

GRADUATE PROGRAM AT GLANCE

Features

- Late afternoon and evening classes for working professionals
- Summer offerings
- Small classes, close interaction with faculty
- Many opportunities for research projects
- Flexible preparation for professional careers or doctoral studies

Master of Science in Mathematics

- 30 credit hours (coursework or coursework plus thesis)
- Broad core mathematics preparation
- Individualized Plan of Study (Focus on Pure Math, Applied Math, or Statistics)
- Graduate Assistantships for full time students

Statistics Graduate Certificate

- 15 credit hours
- Designed to strengthen expertise in applied statistics

Operations Research Graduate Certificate

- 15 credit hours
- Prepares to handle operations research projects in business and industry.

Contact Information

Graduate Program co-Directors
Annalisa Calini calinia@cofc.edu
Martin Jones jonesm@cofc.edu

More Information

<http://math.cofc.edu>

GRADUATE RESEARCH OPPORTUNITIES

I. Anguelova *Mathematical Physics, Integrable Systems, Differential Equations.*

A. Calini *Integrable Systems, Nonlinear waves, Dynamical Systems. Geometric evolution equations.*

J. Carter *Algebraic Number Theory.*

D. Caveny *Transcendental Number Theory, Non-associative algebras.*

B. Cox *Representation theory of quantum groups, Infinite-dimensional Lie Algebras.*

B. Diamond *Topology, Topological Dynamics.*

J. Howell *Numerical methods for Differential Equations, Applications to Newtonian and non-Newtonian Fluids.*

T. Ivey *Differential Geometry, Differential Equations.*

R. Jin *Mathematical Logic, Nonstandard analysis, Set theory, Model theory.*

M. Jones *Probability, Stochastic processes, Optimal stopping theory.*

L. Jurisich *Representation theory, Free field theory, Vertex operators, Conformal field theory.*

B. Kai *High-dimensional data analysis, Semi-parametric methods, Robust modeling, Variable selection.*

A. Kasman *Algebraic Analysis, Mathematical Physics.*

T. Kunkle *Approximation Theory, Multivariate interpolation.*

S. Lafortune *Nonlinear waves, Integrable Systems, Applications to elastic materials, flame propagation, fluids.*

A. Langville *Information retrieval, Numerical Linear Algebra, Mathematical Modeling.*

B. LeMesurier *Nonlinear wave phenomena, Scientific computing.*

L. Jiexiang *Statistics, Nonparametric Estimation.*

R. Mignone *Mathematical Logic, Set Theory.*

G. Mitchener *Dynamical Systems, Probability, Applications to Biology and Linguistics.*

J-H. Park *Dimension Reduction methods, Applied time Series, Nonparametric methods, Statistics applications to Finance and Econometric.*

A. Przeworski *Geometry and Topology of Hyperbolic 3-manifolds.*

D. Sarvate *Combinatorics, Block Design.*

S. Shields *Low-dimensional Topology.*

O. Smirnov *Lie algebras, Non-associative algebras.*

K. Thom *Algebra, Theory of semigroups.*

A. Vartanian *Asymptotic analysis, Orthogonal polynomials, Integrable Systems.*

J. Webster *Mathematical modeling, Nonlinear evolutions, Dynamical Systems, Semigroups and monotone operator theory, Coupled systems of PDE, Control of PDE.*

J. Young *Statistics, Probability, Stochastic processes, Statistical learning, Data science, Predictive analytics, Knowledge discovery, Data mining, Big data, Optimization.*

P. Young *Number Theory, p-adic analysis.*

GRADUATE COURSES IN MATHEMATICS

- 502 Advanced Linear Algebra
- 503 Applied Algebra I
- 511 Real Analysis
- 514 Methods for Middle/Secondary Mathematics
- 515 Complex Variables
- 523 Partial Differential Equations I
- 545 Numerical Analysis I
- 604 Applied Algebra II
- 551 Linear Programming and Optimization
- 552 Operations Research
- 580/680 Topics in Applied Mathematics
- 585/685 Topics in Pure Mathematics
- 601 Topology
- 604 Applied Algebra II
- 607 Discrete Mathematics
- 612 Real Analysis II
- 623 Partial Differential Equations II
- 624 Dynamical Systems
- 645 Numerical Analysis II
- 690 Graduate Teaching Seminar
- 699 Independent Study
- 700 Thesis

GRADUATE COURSES IN STATISTICS

- 530 Mathematical Statistics I
- 531 Mathematical Statistics II
- 540 Statistical Learning Theory I
- 541 Statistical Learning Theory II
- 550 Linear Models
- 560 Stochastic Processes
- 561 Time Series Analysis
- 555 Bayesian Statistical Methods
- 589 Special Topics in Probability and Statistics
- 650 Statistical Quality Control
- 651 Design of Experiments