

## Bachelor of Science Degree (BS) in Mathematics

**Group R ..... Required Courses .....**

_____	M415 - An Introduction to Advanced Math	3 hrs
_____	M511 - Linear Algebra	3 hrs
_____	M547 - Advanced Calculus I	3 hrs
_____	M551 - Numerical Methods	3 hrs
_____	M555 - Differential Equations I	3 hrs

**Group A ..... One Course from Group A .....**

_____	M513 - Fundamental Concepts of Algebra	3 hrs
_____	M615 - Elementary Number Theory	3 hrs
_____	M621 - Elementary Geometry	3 hrs
_____	M690 - Introduction to Mathematical Logic	3 hrs
_____	M720 - Modern Geometry	3 hrs
_____	M725 - Topology I	3 hrs

**Group B ..... One Course from Group B .....**

_____	S460 - Elementary Probability and Mathematical Statistics	3 hrs
_____	S571 - Statistical Methods I	3 hrs
_____	S572 - Statistical Methods II	3 hrs
_____	S574 - Elementary Survey Sampling	3 hrs
_____	S576 - Applied Nonparametric Statistical Models	3 hrs
_____	S761 - Probability	3 hrs
_____	S762 - Applied Stochastic Processes	3 hrs
_____	S763 - Applied Regression Analysis	3 hrs
_____	S764 - Analysis of Variance	3 hrs
_____	S771 - Theory of Statistics I	3 hrs
_____	S772 - Theory of Statistics II	3 hrs
_____	S775 - Applied Statistical Method I	3 hrs
_____	S776 - Applied Statistical Methods II	3 hrs

**Group C ..... One Course from Group C .....**

_____	M530 - Applied Combinatorics	3 hrs
_____	M545 - Integration Techniques and Applications	3 hrs
_____	M553 - Mathematical Models	3 hrs
_____	M640 - Advanced Calculus II	3 hrs
_____	M655 - Differential Equations II	3 hrs
_____	M657 - Optimization Theory	3 hrs
_____	M714 - Applied Mathematics	3 hrs
_____	M751 - Numerical Analysis	3 hrs
_____	M753 - Ordinary Differential Equations	3 hrs
_____	M755 - Partial Differential Equations	3 hrs

**Plus Two Additional Courses from Groups B and/or C:**

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**Plus a high-level algorithmic computer language. The MATLAB course, Math 451 is strongly recommended.**

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**Note:**

For students who are contemplating graduate work it is highly recommended that they include Math 513 and 640 in their program, along with courses in one or more of French, German, or Russian.

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Minimum G.P.A. for this degree is 2.0

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