



### **Learning outcomes for Undergraduate Professional Study Programme in Computing**

- Ability to analyse a code, anticipate its behaviour, test the correctness of an algorithm or of a program written in a pseudo-code or in a programming language.
- Ability to identify, control and use properly the tools and the very concept of operating systems.
- Ability to devise, design and write programs by using object paradigms.
- Ability to devise, design and write programs by using modern web design technologies.
- Ability to understand, analyse and implement the knowledge of electrical engineering and digital circuits, with special emphasis placed on computer system architecture.

### **Specialisation in Computer Systems and Network Engineering:**

- Ability to plan and formulate a request and implement a methodology in order to build a computer network with all necessary contents.
- Ability to use, devise, adjust, innovate and set up an operating system with the accompanying computer services.
- Ability to set up a development environment, default methodologies and technologies in program design according to specific environmental demands (HTML, CSS, ASP, MVC, JAVA, PHP), with special emphasis placed on facilitating work in computer system and network environment.
- Ability to plan, maintain and use databases by means of modern methods (SQL).
- Ability to identify, compare and use specific principles related to specialised areas of computing, with special emphasis placed on computer systems and networks (cryptography, embedded systems, complex applications, program models, testing).

### **Specialisation in Software Engineering:**

- Ability to understand, implement and use the advanced principles of computer networks, with special emphasis placed on understanding work mode.
- Ability to understand the principles of work mode and installing an operating system with the accompanying computer services.
- Ability to plan, design, create, use and configure databases by means of modern methods (SQL).
- Ability to plan, estimate and devise the interface design of program solutions and web sites.
- Ability to identify, compare and use specific principles related to specialised areas of computing, with special emphasis placed on programming solutions (cryptography, embedded systems, complex applications, program models, testing).

