



Enrollment report

The Fall semester ended with 350 students, or 81.6%, successfully completing EF 151, Physics for Engineers I. The success rate was up slightly from the previous Fall, which was 78.2%. There are 355 students enrolled in EF 152, Physics for Engineers II, this semester, or a 44% increase over the 246 students last spring. We are pleased with the large increase in number of engineering students. We have reached our capacity, and due to financial constraints, we will not be able to accommodate any increase in enrollment next year. Admissions are being carefully monitored for the coming Fall, and we unfortunately may not be able to accept all qualified students.

Are you smarter than a freshman?

You may wonder what is covered in our two physics courses. Below is a sample of a few questions from the fall final exams. See how many you can answer.

EF 151, Physics for Engineers I

A motorcycle going around a 150 ft radius curve has a speed of 20 ft/s and is slowing down at the rate of 3 ft/s^2 . What is the magnitude of the total acceleration?



An 8 ft long elastic cord ($k = 0.29 \text{ lb/ft}$) is attached to the 11 ft high ceiling in Estabrook 111. A tennis ball ($w = 0.125 \text{ lb}$) is fastened to the other end of the cord. The ball is pulled down to the floor and released. How close does the ball come to hitting the ceiling?

EF 152, Physics for Engineers II

You are driving your pickup truck at 20 mph. A tuba player in the back of the truck emits a sound with a constant frequency of 75 Hz. Determine the frequency that a person in a car moving at 60 mph towards you hears. Assume the speed of sound is 767 mph.



Calculate the change in entropy of 2 kg of water when it is heated from liquid water at 60°C to steam at 100°C .



Students who leave engineering

One of the original goals of the Engage program was to increase retention, and particularly increase the retention of top students. In the fall, we had 73 students leave the College of Engineering. Half of these (37) had not qualified to take Calculus, so were not in any of our courses. Of the remaining 36, 14 did not enroll in either the university or an engineering course, 12 either withdrew or did not pass the first engineering course (EF 151/157), 3 earned a C, and 7 earned a C+ or better. Although we don't like to lose any of our good students, the number of good students leaving in the fall was small. The most common reason for a good student leaving the college is that they are pre-med, and feel they can make better grades in another major. We will continue to monitor students leaving the college in the spring.

Answers: EF 151 - 4.01 ft/s^2 , 0.56 ft , EF 152 - 83 Hz, 13100 J/K