

Aeronautics

The rapid development of aerial navigation has led the Institute to offer instruction in the important branches of this subject. The object of the course is to prepare students for experimental and practical work in aeronautics.

The elements of what is known of the scientific principles upon which the art of flying is based are taught. Students are made acquainted with the work and results of the principal experimenters, and also with the methods of construction now used in successful air ships and aeroplanes, including motors. These courses are elective and open to Juniors and Seniors of all departments.

SUBJECTS OF INSTRUCTION

I. AERODYNAMICS.

The work in this subject includes the study of fluid resistance, stream line forms, the economics of flight, the theory and efficiency of the screw propellor, and experimental aerodynamics. Published accounts of experiments, including the latest available, are drawn upon for data on which to base mathematical studies of the problems of flight.

II. AERONAUTICAL DESIGNING.

The studies include the stresses in the principal types of balloons, air ships and aeroplanes now in use, and the designing and detailing of these structures.

III. GAS ENGINES.

Elementary theory, construction and practical working of light-weight gas engines.

The courses were originally meant to begin next fall, but a number of Seniors wanted to take the first named course, so a class was started at the beginning of the second semester. The class has proved very interesting and beneficial to all.

"Education is the chief defense of nations."