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

ASSOCIATE DEGREE PROGRAMS

I.   ASSOCIATE DEGREES

ACADEMIC MAJOR 1: ASSOCIATE DEGREE IN ENGINEERING (AS)

ASSOCIATE OF SCIENCE IN ENGINEERING (AS)

Program Information:

Coursework for the AS in Engineering transfers to four-year baccalaureate engineering programs in the United States of America or continue at one of ICT University's local campuses based in developing nations. Students in this program will have the option to specialize in Power Systems and Renewable Energy such as Solar Energy and Wind Energy Systems.   Students should use the table below in selecting courses based on the requirements of the transfer institution. Students should also plan a program beyond the minimum degree requirements listed in order to transfer into the junior year of their engineering program. Hence, it is very strongly encouraged that students work closely with the academic counselors at ICT-U to do so. Like all our other Associate programs, this program takes two years for full-time students taking classes in all three semesters annually (Spring, Summer and Fall semesters).

Program Goals:

By completing this program, students will achieve the following learning goals:

1) Comprehend and apply fundamental engineering concepts;

2) Understand and apply the engineering design process;

3) Present clear and accurate solutions with respect to mathematics and units of measure.

Developmental Courses:

Some students may need preparatory course in the areas of English or Mathematics. Courses numbered below 1000 will not apply toward this degree.

Graduation Requirements:

• A minimum cumulative grade point average (GPA) of 2.5

• Completion of specific degree requirements.

(Total of 60 credits)

Program Requirements:	**21 credits**
☐ ENGR 1100 Introduction to Engineering	3
☐ MATH 2210 Differential Equations	3
☐ MATH 2220 Multivariable Calculus and Vector Analysis	3
☐ CHEM 1061 Principles of Chemistry I	3
☐ CSCI 1106 Fundamentals of Computer Science I	3

Students must select one of the following:

☐ MATH 2200 Linear Algebra	3
☐ MATH 2201 Introductory Linear Algebra	3

Additional Requirements   **9 credits**

Select a minimum of 10 credits from the following list of courses. Students interested in Power Systems and Renewable Energy must take the following three courses from the list below (which will count as the 10 selected credit hours):

- ENGR 2210 Power Electronics(3hrs)
- ENGR 2220 Power System Prototypes (3hrs)
- ENGR 2230 Solar and Wind Power Systems (4hrs)

All the above courses are heavy in both theory and hands-on laboratory practice whereby actual power systems will be developed as part of the program. Hence, a student graduating from the Power Systems and Renewable Energy Associate of Engineering program will be ready for employment in that domain.

In order to transfer to another ICT University campus, plan a program beyond the minimum degree requirements.

ENGR 1111   Engineering Graphics (3hrs)

ENGR 2219   Linear Circuits I (4hrs)

ENGR 2210 Power Electronics (3hrs)

ENGR 2220 Power System Prototypes (3hrs)

ENGR 2230 Solar and Wind Power Systems (4hrs)

ENGR 2240   Thermodynamics (3hrs)

ENGR 2241   Statics (3hrs)

ENGR 2242   Dynamics (3hrs)

ENGR 2243   Mechanics of Materials (3hrs)

CHEM 1062   Principles of Chemistry I (4hrs)

CHEM 2061   Organic Chemistry I (5hrs)

CHEM 2062   Organic Chemistry II (5hrs)

CSCI 1107   Fundamentals of Computer Science II (4hrs)

CSCI 2253   Assembly Language Programming (4hrs)

MATH 2100 Discrete Mathematics (4hrs)

General Education Requirements (30 credits)

Students must complete at least 30 credits from the courses listed. You must complete at least one course in 6 of the 10 goal areas. One course may satisfy more than one area, but the course credits may be counted only once.

1. **Communications**
   ENGL 1121   4
2. **Critical Thinking**
3. **Natural Science**
   PHYS 1327, 1328   12
4. **Mathematical/Logical Reasoning**
   MATH1400, 1401,   10
5. **History/Social/Behavioral Science**
6. **The Humanities and Fine Arts**
7. **Human Diversity**
8. **Global perspective**
9. **Ethical/Civic Responsibility**
10. **People and the Environment**