# 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

# I. BACHELORS DEGREE PROGRAMS (BSc) IN INFORMATION AND COMMUNICATIONS TECHNOLOGY

## ACADEMIC MAJOR 1: INFORMATION AND COMMUNICATIONS TECHNOLOGY (ICT)

## A. TOP-UP BACHELOR OF SCIENCE DEGREE IN INFORMATION & COMMUNICATIONS TECHNOLOGY

### Program Overview

The Top-Up Bachelor of Science in ICT is a three semester program for students taking classes in the Spring, Summer and Fall semesters. Students are required to complete at least 15 credit hours selected from a list of the core and required courses offered. All students prior to graduation must carry out some scientific research project supervised one-on-one by a faculty member. See below for a list of some of the selected core courses:

**Course Name:** *Management Information Systems (3 hours)*
*Course Content:* The course will examine the theoretical underpinnings of the competitive advantage of information systems, information systems development process, the practical and policy aspects of information systems planning, and the ethical issues in information systems. This course covers the application of people, documents, technologies, and procedures by managers to solve business problems, tied to the automation or support of human decision making. Executive Information Systems (EIS) and Decision Support Systems (DSS) are discussed in detail.

**Course Name:** *E-government and Institutional Change (3 hours)*
**Course Content:** The course explores how ICTs are affecting how people interact with government, and how governments are using and managing ICTs to promote transparency and offer better information and services to the public. The course will cover methods for developing and accessing e-government applications using Internet, mobiles and other forms of ICTs, and the policy, privacy and ethical issues relevant to the implementation and management of e-government systems. Other topics include the use of ICTs in non-governmental organizations, tele-democracy and aligning IT resources in the public sector.

**Course Name:** *ICT and Society (3 hours)*

**Course Content:** This course examines the use of ICTs, Internet applications, multimedia tools and other advanced applications for the provision of multiple services to society, including areas that have little exposure to the outside world. This course provides the participant with a unique opportunity to learn about the application of ICTs in resource-poor environments. This course exposes "best practice" models for ICTs in society.

**Course Name:** *Information Technology Policy and Strategy (3 hours)*

**Course Content:** The course provides a comprehensive understanding of the strategic value of information systems, and the planning and development of strategies and policies to support the use of information systems in the context of organizations and institutions. This course explores the core information systems capabilities which enable managers to understand the processes of policy-making, develop competence in communicating with policy makers, demonstrate leadership in technology strategy, manage ICT outsourcing and risk management, develop literacy on technology law, and develop the knowledge to identify, acquire and implement new technology applications to sustain competitive advantage.

**Course Name:** *Information/Cyber Space (3 hours)*

**Course Content:** The course provides an in-depth understanding of security issues in contemporary information systems. Social, scientific and legal measures that address the problem of security in information systems are discussed with a view to preparing the scholar for further work in evolving robust security solution to emerging problems. Spamming, phishing, intrusion detection, anti-spam systems, the use of proxies and cyber forensics are explored extensively. Policy issues are also examined as it affects the trans-national nature of cybercrime. In this regard, the Top-up BSc in ICT program is broad-based and covers a range of technical and soft skills that Information Systems and ICT scholars are expected to possess.

**Course Name:** *Special Topics in Contemporary ICTs (3 hours)*

**Course Content:** This course provides a broad spectrum of technical, social, economic, political, and legal and usage issues that affects the usage, adoption and introduction of ICTs in organizations and governments. It provides a forum to discuss emerging trends in ICTs, issues of the evolution of information technology, its application, and value added as well as concerns.

**Course Name:** *ICT Diffusion, Transfer and Adoption (3 hours)*

**Course Content**: This course examines the interplay between the diffusion, transfer, adoption and impact of ICTs on resource poor environments and institutional elements that shape it. The course explores the diffusion, transfer and adoption of ICTs at three levels: individual, firm and national. It will cover the theories of technology diffusion and transfer and the behavioral, cultural and environmental factors which influence adoption and usage.

**Course Name:** *Quantitative/Qualitative Research Methods (3 hours)*

**Course Content:** A variety of quantitative research methods available for applied research are taught, providing you with sufficient background to choose techniques and methods suited to different data-sources and models. The focus is on the way techniques relate to theory, and on the insights that can be drawn from their application. You will learn the interpretation and appraisal of results, and emphasize applied work. Example topics include: Probability distributions, Descriptive statistics, Testing hypothesis, Simple and multiple regression, Linearity, nonlinearity and categorical variables, Properties of regression coefficients, and Time series models. The Qualitative aspect will cover basic philosophical concepts and tools, epistemology, the principal types of qualitative data, study of research design, the links between theory, methodology and choice of research techniques, issues of qualitative research validity, reliability, bias and ethics, and the analysis of qualitative research data.

*Research Project (3 hours)*

The project is a scholarly research that provides students the opportunity to create new or add to existing knowledge, solve problems in business, health care, government, society and education by harnessing the knowledge acquired in the courses taken. We encourage students to select research themes which address the challenges of developing economies. Students are expected to complete a thesis of not less than 25 pages or more than 10,000 words.