< C Programming Fundementals > Course Description

**Course Number：** 3132100029

**Course：** C Programming Fundementals

**Credit(s)：** 3 credits, 48 hours

**Course Description：** The course teaches programming concepts and methodologies. It introduces structured programming principles and gramma of C programming language, so that students have the ability to design simple algorithms with C. After the course, students shoule be able to design a simple algorithm, input it into a computer and edit it, then debug, modify, improve and execute the program. They should master the sequential, selection and iteration structure of C, be able to use array, function, point and file to improve the performance of C program, and express algorithms with C language.

**Prerequisite(s)：** Computer Basics

< Data Structures > Course Description

**Course Number：** 3132100072

**Course：** Data Structures

**Credit(s)：** 2 credits, 32 hours

**Course Description：** This course is the integrated specialized basic course of computer science, and the foundation of non-numerical programming. And the course also belongs to the basic course of understanding the computer for non-computer science students. This course aims to introduce the principles of organizing and operating data by computer, and the method of evaluating the efficiency of algorithms. Moreover, the course sets the foundation of learning other specialized course of computer science and developing software. The main contents include: linear structure, tree, graph, searching algorithms, and sorting algorithms.

**Prerequisite(s)：** C Programming / C++ Programming

< Internet Applications > Course Description

**Course Number：** 3132100189

**Course：** Internet Applications

**Credit(s)：** 3 credits, 48 hours

**Course Description：** The course aims to provide an in-depth knowledge of contemporary and widely-deployed Internet Applications, providing the students with an insight into their functionality and inter-relationship. This includes DHCP, DNS, SNMP and traditional non-real-time data delivery services such as e-mail, file transfer protocols, telnet and WWW. In addition, new real-time and low access latency services including voice over IP, multimedia transport and multimedia retrieval technologies are addressed. The Internet Applications course is complementary to the Internet Protocols course as it is examining OSI layers 5-7, while the latter considers layers 1-4.

**Prerequisite(s)：** Programming Fundamentals, Internet Protocols