

DEPARTMENT OF MATHEMATICAL SCIENCES

MAJOR: MATHEMATICS (39 HOURS)

NO MINOR REQUIRED

TOTAL HOURS TO COMPLETE: 39 HOURS

MATHEMATICS MAJOR REQUIREMENTS (39 HOURS)				
	COURSE NAME	HRS	TERM	PREREQUISITES
MATH 152	CALCULUS II	4	FALL, SPRING	MATH 151
MATH 230	FOUNDATIONS OF HIGHER MATHEMATICS	3	SPRING	MATH 151
MATH 251	CALCULUS III	4	FALL	MATH 152
MATH 325	STATISTICS AND DATA ANALYSIS	3	SPRING (ODD YEARS)	MATH 151
MATH 331	LINEAR ALGEBRA	3	FALL	MATH 151
MATH 351	DIFFERENTIAL EQUATIONS	3	SPRING (EVEN YEARS)	MATH 251
MATH 352	ADVANCED CALCULUS	3	SPRING (ODD YEARS)	MATH 251 and MATH 331
MATH 404	MODERN ABSTRACT ALGEBRA	3	FALL (EVEN YEARS)	MATH 230 and MATH 331
MATH 490	WRITING IN THE DISCIPLINE I (WI3)	2	AS NEEDED	MATH 230, MATH 251, and MATH 331
MATH 491	WRITING IN THE DISCIPLINE II (WI3 & PRE)	2	AS NEEDED	MATH 230, MATH 251, MATH 490, and Senior Status
CISS 201	PROGRAMMING LANGUAGE I	3	FALL	
CHOOSE ONE	SELECT 3 CREDIT HOURS FROM ANY OTHER MATH COURSE ABOVE MATH 300 (excluding MATH 311)*	3	SEE CATALOG COURSE DESCRIPTIONS ADDITIONAL INFORMATION	SEE CATLOG COURSE DESCRIPTIONS FOR PREREQUISITES
CHOOSE ONE	SELECT 3 CREDIT HOURS FROM ANY OTHER MATH COURSE ABOVE MATH 400*	3	SEE CATALOG COURSE DESCRIPTIONS ADDITIONAL INFORMATION	SEE CATALOG COURSE DESCRIPTIONS FOR PREREQUISITES
TOTAL MAJOR HOURS		39		

OPTIONAL MATHEMATICS CONCENTRATIONS (15-18 HOURS)**				
	COURSE NAME	HRS	TERM	PREREQUISITES
SELECT	CONTENT CONCENTRATIONS: PURE MATH, ACTUARIAL MATH, or COMPUTATIONAL SCIENCE	15-18	SEE BELOW FOR ADDITIONAL INFORMATION	SEE BELOW FOR PREREQUISITES
TOTAL HOURS		15-18		

PURE MATH CONCENTRATION (18 HOURS)*				
	COURSE NAME	HRS	TERM	PREREQUISITES
MATH 303	MODERN COLLEGE GEOMETRY	3	SPRING (EVEN YEARS)	MATH 152 and MATH 230
MATH 332	LINEAR ALGEBRA II	3	AS NEEDED	MATH 331
MATH 405	MODERN ABSTRACT ALGEBRA II	3	AS NEEDED	MATH 404
MATH 412	ELEMENTARY REAL ANALYSIS	3	AS NEEDED	MATH 230 and MATH 352
MATH 421	PROBABILITY THEORY	3	FALL (ODD YEARS)	MATH 251
MATH 441	FUNCTIONS OF A COMPLEX VARIABLE	3	SPRING (ODD YEARS)	MATH 251
TOTAL CONCENTRATION HOURS		18		

ACTUARIAL MATH CONCENTRATION (15 HOURS)*				
	COURSE NAME	HRS	TERM	PREREQUISITES
MATH 421	PROBABILITY THEORY	3	FALL (ODD YEARS)	MATH 251
MATH 422	STATISTICAL INFERENCE	3	AS NEEDED	MATH 421
FINC 320	RISK MANAGEMENT AND INSURANCE	3	FALL (EVEN YEARS)	
ECON 303	INTERMEDIATE MICROECONOMICS I	3	SPRING (ODD YEARS)	ECON 203 and ECON 204
ECON 402	MANAGERIAL ECONOMICS	3	FALL (EVEN YEARS)	ECON 303
TOTAL CONCENTRATION HOURS		15		

COMPUTATIONAL SCIENCE CONCENTRATION (16 HOURS)*				
	COURSE NAME	HRS	TERM	PREREQUISITES
PHYS 204	GENERAL PHYSICS FOR SCIENTISTS AND ENGINEERS II	4	SPRING	PHYS 203 or Permission from Instructor, and MATH 151 or higher
CISS 202	PROGRAMMING LANGUAGE II	3	SPRING	CISS 201
MATH 332	LINEAR ALGEBRA II	3	AS NEEDED	MATH 331
MATH 370	NUMERICAL METHODS	3	AS NEEDED	CISS 201 and MATH 151
MATH 412	ELEMENTARY REAL ANALYSIS	3	AS NEEDED	MATH 230 and MATH 352
TOTAL CONCENTRATION HOURS		16		

NOTE: MATH 151 is a prerequisite for courses required in the major, will fulfill the General Education requirement, and must be completed with a minimum grade of "C"; PHYS 203 is required to fulfill the General Education requirement.

**NOTE: For each concentration, six hours can be applied to elective categories in the major; A minimum grade of "C" is required for each course in a concentration area*

***NOTE: A University-approved minor or Mathematics Concentration is strongly recommended*

ADDITIONAL REQUIREMENTS FOR TRANSFER MAJORS: All students transferring under the Comprehensive Articulation agreement must complete PHYS 203 as part of the General Education Curriculum