



ICT-U CAMEROON, P.O. Box 526 Yaounde, Cameroon

Schools and Programs

DETAILED ICT-U PROGRAMS AND CORRESPONDING CREDIT HOURS

Important note on English as a Second Language (ESL) and International Computer Driving License (ICDL):

English as a Second Language (ESL): The courses detailed in this document are all taught in English. However, students with French or Spanish as their first language will be offered the opportunity to go through a one-semester intensive English as a Second Language (ESL) program to prepare the students for our ICT University courses. This one semester program DOES NOT count towards the student's degree. The details of the ESL program follow the explanation of the ICDL.

International Computer Driving License (ICDL):

The ICDL demonstrates a student's ability to use a computer and its most popular computer applications. Candidates have to pass tests in the following seven modules as the first three (3) credit hour course at ICT-U. The ICDL program is for anyone who wishes to become fully competent in the use of a computer and common applications. Each ICDL module provides a practical program of up-to-date skills and knowledge areas which are validated by a test.

For students to achieve a solid base of skills and knowledge, therefore attaining a minimum level of digital literacy, it is recommended that candidates complete and attain certification in a minimum of four ICDL modules. Students are required to take training on each module prior to taking the test. Each module is tested separately with each test lasting no longer than 45 minutes. For a recommended level of ICT competence to be achieved, a certification of a minimum of seven ICDL modules is appropriate. In order to achieve the ICDL certification, individuals must pass a test for each of the seven modules.

ALL ICT-U students MUST take this course which counts for three (3) credit hours towards their degree. This course will be open to members of the public who just wish to do this as their part of their professional development, without engaging in any of ICT-U's degree programs.



- Module 1 - Concepts of ICT
- Module 2 - Using the Computer and Managing Files
- Module 3 - Word Processing
- Module 4 - Spreadsheets
- Module 5 - Using Databases
- Module 6 - Presentation
- Module 7 - Web Browsing and Communication
- Module 8 - 2D Computer Aided Design
- Module 9 - Image Editing
- Module 10 - Web Editing
- Module 11 - Health Information Systems Usage
- Module 12 - IT Security
- Module 13 - Project Planning

English as a Second Language (ESL) Detailed Program: Organized in five modules

English as a Second Language Module 1

Conversation Skills Are Developed

• Reading and writing are important skills, but we begin the ESL program with emphasis on listening and speaking. The main focus of the program is developing one's ability to use English in everyday personal and workplace situations.

The student will receive a student assignment booklet and CD which are designed to help you learn to speak English. The student needs to follow the directions in the student assignment booklet to understand how and when to use each component of the program.

English as a Second Language Module 2

Literacy in the Workplace

The student will learn the essentials of basic English necessary to survive on the job.

- Completing simple forms and asking for directions
- Identifying places at work
- Following simple instructions for using common machines at work
- Greeting customers, taking their orders and offering assistance
- Understanding good work habits
- Working with money, both at work and at home
- Following safety rules at work
- Reading help wanted ads, and completing a job application

English as a Second Language Module 3



Everyday English

The student will learn the essentials of basic English necessary to survive in any English speaking country

- Introducing and completing an identification form
- Reading maps, following directions and using a payphone
- Calendars, times and dates, store hour signs, and the weather
- The supermarket, reading price tags and expiration dates
- Shopping for clothes, comparison shopping, and writing checks
- Buying or renting a home, asking for simple repairs
- Making doctors' appointments, listening to doctors' instructions
- Reading help wanted ads, completing job applications
- Using public transportation and reading traffic signs

English as a Second Language Module 4

Basic Skills in Reading

The student readings include a variety of sources such as popular literature, classical literature, articles, reviews, and workplace-related materials.

- Fiction - includes many different examples from novels and short stories
- Nonfiction - biographies, autobiographies, essays, magazine articles, reviews
- Poetry and Drama - popular, social, and classical aspects of each are covered
- Prose and Visual Information - brochures and ads, calendars and schedules, forms and documents, manuals and handbooks, drawings and diagrams, charts and graphs

English as a Second Language Module 5

Basic Skills in Writing

Writing is a form of expression and communication. When the student writes well, others can understand what they are saying. The student will learn to use the writing process to their advantage.

- Essay and Creative Writing - the writing process, narrative writing, descriptive writing, expository writing, persuasive writing
- Workplace and Personal Writing - letter writing, job search writing, workplace writing, explanatory writing, report writing
- Grammar Guide - mechanics, usage, sentence structure
- Writing Handbook - models, editing, checklist, proofreading



ACDEMIC MAJOR 4: DATA COMMUNICATIONS AND NETWORKING (DCN)

BACHELOR OF SCIENCE IN DATA COMMUNICATION AND NETWORKING (DCN)

Program Overview

Graduates upon completing this degree program are expected to develop the skills and knowledge essential to design, build, maintain and manage network and communication systems in any organization. Consequently, students are taught core components of communication, such as TCP/IP Programming, Internet Computing, High-Speed Networks, real time systems and Client Server Computing.

This is a four year program (or three years if a student takes classes during the summer semesters) for full time students, and students are required to earn at least 48 credit hours, complete a research project supervised by one of the faculty members and also complete a three month mandatory summer internship. A list of some of the required courses is described below:

Computer Network Fundamentals (3 credit hours)

This course serves as a prerequisite for many other data Communications courses. Students are taught the different elements of a computer network or data communications system, as well as media, signals, encoding and bandwidth in this course. Students are introduced to the concept of local area networks, cable modems and wireless networks. Other topics covered in this course include network applications, java, program to interface protocols and IP addressing.

Programming (3 credit hours)

This is an entry-level course which is required as a prerequisite for other data communications courses. Students are introduced to the basic concepts of computer programming and programming language. Topics covered include algorithms, logic, design and data types, as well as object-oriented programming and C++ concepts.

Introduction to Operating Systems (3 credit hours)

This course focuses on operating system configuration and functions. Also discussed in this course are topics like: Virtual memory, deadlocks, file systems, security, device management, and communication. Students learn how to install, configure and manage an operating system within a computer network. It usually requires an introductory course in computer networks as a prerequisite.



Network Communication Course (3hrs)

Students are taught how computer networks operate and the fundamentals of data communication. The course covers topics, such as routing algorithms, DNS, HTTP, Wi-Fi, peer-to-peer systems, and protocol verification.

Wireless Communications Course (3hrs)

This is an advanced level course, teaches students wireless networks, signals and systems. Among the topics covered are: performance and technologies and wireless metrics, antennas. In addition to the course work, Students are required to examine wireless companies and the innovations within that industry.

Other required courses for this program include the following:

- Object Oriented Programming (3hrs)
- Ethics & Professional Conducts (3hrs)
- Operating Systems (3hrs)
- Software Engineering Fundamentals (3hrs)
- Computer Networks (3hrs)
- Probability & Statistics (3hrs)
- Routing & Switching (3hrs)
- Cryptography & Data Security (3hrs)
- Network system for Multimedia (3hrs)
- Internet Computing (3hrs)
- Client-Server Computing (3hrs)
- Real Time Systems (3hrs)
- Mobile & Wireless Communications (3hrs)