

## COURSE DESCRIPTION – ACADEMIC YEAR 2022/2023

<b>Course title</b>	<b>IT Management and ERP Systems</b>
<b>Course code</b>	76414
<b>Scientific sector</b>	INF/01
<b>Degree</b>	Bachelor in Informatics and Management of Digital Business (L-31)
<b>Semester</b>	2
<b>Year</b>	2
<b>Credits</b>	12
<b>Modular</b>	Yes

<b>Total lecturing hours</b>	80
<b>Total lab hours</b>	40
<b>Attendance</b>	Recommended
<b>Prerequisites</b>	
<b>Course page</b>	<a href="https://ole.unibz.it/">https://ole.unibz.it/</a>

<b>Specific educational objectives</b>	<p>The course belongs to the type "caratterizzane - informatica".</p> <p>This course is designed for acquiring contemporary professional skills and knowledge.</p> <p>After successful completion the student should have a well-founded, basic understanding of what is involved to successfully model and analyze complex aspects of an organization that provide a context for the structuring and interpretation of Enterprise Data. The course will not teach mastery of specific tools, but educate on best practices and processes.</p> <p>The first module will be taught from a perspective that is strongly based on modeling. For that, the students will learn to produce, read and reason with architecture models ranging from Strategy Models (Business Models and Goal Models), passing by Service and Business Process Models, as well as models of IT services and infrastructures that support the business layer.</p> <p>As part of the second module students will learn about the functioning and architecture of Enterprise Resource Planning (ERP) Systems. Furthermore students will be introduced to the development and customization process for implementing different Enterprise Systems. Finally students will also participate in a management simulation game to make first-hand experience of IT Management concepts.</p>
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
<b>Module 1</b>	<b>IT Management and Enterprise Modeling</b>
<b>Module code</b>	76414A
<b>Module scientific sector</b>	INF/01
<b>Lecturer</b>	<a href="#">Andrea Molinari</a>
<b>Contact</b>	Piazza Università 1, Office E3.10, <a href="mailto:andrea.molinari@unibz.it">andrea.molinari@unibz.it</a> , +39 0471 013278 / 013279
<b>Scientific sector of lecturer</b>	INF/01
<b>Teaching language</b>	English
<b>Office hours</b>	To be arranged beforehand by email.
<b>Lecturing assistant (if any)</b>	<a href="#">David Massimo</a>

<b>Contact LA</b>	Piazza Domenicani 3, Office 2.14, <a href="mailto:david.massimo@unibz.it">david.massimo@unibz.it</a> , +39 0471 016144
<b>Office hours LA</b>	To be arranged beforehand by email.
<b>Credits</b>	6
<b>Lecturing hours</b>	40
<b>Lab hours</b>	20
<b>List of topics</b>	<ul style="list-style-type: none"> <li>• Basic concepts of IT management</li> <li>• Managing technical environments</li> <li>• Security issues in IT management</li> <li>• IT related standards, laws, and regulations</li> <li>• Risk management and disaster recovery</li> <li>• Service-based management of IT</li> </ul>
<b>Teaching format</b>	Frontal lectures on theory, Lab sessions on using software solutions for managing IT projects life-cycle

<b>Module 2</b>	<b>ERP Systems and IT Service Management</b>
<b>Module code</b>	76414B
<b>Module scientific sector</b>	INF/01
<b>Lecturer</b>	<a href="#">Markus Zanker</a> and <a href="#">Matthias Heiler</a>
<b>Contact</b>	Markus Zanker: Piazza Domenicani 3, Faculty of Computer Science, Office 2.20, <a href="mailto:markus.zanker@unibz.it">markus.zanker@unibz.it</a> , +39 0471 016977 Matthias Heiler: <a href="mailto:Matthias.Heiler@unibz.it">Matthias.Heiler@unibz.it</a>
<b>Scientific sector of lecturer</b>	INF/01
<b>Teaching language</b>	German
<b>Office hours</b>	To be announced in the first lecture, arrange beforehand by email.
<b>Lecturing assistant (if any)</b>	<a href="#">Matthias Heiler</a>
<b>Contact LA</b>	<a href="mailto:Matthias.Heiler@unibz.it">Matthias.Heiler@unibz.it</a>
<b>Office hours LA</b>	To be announced in the first lecture, arrange beforehand by email.
<b>Credits</b>	6
<b>Lecturing hours</b>	40 (26 h in presence and 14 h on-line)
<b>Lab hours</b>	20 (14 h in presence and 6 h on-line)
<b>List of topics</b>	<ul style="list-style-type: none"> <li>• IT service management processes</li> <li>• Management simulation game on the information and technology function in organizations</li> <li>• Concepts, technologies and systems in the ERP market</li> <li>• ERP project lifecycle</li> <li>• ERP systems from the developer perspective (customizing and developing)</li> <li>• Best practice case studies, frameworks and tools</li> </ul>
<b>Teaching format</b>	Frontal lectures with hands-on exercises, management simulation game

<b>Learning outcomes</b>	<p>Knowledge and understanding:</p> <ul style="list-style-type: none"> <li>• D.9 - Know the main IT Management and IT Service Management methods.</li> <li>• D.10 - Know the main methodologies for business modeling as well as for the introduction and adaptation of business software packages.</li> </ul> <p>Applying knowledge and understanding:</p> <ul style="list-style-type: none"> <li>• D2.4 - Ability to formalise and to analyse procedures and operational processes, to recognise and use optimisation potentials.</li> </ul>
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	<ul style="list-style-type: none"> <li>• D2.5 - Selective skills for the introduction, adaptation and maintenance of standard operating software and other IT solutions.</li> <li>• D2.6 - Ability to design, describe and present IT solutions to policy makers and stakeholders.</li> <li>• D2.9 - Ability to support the management of IT departments in their business by providing appropriate tools and techniques.</li> <li>• D2.10 - IT infrastructure and project management capabilities.</li> </ul> <p>Making judgments</p> <ul style="list-style-type: none"> <li>• D3.1 - Ability to collect and interpret data useful for forming independent judgments on IT and economic aspects of information systems.</li> <li>• D3.3 - Ability to compare and evaluate different IT solutions based on their technical characteristics and key business figures.</li> </ul> <p>Communication skills</p> <ul style="list-style-type: none"> <li>• D4.2 - Ability to use modern means of communication also for remote interactions.</li> <li>• D4.5 - Ability to collaborate in interdisciplinary teams to achieve IT objectives.</li> </ul> <p>Learning skills</p> <ul style="list-style-type: none"> <li>• D5.2 - Learning ability to carry out strategic and IT project activities in corporate communities, also distributed.</li> <li>• D5.3 - Ability to follow rapid technological developments and to learn about innovative aspects of the latest generation of information technology and systems.</li> </ul>
<p><b>Assessment</b></p>	<p>The assessment of the course consists of two parts:</p> <ul style="list-style-type: none"> <li>• M1: Written + Project assignment. Written exam (50%) on theoretical parts, project plan presentation (50%) including time, cost, resources, risk and stakeholder plan. Projects be handed in on the pre-announced date and time.</li> <li>• M2: for the project assignment M2, a written project report must be handed in on the pre-announced date and time.</li> </ul>
<p><b>Assessment language</b></p>	<p>English (M1) and German (M2)</p>
<p><b>Assessment Typology</b></p>	<p>Collegial</p>
<p><b>Evaluation criteria and criteria for awarding marks</b></p>	<p>ALL theoretical and practical/oral parts must be positive!</p> <p>Oral exam: creativity, skills in critical thinking; ability to summarize in own words and concisely present (intermediate and final) results; clarity of answers, mastery of language, ability to clearly explain, summarize, evaluate, and establish relationships between topics; demonstrate a deep understanding of the subjects covered during the course and be able to describe them precisely and clearly.</p> <p>Relevant for collective project assignment: ability to work in a team, creativity, introduce oneself into new topics and research literature on your own to create a deep understanding; demonstrate a deep understanding of the subjects covered during the course and be able</p>

	<p>to describe them precisely and clearly.</p> <p>The overall, final mark is computed as the weighted average of the marks obtained in the two modules.</p>
<b>Required readings</b>	<p>M1:          There are a number of supplementary readings for the course. One which is used throughout the course very consistently is the following:</p> <ul style="list-style-type: none"> <li>• Readings on IT Management and Enterprise Modeling will be made available via OLE.</li> </ul> <p>M2:  <ul style="list-style-type: none"> <li>• Readings on IT Service Management and ERP Systems will be made available via OLE.</li> </ul> </p> <p>Subject Librarian: David Gebhardi, <a href="mailto:David.Gebhardi@unibz.it">David.Gebhardi@unibz.it</a></p>
<b>Supplementary readings</b>	<p>M1:</p> <ul style="list-style-type: none"> <li>• Kathy Schwalbe, Information Technology Project Management, Cengage Learning, 9th Edition, ISBN: 9781337101356</li> <li>• Marc Lankhorst et al., Enterprise Architecture at Work: Modeling, Communication and Analysis, The Enterprise Engineering Series, Springer, 4th Edition, 2017, ISBN: 3- 662-53932-2</li> <li>• Archimate Specifications, The Open Group, available online a </li> <li>• Maria-Eugenia Jacob, Henk Jonkers, Dick Quartel, Henry Franken, Harmen van den Berg, Delivering Business  outcome with TOGAF and Archimate</li> <li>• Articles on Specific Topics of the Course</li> </ul> <p>M2:</p> <ul style="list-style-type: none"> <li>• Additional articles on IT Service Management and ERP Systems will be made available via OLE.</li> </ul>
<b>Software used</b>	<p>M1:          Project Management Software (To be defined at the beginning of the course)          Archimate Modeling Tool: examples include ARCHI or the Draw.IO Archimate Template, all available online and can be used free of charge by the students.</p> <p>M2:          ERP software for demonstration purposes and hands-on experience.</p>