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
ACADEMIC PROGRAM 4: DIPLOMA IN ICT EDUCATION

DIPLOMA IN ICT EDUCATION

Program Overview

The Diploma in ICT Education program is an intensive three-month Diploma program. Modules are taught through lectures, tutorials, and research seminars. The international reputed faculty will conduct online sessions (seminars) and students will be required to take active part in a 3 weeks orientation and fundamental concepts review sessions, attend 8 weeks of Lectures, a week for final examination at an ICT-U campus. Students will also present a project on an assigned topic. The program consists of 21 credits of coursework, 3 credits seminar course, and 3 credits for a project, making a total of 27 credit hours. The program structure is outlined below.

Structure of Diploma in ICT Education

<table>
<thead>
<tr>
<th>Category or Area</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>21</td>
</tr>
<tr>
<td>Seminars</td>
<td>3</td>
</tr>
<tr>
<td>Project</td>
<td>3</td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>27</td>
</tr>
</tbody>
</table>

Core Courses

- Philosophical and Sociological Foundations of Education
- Development of Teaching and learning process
- Educational Measurement and Evaluation
- Information Systems and Educational Technology
- Programming Fundamentals
- OS, Architecture & Organization
- Networking & Applications

Seminars
• Social and Professional Issues in ICT Education

Project

• ICT Pedagogy

Course Name: Philosophical and Sociological Foundations of Education (3 hours)

Course Contents: The course will provide the students with an understanding of the meaning and concept of education, the relationship between philosophy and education, the educational contribution of educational thinkers. It will also familiarize the student with educational thoughts in classroom, the sociology of education, Social Neo-construction, the nature of education - in terms of progressive trends - Formal and Informal, Nonformal, Continuous and Distance Education, e-learning, educational philosophies such as idealism, naturalism and pragmatism.

Course Name: Development of Teaching and Learning Process (3 hours)

Course Content: This course will introduce the students to the different stages of stages of human development with special reference to adolescent learners. Develop understanding of the process of children learning in the context of various theories of learning and teaching. Provide understanding on intelligence, aptitude, personality, creativity, motivation and various types of exceptional children. Develop skill of effective teaching-learning process and use of psychological tests. Understand the principles and techniques of attitudinal and behavior modification. Differentiate between growth and development in the context of learning and examine stages and types of development (Physical, Emotional, Motor, Mental and Social)

Course Name: Educational Measurement and Evaluation (3 hours)

Course Content: This course will acquaint the student teacher with the basic scientific concepts and practices in educational measurement, evaluation and tests. We will teach student to tabulate and find out some standard meaning from the raw scores by using statistical procedures. Develop skills and competencies in the student teacher for the use of techniques in the field to enable the student teacher to interpret the result of educational evaluation & statistics. Various models of educational evaluation will be taught. The concept of measurement and evaluation, the difference between measurement & evaluation, continuous evaluation, steps of evaluation, scale of measurement (Nominal, Ordinal, internal & ratio scale) and characteristics of evaluation will be covered. Quality of a tests such as reliability concept, method test, split - half, parallel & rational method, methods with formula, validity concept and types will be covered. Concept of intelligence and measurement of
intelligence, concept of IQ, names of intelligence tests with their constructers, individual and group tests of intelligence aptitude test concept and uses will also be covered.

**Course Name: Information Systems and Educational Technology (3 hours)**

**Course Content:** The course will explore the collection, organization, modeling, transformation, presentation, safety and security of data and information. 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), Decision Support Systems (DSS), and Management Information System (MIS) are discussed. Data Organization Architecture as in Database systems is also examined. We will also examine Educational technology concept, need and functions. The development of educational technology transfer from teacher centered instruction to learner centered instruction in reference to material used before machines, print material, photography, recording, audio & video recording, television, computer, and internet. The emerging role of teacher in developed Educational technology such as presentation in direct teaching, managing teaching resources and facilitating or producing teaching material will be examined. Communication process-concept, nature, principles, functions, types of effective classroom communication, obstacles in communication and teachers’ attempts to overcome them, need and importance of computer in education, need and relevance of information technology in modern world and the importance of knowledge of using computers by the teachers in classroom teaching will be taught.

**Course Name: Programming Fundamentals (3 hours)**

**Course Content:** This course will examine the skills and concepts that are essential for good programming practice and problem solving. This course covers fundamental programming concepts, basic data structures, algorithms and problem-solving, programming languages and software engineering.

**Course Name: OS, Architecture & Organization (Platform Technologies)(3 hours)**

**Course Content:** This course will explore various platforms required in carrying out the functions of selecting, deploying, integrating and administering support to a computer system. This course covers fundamentals of hardware and software and how they integrate to form essential components of ICT systems focusing on Operating Systems, Computing Infrastructures, Firmware, Hardware, Data Representation, and Computer organization focus is also given to Human Computer Interaction.

**Course Name: Networking and Applications (3 hours)**
**Course Content:** This course will explore the foundations of Networking and aspects of Net-Centric Computing. The course covers data communications, inter/intranetworking, Network Security, Network Management including application of networking to multimedia, information storage and distribution, and the World Wide Web.

**Course Name: Social and Professional Issues (3 hours)**

**Course Content:** This course will look at the historical, social, professional, ethical and legal aspects of computing. This course examines the use of ICTs, Internet applications, multimedia tools and other advanced applications for the provision of multiple services to society. The course also provides an in-depth understanding of security issues in contemporary information systems. Social, scientific and legal measures that address the problem of insecurity in information systems are discussed. Spamming, phishing, intrusion detection, ant-spam systems, the use of proxies and cyber forensics are also explored.

**Project (3 hours)**

The project is a scholarly research that provides students the opportunity to create new or add to existing knowledge or solve problems. Projects shall focus on the teaching (pedagogy) of ICT. Students are encouraged to select project themes which address the challenges of the teaching (pedagogy) of ICT/Computer Science especially in developing economies. Students are expected to complete a project of not less than 20 pages or more than 10,000 words.

**Diploma in ICT Education Project**

The candidates will be supervised by a project/course supervisor(s) chosen from our internationally recognized ICT professors. This course supervisor will monitor the student’s coursework as well as the projects.

**Diploma in ICT Education Project Proposal**

The proposal is an introduction and a summary of the student's project goals and proposed methods of investigation. The purpose of the proposal is to 1) agree on the project topic and expected deliverables, 2) assess the project quality and relevance, and 3) establish a timeline. The student is required to give an oral presentation of the proposal, which must be approved before the student can proceed with the research.

**Diploma in ICT Education Project Evaluation**
The candidates will be supervised by a project/course supervisor(s) chosen from our internationally recognized ICT professors.

Summary

This program provides a creative and challenging educational platform on which students can develop their potentials. Selection to the program is very competitive and applicants are encouraged to provide sufficient documentation which reflects their ability to undertake this program. Candidates are also expected to select the ICT-U Campus where they will attend classes and arrange for accommodation and feeding.