Major Day Information Sheet

Division: B.S. in Computer Science
Location: LLC 206
Contact Person and Contact Information:

Dept Chair Prof. Ping-Tsai Chung
Department of Computer Science
Associate Professor of Computer Science
718-488-1073 Fax: 718-488-1125 pchung@liu.edu

Executive Secretary Sandra Long
718-488-1073
Fax: 718-488-1125
sandra.long@liu.edu

Phone Number: 718-488-1073

Major: B.S. in Computer Science degree

Description of Major: The 128-credit B.S. in Computer Science degree focuses on the concepts and techniques used in the design and the development of advanced software systems, network designs and systems administration. Students in this program explore the conceptual foundations of computer science – its fundamental algorithms, programming languages, operating systems and software engineering techniques. In addition, they can choose from innovative electives, including artificial intelligence, database systems, graphical user interfaces, game development, e-commerce and computer networks, and system and network administration among others. As with the introductory sequence, these advanced courses stress hands-on learning.

Is a minor available? YES, we offer two minors, one is Computer Science minor, and the other is Technology Minor.

The minor in computer science is designed to give the student of any discipline an excellent working knowledge of the field. A student with a computer science minor will be able to integrate the practices of his or her major field of study with the growing area of computers. The minor gives the student complete background knowledge of software design and of tools available to those working in the computer field. The computer science minor requires the completion of six courses (18 credits), which include:

CS 101 Fundamentals of Computer and Information Sciences
CS 102 Programming I
CS 117 Programming II
CS 118 Computer Architecture
CS 130 Algorithms and Data Structures
CS 150 Operating Systems

The technology minor is designed to provide students with a broad introduction to computer technology. The instruction is focused on developing the skills needed in areas such as databases, networks, Web development, and privacy and security, which are essential in today's work environment. The minor in technology consists of five courses (15 credits), which are:

CS 101 Fundamentals of Computer and Information Sciences
CS 102 Programming I
CS 148 Database I
CS 154 Computer Networks
CS 120 Web Development or CS 158 Privacy and Internet Security

It is suggested that students begin a computer science or technology minor in the sophomore year because of the prerequisite dependencies in the above courses.

Students in this major should enjoy the following subjects:

Computer Programming, Database Systems, Computer Applications such as Web applications, Internet Applications, Mobile applications, and Wireless applications, Computer Networks, Operating Systems such as Microsoft Windows, Unix, and Android.

Special requirements to be accepted into this major (ex. Exam, volunteer experience, GPA):

To be admitted to this program you must:

- Have an overall grade-point high school average of 80 or better
- Submit a high school transcript
- Transfer students must present an overall grade-point average of at least 2.5
- Submit a completed application to the Office of Admissions (see Submitting an Application for Admission)
-

Classes to consider if you are interested in this major:

CS 101 Fundamentals of Computer and Information Sciences
CS 102 Programming I
CS 117 Programming II
CS 118 Computer Architecture
CS 120 Web Development or
CS 130 Algorithms and Data Structures
CS 148 ~CS 149 Database Systems I
CS 150 Operating Systems
CS 154 Computer Networks
CS 158 Privacy and Internet Security
And other Special topics classes in E-commerce, Web services, Medical Informatics and Mobile Computing Platforms.

Examples of jobs alumni of this major have obtained:

System analysts, programmers, or software developers, Information Technology professionals, technical managers, computer scientists, and database and network administrators for the government, health care and pharmaceuticals, business, financial companies and schools.

Graduates of the B.S. in Computer Science program have gone on to highly successful careers with Bloomberg, JPMorgan Chase, Accenture, New York City government agencies, NYU Medical Center and other technology-based corporations.