PROGRAM SPECIFICATION

Program title: **INFORMATION TECHNOLOGY**

Training level: **University Degree**

Name of final award: **Engineer of Information Technology**

Code: **52480201**

Awarded by: **Lac Hong University**

Valid for cohort: **Enrolments since 2017**

Updated on: **July 2017**

1. BRIEF INTRODUCTION

1.1 Program Education Objectives

Right after graduating from IT program, IT graduates will:

• PEO1: Be sufficiently equipped with fundamental knowledge of social sciences, humanities, engineering, science and technology.

• PEO2: Be able to develop their own capability of discovering new knowledge, solving practical problems and thinking systematically for lifelong learning.

• PEO3: Be equipped with teamwork skills and ability to connect with other professional sectors.

• PEO4: Be able to develop their competences in identifying, analyzing, designing, deploying and operating IT systems in accordance with requirements by organizations and enterprises using IT.

1.2 Career Opportunities

IT graduates will be able to work at the following positions:

- Assemblers and installers of network system, network services and server for small and medium-sized businesses;

- Administrator of the network;

After graduating for 2-3 years, IT graduates can take higher positions as:

- Managers of information technology projects;

- Managers of information systems in enterprises;

- Solution providers in information technology;

In addition, IT graduates are able to pursuit their postgraduate studies to obtain master degrees and doctoral degrees.

1.3 Viewpoints in program development

This training program is designed and developed based on the practical demand on high quality human resources in information technology in Dong Nai province. It is also based on the feedbacks and inputs through official surveys, job fairs, annual meeting to review learning outcomes as well as annual meetings with Alumni.

1.4 Mode and Duration of Training

- Mode of training: Regular Full-time;
- Duration of training: 4.5 years.

1.5 Reference Points to Inform Program Outcomes

Stakeholders' surveys

2. ADMISSION CRITERIA

Students enrolled in IT program must satisfy one of the following two criteria:

(1) Passed National high-school exam with a score not lower than the minimum score set by MOET annually; or,

(2) Graduated from a high-school with a total score of related subjects in K-12 not lower than the minimum score set by MOET annually.

3. EXPECTED LEARNING OUTCOMES

By completing IT program, graduates will be able to demonstrate and attain the following expected learning outcomes:

- ✓ ELO1   Demonstrate professional ethics and social responsibility;
- ✓ ELO2   Apply the fundamental knowledge of computer science and mathematics to solve some computational problems;
- ✓ ELO3   Be able to communicate effectively with different objects;
- ✓ ELO4   Be able to work in groups;
- ✓ ELO5   Analyze technical requirements in accordance with a specified solution;
- ✓ ELO6   Develop proper applications to satisfy analyzed requirements;
- ✓ ELO7   Be able to analyze the impact of computers on individuals, organizations and society;
- ✓ ELO8   Demonstrates an understanding of the role of IT in advancing their prospective careers;
- ✓ ELO9   Use new technologies for system development.

4. COURSES AND RELATIONSHIPS WITH EXPECTED LEARNING OUTCOMES

Semes-ter	Course Code	Course Name	Number of Credits				Expected Learning Outcomes N: No relation; L: Low; M: Medium; H: High relation								
			Theory	Practice	Exercise	Total	ELO1	ELO2	ELO3	ELO4	ELO5	ELO6	ELO7	ELO8	ELO9
1	111001	Computer Structure and Installation	1	1	1	3	L	H	M	H	M	L	M	L	M
1	111029	Programming Techniques	2	0	1	3	L	H	L	L	L	L	L	M	L
1	102014	General Computing	2	1	0	3	N	L	H	L	L	L	L	L	L
1	102055	English 1	2	0	0	2	N	N	M	L	N	L	N	H	L
1	102025	Advanced Mathematics 1	1	0	1	2	N	H	L	L	L	L	L	M	N
1	102002	Physical Education 1	0	1	0	1									
2	111002	Language C/C++	3	1	0	4	L	H	L	L	L	L	L	H	L
2	111003	Office Computing	0	2	0	2	L	L	L	M	M	M	L	L	L
2	111004	Fundamental Databases	3	1	0	4	L	M	L	L	L	H	L	L	N
2	102056	English 2	1	0	1	2	N	N	M	L	N	L	N	H	L
2	102003	Physical Education 2	0	0	1	1									
3	111005	Data Structure and Algorithm	3	1	0	4	M	H	N	M	M	L	L	M	L
3	111035	Computer Network	2	1	0	3	L	H	L	L	M	L	L	L	L
3	102057	English 3	1	0	1	2	N	N	M	L	N	L	N	H	L
3	102005	Principles of Marxist and Lennist	4	0	1	5	H	N	L	L	N	N	L	N	N
3	102004	Physical Education 3	0	0	1	1									
4	111010	Discrete Mathematics	3	0	0	3	L	M	L	M	N	N	N	N	N
4	111007	Object-oriented Programming	3	1	0	4	L	H	L	L	M	L	L	M	L
4	111008	Web Design	2	1	0	3	L	L	L	L	M	M	L	H	H
4	112002	Linux Operating System	2	0	1	3	L	H	L	M	M	M	M	M	L
4	102058	English 4	1	0	1	2	N	N	M	L	N	L	N	H	L
4	102033	Ho Chi Minh Ideology	2	0	0	2	H	N	L	L	N	N	L	N	N
4	102006	General Law	2	0	0	2	H	N	L	L	N	N	L	N	N
5	111030	Advanced Web Design	2	0	1	3	L	M	L	M	M	H	L	M	M

Sem	Code	Course													
5	111014	Basic Programming with Java	2	1	0	3	L	M	L	M	L	H	L	L	L
5	111011	Database Management System	3	1	0	4	M	L	L	L	H	L	L	M	L
5	111012	Programming C#	2	1	0	3	M	L	H	H	M	H	L	M	M
5	111013	Visual Basic Programming 1	2	1	0	3	M	L	H	H	M	H	L	M	M
5	102059	English 5	1	0	1	2	N	N	M	L	N	L	N	H	L
5	102001	Revolution Lines of Vietnam Communist Party	3	0	0	3	H	N	L	L	N	N	L	N	N
6	112034	Device-communication Programming	2	1	0	3	L	M	H	H	M	M	H	L	H
6	111036	Network Services	2	0	1	3	L	N	L	M	H	H	L	L	L
6	111015	Web Programming	2	1	0	3	M	H	L	L	M	H	L	M	M
6	111017	Database Application Programming with C#	2	1	0	3	M	L	H	H	M	H	L	M	M
6	111018	Visual Basic Programming 2	2	1	0	3	M	L	H	H	M	H	L	M	M
6	102060	English 6	1	0	1	2	N	N	M	L	N	L	N	H	L
7	112032	Basic Network Programming	3	0	1	4	N	L	L	M	H	L	L	L	L
7	112033	Advanced Computer Network	3	1	0	4	L	L	L	M	H	L	H	L	L
7	111039	Mobile Device Programming	2	1	0	3	L	L	L	H	M	H	L	M	H
7	111040	Open Source Software Development	2	1	0	3	M	L	H	M	M	H	H	M	H
7	111041	Basic PHP Programming	2	1	0	3	M	L	H	M	M	H	H	M	H
7	102061	English 7	1	0	1	2	N	N	M	L	N	L	N	H	L
8	111043	Analysis & Design of Object-oriented Systems	2	1	0	3	L	M	M	H	H	M	H	M	M
8	111038	Application Development project	0	9	0	9	H	L	H	H	H	M	L	M	H
8	112023	Network Safety and Security	2	1	0	3	H	N	L	M	H	H	H	M	M
8	111042	Image Processing Technology	2	1	0	3	L	M	L	L	L	M	H	L	H
8	111044	Advanced PHP Programming	2	1	0	3	L	M	M	H	H	M	H	M	M
9	66666	Graduation project	0	10	0	10	H	M	H	M	H	H	M	M	H

Notes: *The yellow highlighted courses in the same semester are elective courses. Students can select one of them in the semester.*

In addition to the above-mentioned courses, the following are required but excluded from the 137 credits of IT program.

Semester	Course Code	Course Name
1	11112	Military Education 1
1	11113	Military Education 2
1	11114	Military Education 3
1	11115	Military Education 4
1	190003	Study and Self-study Skills
2	190601	Time Management Skills
3	190004	Teamwork Skills
8	190022	CV Writing and Interview Skills

5. SERIES OF BELLWETHER COURSES

Series	Web application programming	Device programming
Semester 1	Programming Techniques	Programming Techniques, Computer Structure and Installation
Semester 2	Fundamental Databases	Language C/C++
Semester 3	Data structure and Algorithm	Data Structure and Algorithm
Semester 4	Object-oriented Programming, Web Design	Linux Operation System
Semester 5	Database Management System, Advanced Web Design, Programming C#/ Visual Basic Programming 1	Basic Programming with Java
Semester 6	Web Programming, Database Application Programming with C#/ Visual Basic Programming 2	Device-communication Programming
Semester 7	Open Source Software Development/ Basic PHP Programming	Mobile Device Programming
Semester 8	Application Development Project	Application Development Project

6. GRADUATION CRITERIA

In order to graduate from IT program, the following criteria must be fully satisfied:

- Successfully complete at least 137 credits;

- Successfully complete all required courses;

- Cumulative average score of nine semesters must be at least 5.00 (10-point scale);

- Have a certificate of foreign language proficiency (TOEIC400 or equivalent);

- Have a Certificate of Completion of Military Education;

- Have a Certificate of Completion of Physical Education;

- At the time of graduation check, student isn't prosecuted in any criminal liability and isn't being stoppage-disciplined.