## BACCALAUREATE DEGREE PLAN

Associate of Art/Associate in Science (AA/AS) to Bachelor of Science (BS)-Mathematics

| North Carolina Community College Course | Specific Course Required |  | Elizabeth City State University Course |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Course credit |  | A. GENERAL EDUCATION | Course credit |
| ENG 111 Writing and Inquiry | 3 SHC |  | ENGL 102 Compostion I | 3 SHC |
| ENG 112 Writing/Resarch in the Disciplines | 3 SHC |  | ENGL 103 Composition II | 3 SHC |
| Communications/Humanities/Fine Arts (from mi | 6 SHC |  | Humanities and Fine Arts A or B | 2-3 SHC |
|  |  |  | ENGL 201/202 World Literature I/II | 3 SHC |
| Social Behavioral Sciences (must come from at least two disciplines) | 6 SHC |  | Social and Behavioral Science A | 3 SHC |
|  |  |  | Social and Behavioral Science B | 3 SHC |
| Mathematics | 8 SHC |  | Natural Science and Mathematics A | 3-4 SHC |
|  | 4 SHC | MAT 273 Calculus III | MATH 267 Calculus of Several Variables III | 4 SHC |
| Natural Sciences | 8 SHC |  | Natural Science and Mathematics B | 4 SHC |
|  |  |  | Elective or Focused Hours | 4 SHC |
| Additional General Education Hours | 11 SHC |  | Additional General Education Hours (includes additional hours from Mathematics and Humanities and Fine Arts B, if applicable) | 5 SHC |
|  |  | MATH 271 Calculus I | MATH 165 Calculus of a Single Variable I | 4 SHC |
|  |  | MATH 272 Calculus II | MATH 265 Calculus of a Single Variable II | 4 SHC |
| Other Required Hours | 14 SHC | MAT 280 Linear Algebra | MATH 351 Linear Algebra | 3 SHC |
|  |  | MAT 285 Differential Equations | MATH 358 Differential Equations | 3 SHC |
|  |  | HEA 110 Personal Health \& Wellness | HLTH 185 Health Concepts | 2 SHC |
|  |  | MAT 152 Statistical Methods I | STAT 251 Basic Statistics | 3 SHC |
|  |  |  | Elective Hours (includes additional hours from MAT 280, MAT 285 and MAT 152) | 3 SHC |
| ACA 122 College Transfer Success | 1 SHC |  | UNIV 110 Freshman Seminar I | 1 SHC |
| TOTAL SEMESTER HOURS | 60-61 SHC |  | TOTAL SEMESTER HOURS | 60-61 SHC |
| If take this at an NC Community College, it would satisfy the requirement in column D |  |  | COURSES TO BE TAKEN AT ECSU (prerequiste) |  |
|  |  |  | MATH 275 Foundations of Mathematics | 3 SHC |
|  |  |  | MATH 350 Number Theory | 3 SHC |
|  |  |  | MATH 354 Abstract Algebra I | 3 SHC |
|  |  |  | MATH 365 Exit Seminar for Juniors | 2 SHC |
|  |  |  | MATH 455 Elements of Real Analysis | 3 SHC |
|  |  |  | STAT 351 Probability and Statistics I | 3 SHC |
|  |  |  | MATH 466 Exit Seminar in Mathematics | 2 SHC |
|  |  |  | MATH 467 Senior Capstone | 3 SHC |
| MAT 152 | 4 SHC | Statistical Methods I | STAT 251 Basic Statistics | 3 SHC |
|  |  |  | CSC 115 Programming I | 3 SHC |
|  |  |  | CSC 215 Programming II | 3 SHC |
|  |  |  | CSC $210 \mathrm{C}++$ Programming or CSC 230 Object Oriented Programming or CSC 414 Python Programming and Visualization | 3 SHC |
|  |  |  | OPEN ELECTIVES | 10 SHC |
| CIS 110 | 3 SHC | Introduction to Computers | CSC 111 Introduction to Computer Applications | 3 SHC |
|  |  | PED Physical Education Activity Course | Physical Education Activity Requirement | 1 SHC |
|  |  |  | Core Electives-Select 4 courses from the list below | 12 SHC |
|  |  |  | MATH 352 College Geometry | 3 SHC |
|  |  |  | MATH 345 History of Mathematics | 3 SHC |
|  |  |  | MATH 360 Applied Cryptography | 3 SHC |
|  |  |  | MATH 366 Complex Variables | 3 SHC |
|  |  |  | MATH 410 Linear Optimization | 3 SHC |
|  |  |  | MATH 452 Internship | 3 SHC |
|  |  |  | MATH 454 Abstract Algebra II | 3 SHC |
|  |  |  | MATH 456 Contemporary Issues in Math Education | 3 SHC |
|  |  |  | MATH 459 Special Studies/Seminars in Math | 3 SHC |
|  |  |  | MATH 462 Math Modeling | 3 SHC |
|  |  |  | STAT 352 Probability and Statistics II | 3 SHC |
|  |  |  | CSC 451 Numerical Symbolic Computing | 3 SHC |
|  |  |  | CSC 305 Intro to Bioinformatics | 3 SHC |
|  |  |  | TOTAL | 60 SHC |

If you complete your AS at a North Carolina Community College, any General Education course that you have not taken that is required at Elizabeth City State University will be waived EXCEPT for those courses specified by the major program as required General Education courses.

Please note: The following ECSU General Education courses cannot be waived per the CAA: General eduction/cognate courses required for major, health, and physial eduation activity course. These courses are required for graduation from ECSU. Students may complete these courses as part of their AA or AS degre with a grade of C or higher and transfer credit to ECSU to fulfill these course requriements.

Reviewed by: Julian A.D. Allagan
Date of Review: June 4, 2021

