OLD DOMINION UNIVERSITY 2006-2008 Catalog
Bachelor of Science-Mathematics Major

Students earning the AS, AA, or AA&S (or university parallel) degree from a Virginia Community College automatically satisfy the lower division general education requirements. Courses marked with * require a grade of C or better to transfer, even with the AS degree. The remaining lower division courses are automatically satisfied by the AS (including foreign language), regardless of the grade earned. Additionally, courses in which a grade of C- or below were earned will not transfer. Therefore Community College degree holders may require additional credits to meet the 120 credit hour graduation minimum. (AS=Associate degree)

LOWER DIVISION GENERAL EDUCATION

A. Skills

1. Written Communication
   - ENGL 110C
   - ENGL 111C or 131C
   - Oral Communication
   - Mathematics
     - Math 162M-163
   - (Met in the major by MATH 317)
   - Foreign Language Skills
   - Computer Skills
     - requires CS 150

2. Perspectives

   A. Fine and Performing Arts
   - History
     - HIST 101H, 102H, 103H, 104H, or 105H or GEN 101
   - Literature
     - ENGL 112L, 144L, or FLET 100L or GEN 101
   - Philosophy
     - PHIL 110P, 120P, or GEN 101
     - (recommend PHIL 120P)
   - Natural Science and Technology
     - (Eight credit hours of Natural Science with labs in sequence. Additionally, 3-4 credit hours of Natural Science or Technology are required. PHYS 231N-232N are advised for the applied Mathematics option; either BIOL 108N-109N or BIOL 115N-116N are advised for the statistics/biostatistics option. GEN 101 may be used for the third requirement.)
   - Technology Requirement
     - 4
   - Social Sciences
     - 3
   - ANTR 110S; COMM 200S; CRJS 215S; ECON 200S, 201S, 202S; GEOG 100S, 101S; POLS 100S, 101S; PSYC 201S, 203S; SOC 201S; WMST 201S (GEN 101 may be used for one social science).

Mathematics Course Requirements

   MATH 211 Calculus I
   - 4
   MATH 212 Calculus II
   - 4
   MATH 307 Ordinary Differential Equations
   - 3
   MATH 311W Modern Algebra I
   - 3
   MATH 312 Calculus III
   - 3
   MATH 316 Intro Linear Algebra
   - 3
   MATH 317 Calculus IV:
   - Into Analysis
   - 3
   STAT 310W or 431 Intro Data Analysis or
   - Theory of Statistics
   - 3
   STAT 405 SAS: An Introduction to Data Handling
   - 1
   STAT 400-level electives
   - 15

All students are required to choose one of the following options:

Applied Mathematics

   MATH 401 Partial Differential Equations
   - 3
   MATH 408 Applied Numerical Methods I
   - 3
   MATH 422 Applied Complex Variables
   - 3
   MATH 400-level electives
   - 9
   (at most three hours from MATH 400, 404, 406)

Statistics/Biostatistics

   STAT 310W or 431 Intro Data Analysis or
   - Theory of Statistics
   - 3
   STAT 405 SAS: An Introduction to Data Handling
   - 1
   STAT 400-level electives
   - 15

Math Teaching Licensure

   Admission. Students wanting to be admitted to the teacher education program must have a 2.75 grade point average in the major and overall, no grade less than a C- in the Math/Statistics content area and the professional education core, and a passing score on PRAXIS I or achieved State Board of Education-approved SAT or ACT scores. Although students may enroll in a limited number of education courses, a passing PRAXIS I score or approved equivalent test score must be on file with the Office of Teacher Education Services and Advising prior to enrollment in any education practicum course or courses in developing instructional strategies. It is recommended that students take the PRAXIS I exam prior to, or during, enrollment in ECI 301.

   The PRAXIS II Mathematics Content Examination must be passed before the candidate may begin the teacher internship. Passing PRAXIS II scores must be on file in the Office of Teacher Education Services and Advising attached to the internship application. Please consult the Department of Mathematics and Statistics for information on PRAXIS II Math tutorial that runs each semester. There is a charge for this tutorial.

   Continuance. Student in education licensure programs must (1) satisfy University requirements, (2) continue to maintain a 2.75 grade point average overall, in the major, and in the professional education core with no earned grade less than C- in all courses taken in the major and in the professional education core, and (3) successfully complete a student teaching interview.

   Assessments required for teacher education programs and licensure. In order to obtain a Virginia teaching license, all teacher education students must attain passing scores on the appropriate teacher licensure exams. Students who complete their programs after December 1, 2006 are required to take the Virginia Communication and Literacy Assessment (VCLA) to be eligible for licensure. The VCLA should be taken during the semester of student teaching. It is recommended that the VCLA be taken after students have completed their English and reading course requirements. In addition, all students must take and pass the Exit Examination of Writing Proficiency to be eligible for student teaching. The University recommends that students take this exam in their junior year. All students will take and attain a passing score on the appropriate PRAXIS II specialty test in order to be eligible for student teaching and licensure. Score reports of all examinations must be on file in the Teacher Education Services Office in room 152 of the Education Building.

   Exit. Students in marketing education and technology education licensure programs must have (1) a 2.75 grade point
average overall, in the major, and in the professional education core, (2) earned a passing grade in student teaching, and (3) completed the senior assessment.

NOTE: Due to changing University requirements, national accreditation standards, and Commonwealth licensure regulations, the programs in the Darden College of Education are under constant revision. Any changes resulting from these factors supersede the program requirements described here or in the University catalog. Students should obtain current program information from their academic advisor and the Darden College of Education website at http://www.education.odu.edu.

MATH 400 History of Mathematics               _____3  
MATH 404 Fundamental Concepts of Geometry       _____3  
MATH 406 Number Theory                         _____3  
MATH 417 or 422 Inter. Real Analysis or Applied Complex Variables _____3  
MATH 400-level electives (2 courses)            _____6  

Professional Education core:  
ECI 301 Social and Cultural Foundations       _____3  
ECI 304 Educational Applications of Technology _____3  
ESSE 406 St w/Diverse Learning Needs          _____3  
ESSE 413 Human Growth and Development          _____3  
ECI 360 Classroom Management and Discipline     _____3  
ECI 408 Reading and Writing in Content Area    _____3  
ECI 453 Developing Instructional Strategies: Math _____4  
ECI 485 Student Teaching                        _____12  

UPPER DIVISION GENERAL EDUCATION  
Option A. Approved Minor, 12-24 hours; second degree or second major. (Professional Education core satisfies this requirement.)  
Option B. Cluster, 9 hours (3 hours may be in the major area of study.) Requirements for graduation (non-teacher education tracks) include a minimum cumulative grade point average of 2.00 overall and in the major, 120 credit hours, passage of the Exit Examination of Writing Proficiency, and completion of Senior Assessment.