What is Software Engineering?

Software engineers use their expertise in computer science, engineering, and math to design, develop and evaluate software for companies that configure and install computer systems. Software engineers work on cutting-edge technology and manage projects through the entire process. They design, construct, test, implement, and maintain software used in items ranging from cell phones, MP3 players, and video games to automobiles, airplanes, household appliances, and medical equipment. For example, they help make and improve safety-critical systems to help airplanes stay in the air and land safely, and control systems that run medical equipment such as pacemakers and X-ray machines. They also help create virtual reality tools to help biologists and doctors in their work.

Many people have a difficult time distinguishing the difference between Computer Science, Computer Engineering, and Software Engineering. But how I would describe it is that Computer Science involves the theory or principles. Computer engineering involves the practice, which is the problem solving and design and analysis. Software Engineering involves the process or the lifecycle development. An example of lifecycle development is an operating system like Windows 7. Software engineers basically work a cycle of designing a fix for a problem, implementing the solution, receiving feedback on new “bugs” or problems and then addressing those again. Lifecycle development essentially means that the product is constantly being analyzed and improvements being made.

Numbers:

- Undergraduates: 127 students (Spring 2011)
- Average starting salary: $60,000
- 98 % In-Profession placement rate within 6 months after graduation

Clubs and Projects: