



REQUIREMENTS FOR THE B.S. DEGREE IN MATHEMATICS
DEPARTMENT OF MATHEMATICS
(At least 15 hours of the major must be earned in residence.)

APPLIED MATHEMATICS OPTION (43HRS)

COURSE NO.	COURSE	CREDIT HRS	PREREQUISITE	SEMESTER OFFERED
MATH 1496	Calculus I	4	C or better in MATH 1390 and MATH 1392; or C or better in MATH 1580; or equivalent.	Fall, Spring, & Summer
MATH 1497	Calculus II	4	C or better in MATH 1496.	Fall, Spring, & Summer
MATH 2335	Transition to Advanced Math	3	MATH 1497	Fall & Spring
MATH 2471	Calculus III	4	C or better in MATH 1497	Fall, Spring, & Summer
MATH 2441	Mathematical Computation	4	MATH 1497	Fall & Spring
MATH 3320	Linear Algebra	3	MATH 1497 or 2330	Fall, Spring, & Summer
MATH 3331	Ordinary Differential Equations	3	MATH 1497	Fall & Spring
MATH 4305	Applied Math I	3	MATH 3320, 3331	Fall
MATH 4306	Applied Math II	3	MATH 4305	Spring
MATH 4371	Introduction to Probability Theory	3	MATH 1497	Fall
MATH 4372	Introduction to Statistical Inference	3	MATH 4371	Spring

AND

(Minimum- Six hours of electives chosen from at least one of: MATH 4315, MATH 4340, or MATH 4373)

MATH 3360	Abstract Algebra I	3	MATH 1497	Fall
MATH 3362	Abstract Algebra II	3	MATH 3360	Spring
MATH 4315	Partial Differential Equations	3	MATH 2471 and MATH 3331	Fall
MATH 4316	Fundamentals of Applied Math for Fluid and Granular Materials	3	MATH 4315	Spring
MATH 4330	Mathematical Modeling in Biology	3	C or better in MATH 3331	Fall
MATH 4340	Numerical Methods	3	MATH 3320; and CSCI 1470 or equivalent	Spring
MATH 4362	Advanced Calculus I	3	MATH 2471	Fall
MATH 4363	Advanced Calculus II	3	MATH 4362	Spring
MATH 4373	Applied Statistics	3	MATH 4372	Fall
MATH 4374	Introduction to Stochastic Processes	3	MATH 4371 or Consent of instructor	Fall
MATH 4375	Introduction to Topology I	3	Consent of instructor	On Demand
MATH 4385	Complex Analysis	3	MATH 2471	On Demand

ANCILLARY REQUIREMENTS:

PHYS 1441 and 1442 or

PHYS 1410 AND 1420 or

CHEM 1450 and 1451 or

ECON 2320 AND ECON 2321

OTHER REQUIREMENTS:

1) **MINOR REQUIRED**

2) 44 HOURS of General Education, 120 semester hours with a GPA of not less than 2.00

3) GPA of 2.00 or better in each of the major and minor fields

4) 40 hours of upper division courses (3000 or 4000)