



Module Specification

Module name: Information Systems Management

Code: ICT13M2

Programme (Energy/ICT): ICT

ECTS: 6

Type Bachelor/Msc : MSc

Module name: Information Systems Management

Scope and form:

Duration (weeks; Hours/week): 15 weeks, 4h/week (180 hours of workload)

Type of assessment: Written exam. Each student is given 10 questions for free form answers, which cover all the learning outcomes of the module. The students have 60 minutes for answers. A prerequisite is a passing grade for the presentation and independent work. The presentation is oral, group-based. Each group presents in 20 minutes their IT strategy for the selected enterprise. The presentation gets passing grade, if the enterprise IT strategy is presented and discussed with other students and lecturer. The independent work is written group work. Enterprise IT strategy, documented in this work, must be introduced in the presentation for a passing grade. Each student has an individual responsibility on certain part of the work. To get a positive mark (1 or more), all the compulsory parts should be present. There is a list of typical mistakes, which's existence in the work get the mark down. If there are not listed mistakes in the work, criteria of the mark 4 (very good) are met. Originality of the topic or viewpoint, relevance to practice bring the mark up.

Qualified Prerequisites: None

General module objectives:

- To give the theoretical knowledge of IT strategy.
- To give the knowledge of IT strategy development methodologies.
- To give knowledge of IT strategy components.
- To give knowledge of software testing processes.
- To the skills for the development of IT strategy.

Topics and short description:

IT governance. IT strategy. Traditional Project management as an instrument for realizing strategies – PMBOK, knowledge areas of PMBOK, other project management methodologies (PRINCE2, OPM3). Project management and software development methodologies. Management on the edge of chaos, complex adaptive systems, self-organization. Agile management, agile software development methodologies (Extreme Programming, FDD, etc). COBIT 4.1 overview, COBIT processes, COBIT related standards



**Project funded by the EU Lifelong Learning Programme
Project Reference No. 527877-LLP-1-2012-1-UK-ERASMUS-ENW**

(BS 7799, ITIL / BS 15000, ISO/IEC 17799:2000, ISO/IEC TR 13335, ISO/IEC 15408, TickIT, NIST 800-14, COSO).

IT strategy development (SWOT and GAP analysis). IT balanced scorecard (1st, 2nd and 3rd generation balanced scorecard). IT infrastructure, IT organization. IT operations management – ITIL, BS15000, ISO 20000. IT Financial management. IT human resources. Using IT in decision support mechanisms, business intelligence, organizational learning.

Learning outcomes:

Knowledge	Skills	Competences
Strategic state of the enterprise and IT	Ability to specify the initial strategic state of the enterprise and IT;	Students must be able to analyse the IT infrastructure and business processes of the company
Strategic goals of the enterprise and IT	Ability to formulate the strategic goals of the enterprise and IT;	Students must be able to develop IT strategies, using different techniques
Strategies for the achievement of strategic goals	Ability to analyze and compare different strategies for the achievement of strategic goals.	Students must have an understanding about IT infrastructure, IT organization, IT operations management, IT Financial management, IT human resources.

Module recommended literature:

- Anita Cassidy, A Practical Guide to Information Systems Strategic Planning, Second Edition, ISBN-13: 978-0849350733
- Robert J. Benson, Tom Bugnitz, Bill Walton, From Business Strategy to IT Action: Right Decisions for a Better Bottom Line
- Laudon, K. C., Laudon, J. P., & Brabston, M. E. (2013). Management information systems: Managing the digital firm(6th Cdn. ed.). Toronto, ON: Pearson Education Canada Inc. ISBN: 9780133259438

Special Considerations: Generically none for this module but should be commented on by the institution delivering the module.