College of Science and Mathematics

Department: Mathematics and Statistics
Undergraduate Program: B.S. Mathematics – Computing Concentration

Current	Hours
I. Required Courses	67-69 Hrs.
MTH 229 Calculus I	
MTH 230 Calculus II	
MTH 231 Calculus III	
MTH 232 Calculus IV	
MTH 233 Differential Equations	
MTH 255 Linear Algebra	
MTH 257 Discrete Math for Computing	
MTH 280 Intro to Math. Proof (WI)	
MTH 316 Numerical Methods I	
Choose One (1) from the following 2 courses:	
MTH 317 Numerical Methods II	
MTH 381 Number Theory	
MTH 355 Advanced Linear Algebra	
MTH 492 Math Seminar (WI)	
STT 360 Applied Statistics I	
STT 361 Applied Statistics II	
Choose one (1) from the following courses:	
MTH 431 Real Variables I	
MTH 451 Intro to Modern Algebra	
Choose Two (2) from the following course:	
MTH 381 Number Theory	
MTH 407 Optimization Techniques	
MTH 410 Theoretical Found to Comp	
MTH 419 Cryptography & Data Security	
MTH 456 Coding Theory	
MTH 457 Combinatorics	
MTH 458 Applied Graph Theory	
Choose one(1) of the following courses:	
MTH 306 Mathematical Modeling	
MTH 381 Number Theory	
MTH 407 Optimization Techniques	
MTH 410 Theoretical Found of Comp	
MTH 419 Cryptography & Data Sec	
MTH 431 Real Variables I	
MTH 432 Real Variables II	
MTH 451 Intro to Modern Algebra I	
MTH 452 Intro to Modern Algebra II	
MTH 456 Coding Theory	
MTH 457 Combinatorics	
MTH 458 Applied Graph Theory	
II. Related Course Requirements	28 Hrs.
CS 240 Computer Science I	
CS 241 Computer Science II	
CS 242 Computer Science III	
CS 400 Data Structures & Software Designs	
Choose at least three (3) from the following courses:	
CEG 320 Computer Orgainization	
CEG 433 Operating Systems	
CEG 434 Concurrent Software Design	
CS 405 Data Base Mgmt Systems	
CS 466 Formal Languages	
CS 470 Systems Simulation	
CS 480 Comparative Languages	
MTH 476 Computer Graphics I	
MTH 477 Computer Graphics II	

New	Hours
Required Courses	67-69 Hrs.
MTH 229 Calculus I	
MTH 230 Calculus II	
MTH 231 Calculus III	
MTH 232 Calculus IV	
MTH 233 Differential Equations	
MTH 255 Linear Algebra	
MTH 257 Discrete Math for Computing	
MTH 280 Intro to Math. Proof (WI)	
MTH 316 Numerical Methods I. I	
Choose One (1) from the following 2 courses:	
MTH 317 Numerical Methods II	
MTH 381 Number Theory	
MTH 355 Advanced Linear Algebra	
MTH 492 Math Seminar (WI)	
STT 360 Applied Statistics I	
STT 361 Applied Statistics II	
Choose one (1) from the following courses:	
MTH 431 Real Variables I	
MTH 451 Intro to Modern Algebra	
Choose Two (2) from the following course:	
MTH 381 Number Theory	
MTH 407 Optimization Techniques	
MTH 410 Theoretical Found to Comp	
MTH 419 Cryptography & Data Security	
MTH 456 Coding Theory	
MTH 457 Combinatorics	
MTH 458 Applied Graph Theory	
Choose one(1) of the following courses:	
MTH 306 Mathematical Modeling	
MTH 314 Introduction to Mathematical Software	
MTH 381 Number Theory	
MTH 407 Optimization Techniques	
MTH 410 Theoretical Found of Comp	
MTH 415 Introduction to Scientific Computation	
MTH 419 Cryptography & Data Sec	
MTH 431 Real Variables I	
MTH 432 Real Variables II	
MTH 451 Intro to Modern Algebra I	
MTH 452 Intro to Modern Algebra II	
MTH 456 Coding Theory	
MTH 457 Combinatorics	
MTH 458 Applied Graph Theory	
II. Related Course Requirements	28 Hrs.
CS 240 Computer Science I	
CS 241 Computer Science II	
CS 242 Computer Science III	
CS 400 Data Structures & Software Designs	
Choose at least three (3) from the following courses:	
CEG 320 Computer Orgainization	
CEG 433 Operating Systems	
CEG 434 Concurrent Software Design	
CS 405 Data Base Mgmt Systems	
CS 466 Formal Languages	
CS 470 Systems Simulation	
CS 480 Comparative Languages	
MTH 476 Computer Graphics I	
MTH 477 Computer Graphics II	