



## **CURRICULUM GUIDE 2008-2009**

### **ENGINEERING**

#### **AS Degree: Transfer Focus**

The Associate of Science Transfer Degree in Engineering offered by Ohlone College is designed to prepare students for studying engineering at most universities. The core courses required in the AS Degree in Engineering 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 engineering, physics, and mathematics. 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 science and math.

Since some curriculum requirements may vary among transfer universities, it is imperative that students entering Ohlone's AS degree program in Engineering 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 a 2.0 grade point average.
- 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 ENGI-120, ENGI-130, and ENGI-140 at Ohlone College.

#### **MAJOR FIELD**

CS-116	Object-Oriented Programming Using C++	4
ENGI-101	Introduction to Engineering	3
MATH-101A	Calculus with Analytic Geometry	5
MATH-101B	Calculus with Analytic Geometry	5
MATH-101C	Calculus with Analytic Geometry	5
MATH-104	Differential Equations	5
PHYS-140	Mechanics	4
PHYS-141	Electricity and Magnetism	4
PHYS-142	Optics, Heat, and Modern Physics	4

Select two (2) of the following Engineering courses:	7-8
ENGI-120    Engineering Mechanics - Statics	(3)
ENGI-130    Electric Circuit Analysis	(4)
ENGI-140    Materials Engineering	(4)
	46-47

**RECOMMENDED COURSES**

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

CHEM-101A    General Chemistry	(5)
CHEM-101B    General Chemistry	(5)
ENGI-115    Engineering Communication	(4)
MATH-103    Introduction to Linear Algebra	(3)