UNIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Dipartimento di Ingegneria Industriale
Academic year 2019/2020

Enterprise information system [145489]

No class division

Study course Mechatronics Engineering
Regulation Master of Science in Mechatronics Engineering
Curriculum Industrial Process Management

Lecturers: LUISA MICH (Tit.), NICOLA ZENI

Hours amount: 60

Period: Second semester

Credits: 6

Fields: ING-INF/05

Formative aims
The general goal of the Enterprise Information System course is to teach students to play an active role in decision making about investments in information technologies.
The course introduces the fundamental principles of information systems; teaches concepts and models to plan investments in information systems according to the activities to be supported and to the company's business model. Focusing on web-based information systems, the second part of the course introduces a method to design an effective web presence strategy.
After completing the course, the student will be able to:
- know and classify information systems and their application in business
- know the principles and the protocols of Internet and Web
- apply requirements elicitation and analysis techniques
- evaluate website quality according to a goal-oriented approach
- model, evaluate and plan web presence strategies
- analyse and manage online reputation of a company.

Prerequisites
In order to be successful in the Enterprise information systems course, the student should be confident with the basics of computer sciences.

Course programme
BASIC CONCEPTS FOR INFORMATION SYSTEMS:
- Definition and role of information systems
- The socio-technical approach to information systems
- Types of information systems
- Information technologies and ICT trends

STRATEGIC PLANNING OF INFORMATION SYSTEMS
- A problem-driven model for information systems
- Requirements analysis
- Models for e-Economy
- Security

WEB-BASED INFORMATION SYSTEMS
- Internet and the World Wide Web
- Web presence strategy
- Web business model
- Online reputation management

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Teaching methods

The course follows a project-based learning approach and is a multi-disciplinary laboratory course (BYOD, Bring your own device). It includes practical work sessions and a project which simulate a project for one of the companies participating to the career day and will be assigned at the beginning of the course.
The course includes:
- Lectures
- Synchronous and asynchronous online lessons
- Group project
- Skype sessions for the project
- Supervision of the group project by an external expert.

Learning assessment method

The final score is determined as follows:
- Written test (using Zoom and sending the essay) (20%): 2 open questions on the course topics.
- Project report (60%): group work to apply the concepts and models introduced in the course to real cases.
- Participation (20%): to the course activities.

Reference books

Laudon K.C., Laudon J.P., Management Information Systems: Managing the Digital Firm, Global Edition, 15/E Pearson, 2017

Further information

Other reference texts and papers will be given in class and on the web site of the course.

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