

The degree programme intends to prepare students and graduate them with a number of abilities and skills. The intended learning outcomes of the degree program have been clearly defined and are accessible to all relevant stakeholders, especially to teachers, trainers, lecturers, and students. These outcomes are valid and based on currently accepted technical developments in computer information systems. The intended learning outcomes and the requirements to achieve them have been made transparent to the learners. Students and prospective students can find the learning outcomes on the web site of the department. Formal mechanisms are in place for the periodic review and monitoring of the degree programme. Students are assessed using the published criteria to ensure that the learning outcomes intended by the degree programme have all been achieved. Student achievements have been measured and monitored constantly to make sure that they are competent to take up qualified employment after graduating from the degree programme.

Most computer based courses in other universities around the world teach only the computer hardware and/or computer software topics. Example courses are computer science (where computer software and algorithm design are taught), or computer engineering (where computer hardware and software programming are taught). Computer Information Systems is a multi-disciplinary course where students learn computer related topics such as programming, as well as accounting, business finance and economics. This is the specific profile of this degree programme.

The graduates have many opportunities after graduating. Some of the possibilities are:

- Study for a postgraduate degree
- Find employment in a government office on information technology
- Find employment in private companies on information technology and related fields
- Find employment in private firms manufacturing computers
- Find employment in private firms developing software
- Find employment in government offices and private firms on computer maintenance and development
- Do private business on information technology and related fields

In accordance with their prospective professions, graduates must possess a series of common, technical and specialized competences closely associated with the demands of the professional areas of the BA degree. These competences reflect the combination of knowledge, skills (intellectual, practical, social, etc.) that enable individuals to perform tasks and solve problems in specific academic and professional situations. Nine educational objectives are outlined here by the description of the learning outcomes that graduates require for practicing their profession. Competences are the following learning outcomes that have compliance with the EQUAINE Euro-Inf learning outcomes also:

## **COMMON COMPETENCES**

### **1. EFFECTIVE ORAL AND WRITTEN COMMUNICATION**

- To communicate with other people knowledge, procedures, results and ideas orally and in a written way.
- To participate in discussions about topics related to the activity of their profession.

- To work in a multidisciplinary group or in a multi-language environment and to communicate, orally and in a written way, knowledge, procedures, results and ideas related to the profession.

## **2. TEAMWORK**

- To be capable to work as a team member, being just one more member or performing management tasks, with contributing to develop projects practically and responsibly.

## **3. INFORMATION LITERACY IN LIFELONG LEARNING**

- To manage the acquisition, structuring, analysis and visualization of data and information of the field, and to value in a critical way the results of this management.
- To overcome deficiencies in the own knowledge through critical reflection and adapting oneself to new methods and technologies, and situations.

## **TECHNICAL COMPETENCES**

### **4. UNDERSTAND & APPLY IT SKILLS**

- To demonstrate knowledge and comprehension of essential facts, concepts, principles and theories related to Computer Information Systems.
- To use properly theories, procedures and tools in the professional development of the informatics engineering in all its fields (specification, design, implementation, deployment and products evaluation) demonstrating the comprehension of the adopted compromises in the design decisions.

### **5. ANALYZE, EVALUATE & MANAGE IT SKILLS**

- To analyse, design, build and maintain applications in a robust, secure and efficient way, choosing the most adequate paradigm and programming languages.
- To evaluate and select hardware and software production platforms for executing applications and computer services.
- To plan, comprehend, deploy and manage IT projects to lead the start-up, the continuous improvement and to value the economical and social impact.

## **SPECIALIZED COMPETENCES**

### **6. COMPUTER SCIENCE RELATED**

- To have an in-depth knowledge about the fundamental principles and models and be able to apply them to interpret, select, value, model and create new concepts, theories, uses and technological developments, related to the field.
- To develop effectively and efficiently algorithms for a software to solve complex problems.

### **7. INFORMATION SYSTEMS RELATED**

- To demonstrate comprehension and apply the principles and practices of the organization, in a way to associate technical and management components of an

organization, and participate actively in the training.

- To integrate solutions of Information and Communication Technologies, and business processes to satisfy the information needs of the organizations, allowing them to achieve their objectives effectively.
- To determine the requirements of the information and communication systems of an organization, taking into account the aspects of security and compliance of the up to date standards.
- To participate actively in the specification, design, implementation and maintenance of the information and communication systems.

## **8. SOFTWARE ENGINEERING RELATED**

- To develop, maintain and evaluate software systems which satisfy all user requirements, which behave reliably and efficiently, with a reasonable development and maintenance and which satisfy the rules for quality applying the theories, principles, methods and practices of Software Engineering.

## **9. INFORMATION TECHNOLOGY RELATED**

- To define, plan and manage the installation of the ICT infrastructure of the organization.
- To design solutions which integrate hardware, software and communication technologies.
- To use methodologies centred on the user and the organization to develop, evaluate and manage applications and systems based on the information technologies which ensure the accessibility, ergonomics and usability of the systems.