Panchenko, L. Schreyer, H.M. Yin

Quality Assurance, Reliability Theory, Risk Modeling

H. Li, J. Pascual

Scientific Computing: Numerical analysis, numerical methods for PDEs, computational linear algebra, stochastic equations, and high performance computing
K. Cooper, S. Lapin, V.S. Manoranjan,

M. Tsatsomeros, N. Voulgarakis

Time Series, Financial Analytics: Estimation of change points, probabilistic modeling of time series, risk modeling
D. DeFord, A. Kaul, K. Jandhyala, H. Li

Statistical Practice: Statistical communication, application of statistics to real world problems, teaching statistics
J. Dasgupta, D. Johnson

Stochastic Modeling, Probability

H. Li, A. Panchenko, N. Strigul

