UNIVERSITY OF CENTRAL FLORIDA
MATHEMATICS

GRADUATE STUDIES IN MATHEMATICS
The Department of Mathematics offers the opportunity to pursue the Ph.D. degree in Mathematics, PhD degree in Financial Mathematics, MS degree in Mathematical Sciences, MS degree in Industrial Mathematics, MS degree in Financial Mathematics and Graduate Certificate in Mathematical Science. The emphasis in the program is on contemporary areas of applied mathematics and traditional areas of core mathematics. Students have the opportunity to specialize in Approximation Theory, Applied and Computational Harmonic Analysis, Big Data and Mathematical Statistics, Combinatorics and Graph Theory, Commutative Algebra and Algebraic Geometry, Control and Optimization, Differential and Symplectic Geometry, Fluid and Plasma Dynamics, Free Boundary Problems, Functional Analysis, Inverse and Ill-posed Problems, Mathematical Biology, Mathematical Finance, Nonlinear Waves and Nonlinear Dynamics, Numerical Analysis, Orthogonal Polynomials, Partial Differential Equations, Probability and Stochastic Analysis, Tomography and Medical Imaging. For appropriately trained students opportunities may exist to work under the Cooperative Education Program with local industries like Lockheed Martin, N.A.S.A., Siemens and Harris Corporation.

COURSE OFFERINGS
The department offers a wide variety of graduate courses to train students in mathematics and its applications. The courses are offered in a collegial, friendly environment with small classes and high student-faculty interaction.

FACULTY
The faculty in the Department of Mathematics includes leading experts in many of the areas mentioned above. Faculty members include invited speakers at the International Congress of Mathematics, the Marcus Wallenberg Prize winner, an ICTP Ramanujan Prize winner, a Fellow of the Brazilian Academic of Science, two Fellows of the American Mathematical Society, and a National Science Foundation Career awardee. Many faculty members conduct interdisciplinary research with several having joint appointment with other departments, research institutes and centers within the university. The department has organized many international and national conferences and has hosted meetings of the American Mathematical Society, the Mathematical Association of America, SIAM and other organizations.

FINANCIAL ASSISTANCE
The department offers many graduate teaching assistantships on a competitive basis and recommends graduate students for various university and national fellowships. Individual faculty also offer some graduate research assistantships and summer research assistantships from their research grants.

For additional information about the graduate program, please visit https://sciences.ucf.edu/math/graduate/ or write to:

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Xin Li, Approximation Theory, Scientific Computing

ASSOCIATE CHAIR
Joseph Brennan, Algebra

GRADUATE PROGRAM DIRECTOR
Qiyu Sun, Applied and Computational Harmonic Analysis

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Deguang Han, Functional and Applied Harmonic Analysis
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Alexander Katsevich, Computer Tomography
David Kaup, Nonlinear Waves, Modeling
Plotr Mikusinski, Functional Analysis
Ram N. Mohapatra, Mathematical Analysis
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Marianna Pensky, Theoretical and Applied Statistics
Gary Richardson, Mathematical Statistics
David Rollins, Fluid and Nonlinear Dynamics
Constance Schober, Nonlinear Dynamics
Bhimsen Shrivamoggi, Fluid and Plasma Dynamics
Alexander Tamasan, Inverse Problems
Eduardo Teixeira, Partial Differential Equations
Alexander Tovbis, Nonlinear Dynamics
Kuppalapalle Vajravelu, Applied Mathematics
Jiongmin Yong, Control and Financial Mathematics
Yue Zhao, Graph Theory and Combinatorics

ASSOCIATE PROFESSORS:
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Basak Gurel, Symplectic Geometry and Topology
Junho Lee, Differential Geometry
Heath Martin, Commutative Algebra
Brian Moore, Scientific Computing
Andrew Nevai, Mathematical Biology
Yuanwei Qi, Nonlinear PDEs
Michael Reid, Combinatorics, Tiling
Jason Swanson, Applied Probability
Zixia Song, Graph Theory and Combinatorics

ASSISTANT PROFESSORS:
Zhe Liu, Functional Analysis, Operator Algebras
Abey López-Garcia, Potential Theory & Orthogonal Polynomials
Zhisheng Shuai, Mathematical Biology
Teng Zhang, Big Data, Statistics and Optimization

EMERITI:
Lee Armstrong, Mathematics Education
Robert Brigham, Graph Theory
John Cannon, Applied Mathematics/PDEs
Michael Taylor, Probability and Statistics