Graduate Certificate in Applied Mathematics

The Graduate Certificate in Applied Mathematics is designed to enhance training in various aspects of applied mathematics.   It is intended for students who are currently pursuing a graduate degree in a discipline outside of the Mathematics Department, or for students who wish to pursue the certificate as a stand-alone program.

Admission to Graduate Studies

An applicant seeking to pursue graduate study in the College may be admitted as either a degree-seeking or non-degree seeking student. Policies and procedures of Graduate Studies govern the process of Graduate admission. These may be found in the Graduate Studies (https://catalog.ku.edu/graduate-studies/) section of the online catalog.

Please consult the Departments & Programs (https://catalog.ku.edu/liberal-arts-sciences/) section of the online catalog for information regarding program-specific admissions criteria and requirements. Special admissions requirements pertain to Interdisciplinary Studies degrees, which may be found in the Graduate Studies section of the online catalog.

Admission to the Graduate Certificate in Applied Mathematics

Applicants must submit a graduate application online. (https://gradapply.ku.edu/apply/) The prerequisites for admission are:

- Current enrollment in a KU graduate program outside the Department of Mathematics, or as a non-degree-seeking student
- Completion of two MATH graduate courses from those listed in the Certificate Requirements, with a minimum 3.0 GPA. These courses can then count towards the 12 credits required for the certificate.

The Department of Mathematics evaluates candidates and makes recommendations to the Office of Graduate Studies regarding admission. The Department ordinarily does not award GTA positions to students accepted to the Graduate Certificate program. Further information about applications and admissions is available from the Department of Mathematics. (https://math.ku.edu/admission-graduate-program/)

Contact the department:

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The certificate requires the completion of four courses from the following list:

Code	Title	Hours
MATH 601	Algebraic Topics in Computing: _____	3
MATH 605	Applied Regression Analysis	3
MATH 611	Time Series Analysis	3
MATH 630	Actuarial Mathematics	3
MATH 647	Applied Partial Differential Equations	3
MATH 648	Calculus of Variations and Integral Equations	3
MATH 650	Nonlinear Dynamical Systems	3
MATH 724	Combinatorial Mathematics	3
MATH 725	Graph Theory	3
MATH 727	Probability Theory	3
or MATH 627	Probability	
MATH 728	Statistical Theory	3
or MATH 628	Mathematical Theory of Statistics	
MATH 750	Stochastic Adaptive Control	3
MATH 765	Mathematical Analysis I	3
MATH 766	Mathematical Analysis II	3
MATH 781	Numerical Analysis I	3
MATH 782	Numerical Analysis II	3
MATH 783	Applied Numerical Methods for Partial Differential Equations	3
MATH 850	Differential Equations and Dynamical Systems	3
MATH 851	Topics in Dynamical Systems: _____	3
MATH 865	Stochastic Processes I	3
MATH 866	Stochastic Processes II	3
MATH 874	Statistical Decision Theory	3
MATH 881	Topics in Advanced Numerical Linear Algebra: _____	3
MATH 882	Topics in Advanced Numerical Differential Equations: _____	3
MATH 950	Partial Differential Equations	3
MATH 951	Topics in Advanced Partial Differential Equations II: _____	3

Other courses (600 level or above) may be substituted with the approval of the Director of Graduate Studies. At least two courses must be at the 700 level or above. Courses should be selected in consultation with an advisor.