INSTITUTO POLITÉCNICO DE BRAGANÇA

| Course Unit | Information Systems Management | | | Field of study | Information Systems | | |
|---|---|---|---|---|---|---|---|
| Bachelor in | Management Informatics | | | School | School of Technology and Management | | |
| Academic Year | 2021/2022 | Year of study | 3 | Level | 1-3 | ECTS credits | 6.0 |
| Type | Semestral | Semester | 2 | Code | 9186-709-3203-00-21 | | |

| Workload (hours) | 162 | Contact hours | T | - | TP | 60 | PL | - | TC | - | S | - | E | - | OT | - | O | - |

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

| Name(s) of lecturer(s) | João Paulo Ribeiro Pereira |
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## Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Plan, manage and maintain Information Systems in organizations. The student should be able to analyze and project the architecture of an Information system.
2. Moreover, he will be able to deploy "back office" (ERP), "front office" (CRM) and integrated supply chain management (SCM) solutions, in a methodological, structured and inclusive way
3. Understand what is the Information Systems Management in the organization
4. Recognize the skills and the core characteristics of Information Systems managers of today
5. Discuss limits and content of the various activities of intervention that makes use of Information Systems Management
6. Know the reasons, motivations, problems and performance of the business-planning Information Systems
7. Understand the role of IT in meeting strategic business objectives

## Prerequisites

Not applicable

## Course contents

Information Systems Management; architectures and IS / IT; characterization of some of the most important Information Systems; decision support systems; Outsourcing in IS; ERP; CRM; SCM; and resolution of Case-Studies.

## Course contents (extended version)

1. Information Systems Management
   - Information and Information Systems Management
   - Information Systems Planning
   - Information Systems Development
   - Information Systems Exploration
2. Information Systems and Information Technologies Architectures
   - Information Systems Architecture
   - Problems and difficulties
   - Utility, benefits and features
   - Models of IS Architectures
3. Enterprise Information Systems
   - Enterprise Resource Planning (ERP)
   - Customer Relationship Management (CRM)
   - Supply chain management (SCM)
   - Balanced Scorecard (BSC)
4. Strategic Application of Information Technology
   - Improve business processes and decision making
   - Development of strategic modules in Visual Basic for Applications (VBA) and Python

## Recommended reading

1. André Blokdijk (2014) Planning and Design of Information Systems. Academic Press.
2. Oz, Effy (2009) Management Information Systems (Sixth Edition). Thomson, USA.
3. Lopes, F. C. , Morais, M. P. ; Carvalho, A. J. (2009) Desenvolvimento de Sistemas de Informação, Métodos e Técnicas. FCA, Lisboa
4. Abramowicz, Witold ; Mayr, Heinrich C. (2007) Technologies for Business Information Systems. Springer.
5. Wagner, B. , & Monk, E. (2012). Enterprise Resource Planning (4th. Ed. ). Boston: Course Technology.

## Teaching and learning methods

Theoretical-Practical Classes: presentantion of programmatic content and exercising of the acquired knowledge (60 Hours). Work at Home (92 hours): individual study; research and consultation of literature; resolution of practical works; practice with laboratory tools.

## Assessment methods

- Alternative 1 - (Regular, Student Worker) (Final, Supplementary, Special)
   - Practical Work - 40% (VBA and Python)
   - Final Written Exam - 60% (Minimum grade for the written exam: 7 points)

## Language of instruction

1. Portuguese
2. Portuguese, with additional English support for foreign students.

## Electronic validation

| João Paulo Ribeiro Pereira | José Luís Padrão Exposto | José Carlos Rufino Amaro | Paulo Alexandre Vara Alves |
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| 06-03-2022 | 12-03-2022 | 12-03-2022 | 17-03-2022 |