

Doctor of Philosophy

Course Requirement. A minimum of 55 credit hours beyond the bachelor's degree (24 beyond the master's degree) and thesis.

Applied Mathematics Option. (* means it is also a MS requirement)

The required courses:

Math 605 - Complex Variables

Math 617*- Measure and Integration

Math 618* - Applied Functional Analysis

Math 622* - Numerical Solutions to Differential Equations

Math 637* - Tensor Calculus and Differential Geometry

Math 638 - Mathematical Theories of Continua

Math 693* - Methods of Applied Mathematics

Math 801 - Asymptotic and Perturbation Method

Math 802 - Integral Equations

Math 821 - Advanced Applied Numerical Methods I

Math 822 - Advanced Applied Numerical Methods II

Math 817 – Advanced Applied Functional Analysis

And one of

Math 803 - Advanced Applied Mathematics I

Or

Math 825 – Computational Fluid Dynamics and Solid Mechanics

Dissertation. A minimum of 24 credit hours of research, Math 898 or 899 , is required.

Colloquium Requirement. All Ph.D. candidates will attend and succinctly summarize and evaluate at least 16 (beyond 8 at the MS level) professional seminars.