



FORMATIONS
UNIVERSITAIRES

IT/
TRANSFORMATION
DIGITALE

BACHELOR IN APPLIED INFORMATION TECHNOLOGY

CONTINUING EDUCATION PROGRAMME



LUXEMBOURG LIFELONG
LEARNING CENTRE
LA FORMATION CONTINUE DE LA CHAMBRE DES SALAIRES



In partnership with :





BACHELOR IN APPLIED INFORMATION TECHNOLOGY

CONTINUING EDUCATION PROGRAMME

OBJECTIVES

The Bachelor in Applied Information Technology - Continuing Education Programme (BINFO-CEP) offers a course programme that responds to the needs of professionals who want to improve and extend their professional expertise in information technology. The main programme objective is the strengthening of both operational and theoretical computer skills of its participants. BINFO-CPE provides foundations for basic theoretical knowledge in computer science together with a broad overview on several topics in information technology relevant for the professional world. Most courses are strongly project-based to deepen the practical skills on the concepts introduced in the class meetings. In addition to technical training, the Bachelor programme aims to enhance relevant soft skills of its students.

LEARNING OUTCOMES

At the end of the programme, the student is able to:

- prove knowledge of advanced programming skills for different types of applications ;
- explain key technologies important in information technology (IT) ;
- develop the interest and skills base that can be continued by joining an academic study of the Master level ;
- communicate in French and English, both written and oral, in a context of teamwork and interaction with people of diverse cultural and technical backgrounds ;
- further develop the personal ability to work independently, analyse situations, anticipate problems and propose solutions in a variety of professional contexts.

TARGET AUDIENCE

The programme aims at employees, self-employed persons, and job-seekers with some already existing experience with information technology wishing to reinforce their computer skills and validate their professional skills.

ADMISSION REQUIREMENTS

- Bac+2 with a minimum of 3 years of professional experience in the IT domain, or a "Diplôme de fin d'études secondaires/ Diplôme de technicien" or equivalent with a minimum of 6 years of professional experience in the IT domain.
- Selected candidates must be granted the equivalent of 100 ECTS for their professional experience by the "Commission de validation des acquis professionnels de l'Université".

PROGRAMME ORGANISATION

Each week, the student will participate in lectures and practical work for small groups of approximately 15 participants. The requested work can be individual or group work. The courses are taught in English (70%) and French (30%). Most modules include the realisation of practical projects, which will allow the student to put into practice the provided theoretical knowledge. Courses take place over 4 semesters in the evening (6 pm to 9 pm), typically on 3 evenings per week. A total of 4 modules are taught per semester for a maximum of 140 hours, an average of 10 hours per week over 14 weeks. The entire training lasts 2 years.

ASSESSMENT

The course evaluation is made by a continuous assessment (at least one intermediate examination per subject and semester) on projects, oral presentations and final examinations. The exact modalities differ per course, but the emphasis is as much as possible put on continuous knowledge control, in addition to final examinations or project defenses. A student who does not pass a course will be allowed to continue his studies and to redo that examination later in one of the two annual exam sessions. In accordance with the rules of the Internal Regulations of the University, a student will have the opportunity to re-register at the University of Luxembourg beyond 2 years to re-pass non-validated exams without additional cost. However, the maximal study length of 3 years (6 semesters) may not be exceeded.

CAREER AND STUDY OPPORTUNITIES

- Developers, business analysts, network administrators, web masters in all IT-related professional sectors.
- Master en Management de la Sécurité des Systèmes d'Information (MSSI) at the University of Luxembourg.

DIPLOMA

The Bachelor's diploma in Applied Information Technology is delivered by the University of Luxembourg, in accordance with the Bologna Process.

PROGRAMME*

SEMESTER 1	ECTS
Databases	6
Introduction to programming	6
Mathématiques générales	4
Networks	4
TOTAL	20

SEMESTER 2	ECTS
Algorithms and data structures 1	4
Analyse et conception des logiciels 1	6
Mathématiques discrètes	4
Operating systems	6
TOTAL	20

SEMESTER 3	ECTS
Algorithms and data structures 2	4
Analyse et conception des logiciels 2	6
GUI programming	4
Web programming	6
TOTAL	20

SEMESTER 4	ECTS
Introduction to Blockchains	4
Java for enterprise applications	6
Mobile application development	6
Software testing	4
TOTAL	20

* Programme subject to changes.

** European Credit Transfer System.

REQUEST
FOR APPLICATION
FORM:



AT A GLANCE

Duration :	4 semesters
Credits :	80 ECTS **
Language :	English (70%), French (30%)
Organization :	Courses take place over 4 semesters in the evening (6 pm to 9 pm), usually on 3 evenings per week.
Place :	University of Luxembourg, Campus Kirchberg
Registration :	6 500 € for the 4 semesters. <i>The candidates as well as their employer can benefit from financial support by the state, under certain conditions.</i>
Request for application form :	www.lllc.lu

PARTNER INSTITUTIONS



The University of Luxembourg is a European research university with a distinctly international, multilingual and interdisciplinary character. It is a modern institution with a personal atmosphere, close to European institutions, innovative companies and the financial place. With over 6,400 students and about 2,000 employees from all over the globe, the University offers a unique mix of international excellence and national relevance, delivering knowledge for society and businesses.

The University's ambition is to provide the highest quality research and teaching in its chosen fields and to generate a positive scientific, educational, social, cultural and societal impact in Luxembourg and the Greater Region.



CHAMBRE DES SALARIÉS
LUXEMBOURG

A NECESSARY INSTITUTION TO DEFEND EMPLOYEES' INTERESTS

The *Chamber of employees* (Chambre des salariés, CSL), which was constituted as a result of the introduction of the unique status has about 600.000 adherents. It plays a major role in the consultation process regarding national legislative procedures. Its opinion is required on all bills in relation with its adherents before the final vote in the Parliament.

The CSL publishes documentation on legal issues regarding labour law, social security law as well as viewpoints and opinions on economic and social topics. It also organises public conferences with relation to the work environment.

The CSL appoints the employee and retiree representatives who sit within the Caisse nationale de santé (National Health System), the Assurance pension (retirement insurance), the labour court and the social security jurisdictions.

Continuing education for adults is one of the main activities of the CSL. The Luxembourg Lifelong Learning Centre (LLLC), the continuing education centre of the CSL, proposes a large panel of evening courses, seminars, university degrees, specialised training courses and professional certifications.

The LLLC facilities are located in the heart of Bonnevoie, ideally connected to the public transport network and in close proximity to the central station. It is not only a training space, but also a lively place of exchange which can host working meetings, conferences as well as cultural gatherings in the best conditions.

The University is composed of three faculties and three interdisciplinary research centres. The research priority areas are Materials Science, Computer Science and ICT Security, European and International Law, Finance and Financial Innovation, Education, Digital and Contemporary History, Health and Systems Biomedicine, and Data Modelling and Simulation. Times Higher Education ranks the University of Luxembourg among the top 251- 300 universities worldwide.



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With more than 12 000 enrollments per year, the LLLC is positioned as one of the largest providers of continuing education for adults in Luxembourg.

It offers employees a wide range of competitively priced training courses leading to recognized diplomas and certifications.

THE OFFER

- Evening courses
- Seminars
- Diploma of Access to University Studies - Literary option (DAEU-A)
- University and higher education courses
- Specialized training
- Training courses for senior citizens
- Certifications



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