



CURRICULUM GUIDE 2009-2010

MATHEMATICS

AS Degree: Transfer Focus

The Associate of Science Transfer Degree in Mathematics offered by Ohlone College is designed to prepare students for studying Mathematics at most universities. The core courses required in the AS Degree in Mathematics will fulfill the lower division requirements for most campuses of the UC and CSU systems. This program will enable students to develop a strong foundation in mathematics, physics, and computer studies. Furthermore, the theoretical knowledge and laboratory skills acquired by students in this program will also enhance their success with obtaining entry-level jobs that require two years of college-level math and science.

Since some curriculum requirements may vary among transfer universities, it is imperative that students entering Ohlone's AS degree program in Mathematics meet with a counselor at the start of their academic work. Counselors will assist students in preparing a Student Education Plan that will prepare them to transfer to the university of their choice. Counselors will also advise students on the general education plan that best prepares them for future transfer.

Requirements for AS Degree:

- a) Complete the Major Field courses with grade of C or better.
- b) Complete Plan A, B, or C General Education requirements. These requirements are specified in the Ohlone College catalog.
- c) Complete at least 60 degree-applicable units with a 2.0 grade point average.
- d) Complete at least 12 units at Ohlone College.
- e) Complete at least 50% of the Major Field courses at Ohlone College.
- f) Complete MATH-101B, MATH-101C, MATH-103, and MATH-104 at Ohlone College.

MAJOR FIELD

MATH-101A	Calculus with Analytic Geometry	5
MATH-101B	Calculus with Analytic Geometry	5
MATH-101C	Calculus with Analytic Geometry	5
MATH-103	Introduction to Linear Algebra	3
MATH-104	Differential Equations	5
PHYS-140	Mechanics	4

Select one of the following courses: 3-4
CS-102 Introduction to Computer Programming Using C++ (4)
CS-104A Introduction to .NET Programming (4)
MATH-111 Introduction to Matlab (3)

Select two of the following courses: 6-10
CHEM-101A General Chemistry (5)
ENGI-120 Engineering Mechanics - Statics (3)
MATH-159 Introduction to Statistics (5)
MATH-163 Discrete Mathematics for Computers (3)
PHYS-141 Electricity and Magnetism (4)
PHYS-142 Optics, Heat, and Modern Physics (4)
36-41

RECOMMENDED COURSES

The following courses are recommended because they are required in the lower division of some baccalaureate-granting universities:

ENGI-130 Electric Circuit Analysis (4)
ENGI-140 Materials Engineering (4)