



ILNAS
HIGHER EDUCATION

University Certificate • Presentation & Specificities



OVERVIEW

In the frame of the development of the national education about technical standardisation ILNAS, which is an administration under the authority of the Minister of the Economy, in partnership with the University of Luxembourg, offers you a university specialisation intended for professionals and job seekers. The new certificate *Smart ICT for business innovation* will enhance the skills of ICT professionals and contribute to reinforce the position of Luxembourg in the field of Smart ICT by offering its students a broad view of Smart ICT concepts and tools at their disposal to develop their sense of innovation.

COURSE ORGANISATION

Summary Description of the Programme

This university certificate will focus on important aspects of Smart ICT and their applications, such as the development of Smart cities, Smart grid, Big data and analytics, Cloud computing and environmental issues related to ICT. Furthermore, in an interconnected world, Digital trust and ICT governance are essential and thus these matters will be approached by international experts. Technical standardisation will also be at the core of the curriculum as it is a key source of knowledge in constant evolution. Indeed, standardisation committees can be considered as the only platforms gathering manufacturers, researchers, business innovators and other stakeholders, making them the beating heart of ICT progress.

Pedagogical Strategies & Workload

The teaching methods are characterized by a multidisciplinary approach to promote knowledge sharing and exchange of experiences and it will encompass lectures, tutorials and practical projects. The certificate will include 153 hours of teaching classes (lecture courses and tutorials) and 48 hours will be allocated to a final project, which has to be developed by the students during an internship.

Programme Structure

The certificate *Smart ICT for business innovation* will include 6 different modules and an internship and will award ECTS (European Credit Transfer System) credits:

- 1 **Smart ICT concepts:** foundations of Smart ICT
- 2 **Business innovation:** fundamental knowledge and tools concerning business innovation
- 3 **Technical standardisation:** overview of ICT standardisation and its economic benefits
- 4 **Digital intelligence:** inputs on technology trends, opportunities and challenges for Smart ICT
- 5 **Smart platforms:** introduces a broad range of technological platforms that enable the creation of products and processes supporting current and future developments in the digital world (Cloud computing, Smart cities, Internet of Things, Green ICT)
- 6 **Smart interactions:** focuses on interactions which enable smart interfaces taking into account environmental factors (Sensor networks, Big data and analytics, Digital trust)
- 7 **Internship and Certificate report**

Planning & Calendar

For the academic year 2015/2016, the sessions will be held every 2 weeks from September 2015 to May 2016 and will be scheduled on Thursday and Friday evenings and on Saturdays.



LEARNING OUTCOMES

Students who successfully complete the university certificate *Smart ICT for business innovation* will be able to:

- Identify and decode the high potential of Smart ICT concepts for business and innovation;
- Cater for the current and future issues and standardisation needs in ICT areas such as:
 - Digital Intelligence (Development of ICT standardisation, ICT Governance),
 - Smart Platforms (Cloud computing, Smart cities, Internet of Things, Green ICT),
 - Smart Interactions (Sensor networks, Big data and analytics, Digital trust);
- Analyse the challenges of Digital trust and information security;
- Identify and use published and draft standards relevant to the ICT sector;
- Implement ICT technical standardisation in the business strategy.

ADMISSION REQUIREMENTS

Admission Criteria

In order to be considered for the selection phase, candidates must fulfil the following eligibility criteria:

- 1 Diploma & Professional Experience**
 - Bachelor's degree (180 ECTS) with relevant professional experience within the matters covered by the university certificate;OR
 - Master's Degree (300 ECTS) in a field within the matters covered by the university certificate;
- 2 Language skills:**
 - Good knowledge of English is required since all the courses and materials will be delivered in English.

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Target Group

The university certificate is mainly aimed at experienced ICT professionals who wish to enhance their Smart ICT skills. The certificate is also open to all professionals and students who fulfil the admission criteria.

Selection Procedure

The admission committee will accept a maximum of 20 participants. The selection procedure will include an initial screening based on the Application Form and, in addition, an interview can be organised in order to take the final decision.

CAREER PROSPECTS

The certificate will allow students to develop their Smart ICT skills and to embrace new career opportunities. Added to their current abilities, it is an ideal training to consider the following types of employment:

- Technology Officer
- Digital Strategy Consultant
- Smart ICT Consultant
- Innovation Manager
- Standards Manager
- Head of Innovation
- Head of Digital Strategy
- Entrepreneur (startup)



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SUPPORTING ORGANISATIONS:

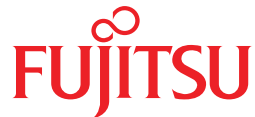


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