Course Unit Descriptor

Study Programme: Environmental Engineering And Occupational Safety Engineering

Course Unit Title: Computer technology fundamentals

Course Unit Code: Z201A

Name of Lecturer(s): Anderla Andraš

Type and Level of Studies: bachelor

Course Status (compulsory/elective): compulsory

Semester (winter/ summer): winter

Language of instruction: english

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 6

Prerequisites: none

Course Aims:.

The course is intended to help students: to understand contemporary information technologies and to understand the possibilities of their appliance in environmental engineering and safety on work; to achieve computer literacy; to master methods and techniques of IT resources usage; and to learn how to use standard applications that are broadly applied in engineering practice.

Learning Outcomes:

By the end of the course, students should be able to use operating systems, text editors, spreadsheets, presentation and slide software and Internet services. They will be able: to understand and describe basic computer architecture, to understand functionality of computer systems; and to independently use IT resources.

Syllabus.

Fundamental information technology concepts. Data representation. Computer architecture and functionality: basic components, their features, characteristics and behavior, comparison, merits and limitations. Microcomputers. Operating systems and application techniques. Components of information system. Geo-information systems - components and application. Introduction to computer networks and application techniques. Internet services. Programing systems. Application techniques of: text editors, spreadsheets, presentation and slide systems. Information society, trust in information society (safety, privacy, intellectual property). Technological and social perspectives: merits and limitations of information age.

Required Reading:

Relevant literature in English, tbd

Weekly Contact Hours: 2	**Lectures: 2**	**Practical work: 0**

Teaching Methods:

Teaching is done through lectures and exercises that are performed in the computer lab.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Attendance			
Computer exercises			
Tests (4x)			