Math Major with Statistics Track Requirements
Catalog Year: 2014-15
Degree: Bachelor of Science
Credit Hours: 46+

“PR” indicates a pre-requisite. “CO” indicates a co-requisite.

Courses within this major may also satisfy general education requirements. Please consult http://registrar.cofc.edu/general-edu for more information.

Required Courses

☐ MATH 120  Introductory Calculus (4) PR: Placement or C or better in MATH 111
☐ MATH 220  Calculus II (4) PR: MATH 120 or HONS 115
☐ MATH 203  Linear Algebra (3) PR: MATH 120 or instructor permission
☐ MATH 221  Calculus III (4) PR: MATH 220

Select one of the following tracks (Actuarial, Applied, Pure, Statistics or Teacher Education):

Statistics Track

☐ MATH 295  Introduction to Abstract Mathematics (3) PR: MATH 203 or MATH 221
☐ MATH 311  Advanced Calculus I (3) PR: MATH 221 and MATH 295
☐ MATH 250  Statistical Methods I (3) PR: MATH 105 with a C-grade or better or MATH 111 or MATH 120 or permission of instructor
☐ MATH 350  Statistical Methods II (3) PR: MATH 120 and MATH 250
☐ MATH 430  Mathematical Statistics I (3) PR: MATH 221
☐ MATH 431  Mathematical Statistics II (3) PR: MATH 430

Select one of the following course/lab pairings:

☐ ___________________  ☐ ___________________ lab

CSCI 220  Computer Programming I (3) PR: CSCI 120 or CSCI 180 or CSCI 210 or MATH 111 or department permission
CSCI 220L Computer Programming I Lab (1) PR or CO: CSCI 220

OR

MATH 245  Numerical Methods and Mathematical Computing (3) PR: MATH 203 or MATH 220 or instructor permission; CO: MATH 246
MATH 246  Mathematical Computing and Programming Lab (1) PR: MATH 220 or instructor permission

Select 9 additional credit hours from the following:

☐ ___________________  ☐ ___________________  ☐ ___________________

CSCI 334  Data Mining (3) PR: CSCI 221 and MATH 207 and MATH 250
MATH 440  Statistical Learning I (3) PR: MATH 203 and MATH 220 and MATH 350
MATH 441  Statistical Learning II (3) PR: MATH 440
MATH 451  Linear Programming and Optimization (3) PR: MATH 203 and MATH 221, and CSCI 220 or MATH 245, or instructor permission
MATH 452  Operations Research (3) PR: MATH 203 and MATH 430, and CSCI 220 or MATH 245
MATH 455  Bayesian Statistical Methods (3) PR: MATH 430
MATH 475* Statistical Consulting (3) PR: MATH 350 and one of MATH 440 or MATH 441 or MATH 451 or MATH 452 or CSCI 334

Note: *MATH 475 Statistical Consulting is the recommended capstone for this track.