

School	Freshman
Major	Freshman - Engineering

Major Requirements			
Code	Title	Credits	Description
ENGL101	Introduction to Oral and Written Skills	7	In the course of Communication Skills and Reading/Writing, students build on the strong foundation achieved in the integrated skills classes. At these levels students develop strong reading skills to increase reading speed, comprehension, and vocabulary. In writing, students learn how to compose essays in different rhetorical modes. Communication skills are refined to the point that students are able to discuss topics and make oral presentations.
ENGL151	Advanced Writing Skills	6	In this course students are exposed to materials/assignments which equip them with the skills necessary for success in the college/university environment. In these levels students are expected to understand and take notes on lectures, participate in discussions, make presentations, do library research, write research papers, and read sources related to their fields of study. At these advanced levels, students have the opportunity to take concurrent university classes for audit or credit.
MATH110	Pre-Calculus	3	Symmetry, graphs, rational functions, irrational functions, exponentials, logarithmic functions, exponential growth, trigonometric functions and their inverses, conic sections. Prerequisite: MATH 100.
MATH160	Calculus I	4	The topics of this course include rate of change, limits, continuity, inverse functions, trigonometric and hyperbolic functions, derivatives, chain rule and parametric equations, implicit differentiation, mean value theorem, curve plotting, indefinite integral, differential equations, integral rules, integration by substitution, estimating with finite sums, Reimann sums and definite integral, application to area, distance, volume and arc-length, fundamental theorem of calculus, and definite integrals, applications of integrals, volume by slicing and rotation about an axis, length of plane curves.
PHYS100	College Physics I	3	"Fundamentals of mechanics, including vectors, velocity and acceleration, falling bodies and projectiles in two motions, forces and Newton's three laws, conservation of energy theorem, Linear momentum, and circular motion. Fundamentals of mechanics, including vectors, velocity and acceleration, falling bodies and projectiles in two motions, forces and Newton's three laws, conservation of energy theorem, Linear momentum, and circular motion."

PHYS160	College Physics	3	Fundamentals of mechanics, including vectors, velocity and acceleration, projectiles in two motions, forces and Newton's laws, conservation of energy theorem, Linear momentum, Electric forces and Electric Fields, electric potential energy and voltage, Ohms Law, Magnetism, reflection and refraction, mirrors and thin lenses. Prerequisites: ENGL151
SSCI200	Introduction to Sociology	3	The aim of this course is to drive the student to grasp the overflows of sociology. In other words, to grasp the meanings of capacitating or incapacitations of individuals, groups, institutions, politics, economics, religion and etc. on the basis of their societal functioning.
CHEM160	Freshman Chemistry II	3	This course will cover the fundamental principles of chemistry such as the properties of gases and mass relationship in chemical reactions, atomic structure and bonding, molecular geometry, periodic properties and chemical reactions of elements. The basic concepts of chemical equilibrium, thermochemistry, electrochemistry and chemical kinetics will be also covered.
SSCI215	Introduction to Music	3	.