Homework 2: Keys to Success

Matthew Shuman

Due October 15th, 2009

1 You Can Do It!

The main focus of this assignment is to help every student in ECE 111 form a plan for what they want from their education. These topics come directly from Chapter 1 of the textbook: Keys to Success in Engineering Study.

1.1 Finding Success

Success is the achievement of something desired, planned, or attempted. After you put years and thousands of dollars into your college education, what do you want from your ECE degree?

Write answer here

1.2 60 Hour Rule

The 60 hour rule is quick way to see if you’re doing too much. Use this formula to see how many credits you could take per term.

\[
\text{Credit Hours} \leq \frac{60 - \text{Work Hours}}{3}
\]

Are you violating this rule?

Write answer here

2 Microcontrollers

Atmel Microcontrollers are a very inexpensive way to develop projects. Every future project in ECE 111 will use an Atmel Microcontroller, the Atmel Tiny26.

Lookup the cost of the Tiny26 Microcontroller from Digikey

http://search.digikey.com/scripts/DkSearch/dksus.dll?Detail&name=ATTINY26L-8PU-ND

Write the cost here

Look up a project on Youtube that uses an Atmel Microcontroller

What does the Atmel Microcontroller do for the project you researched?

Write answer here

3 Microcontroller Packages

Integrated Circuits, ICs, are made using many different types of packages. The Tiny26 in lab is a DIP, while the 5 volt regulator is in a TO-92 package. The ECE 272 CPLD uses a 44 pin QFP. The OSWALD OMAP processor is a BGA package type with over 400 pins!

Insert a picture for the DIP, TO-92, QFP, and BGA package types
This link might be helpful


Figure 1: Caption for the image

Write answer here