

Syllabus

Descrizione corso

Titolo insegnamento	Application Engineering for Business Informatics
Codice insegnamento	76405
Titolo aggiuntivo	
Settore Scientifico-Disciplinare	INFO-01/A
Lingua	Tedesco
Corso di Studio	Corso di laurea in Informatica e Management delle Aziende digitali
Altri Corsi di Studio (mutuati)	
Docenti	prof. dr. ing. Andrea Corradini, Andrea.Corradini@unibz.it https://www.unibz.it/en/faculties/engineering/academic-staff/person/48036
Assistente	
Semestre	Secondo semestre
Anno/i di corso	1
CFU	6
Ore didattica frontale	40
Ore di laboratorio	20
Ore di studio individuale	90
Ore di ricevimento previste	6
Sintesi contenuti	<ul style="list-style-type: none"> • Software Development Processes • Requirements Engineering • Software Architectures and Design Patterns • Source Code Management • Software Testing
Argomenti dell'insegnamento	This course is carried out as a mix of frontal lectures, exercises, and students' presentations during the entire semester.
Parole chiave	- Software Development Processes - Requirements Engineering

	<ul style="list-style-type: none"> - Software Architectures and Design Patterns - Source Code Management - Software Testing
Prerequisiti	None.
Insegnamenti propedeutici	
Modalità di insegnamento	This course is carried out as a mix of frontal lectures, exercises, students' presentations, and students' projects.
Obbligo di frequenza	Attendance to labs and lectures is not compulsory, but non-attending students must contact the lecturer at the start of the course to agree on the modalities of the independent study.
Obiettivi formativi specifici e risultati di apprendimento attesi	<p>The course belongs to the type "attività formative caratterizzanti – discipline informatiche".</p> <p>The purpose of this course is to qualify the student to understand the process of developing large-scale IT systems. The student will acquire knowledge about key system development methodologies and processes. The student will learn about concepts, techniques and technologies employed in distributed systems such as scalability, communication styles, architectural patterns, etc.</p> <p>Knowledge and understanding:</p> <ul style="list-style-type: none"> • D1.3 - Know the basic principles of programming. • D1.5 - Know the main foundations of relational database systems and methods of designing, developing and optimising such systems. <p>Applying knowledge and understanding:</p> <ul style="list-style-type: none"> • D2.2 - Ability to solve algorithmic problems using programming methods. • D2.3 - Ability to analyse business problems and to develop proposals for solutions with the help of IT tools. • D2.6 - Ability to design, describe and present IT solutions to policy makers. • D2.17 - Know how to manage small projects for the development of information systems and how coordinate small working groups. <p>Making judgments</p> <ul style="list-style-type: none"> • D3.2 - Be able to work independently according to your level of knowledge and understanding, also taking responsibility for development projects or IT consulting. <p>Communication skills</p>

	<ul style="list-style-type: none"> • D4.4 - Ability to structure and prepare technical documentation • D4.5 - Ability to collaborate in interdisciplinary teams to achieve IT objectives. <p>Learning skills</p> <ul style="list-style-type: none"> • D5.3 - Ability to follow rapid technological developments and to learn about innovative aspects of the latest generation of information technology and systems.
Obiettivi formativi specifici e risultati di apprendimento attesi (ulteriori info.)	
Modalità di esame	<p>Type of assessment: written exam with project work.</p> <p>The exam is the same for both attending and non-attending students.</p> <p>The written exam is individual and consists of a series of verification questions over a 2-hour exam at the University.</p> <p>The project work requires the submission of a report on a specific project that will be assigned in class at least one month before the written exam. The project work/report can/should be done in groups of 4-5 members.</p>
Criteri di valutazione	<p>The grade will be determined by the grades each student receives on homework assignments, on the final individual written exam, and on the final project report.</p> <p>These criteria are the same for both attending and non-attending students.</p> <p>The particulars of this policy are as follows:</p> <ul style="list-style-type: none"> • There are up to two homework assignments for grade, which together are worth 20% of the final grade. • The written individual final exam has a weight of 50% on the final grade. • The project report contributes to 30% of the final grade.
Bibliografia obbligatoria	N/A
Bibliografia facoltativa	<ul style="list-style-type: none"> • Brooks, Frederick P. Jr., The Mythical Man-Month. Addison-

	<p>Wesley, 1975</p> <ul style="list-style-type: none"> · Abbott, M. L., & Fisher, M.T., Art of Scalability, The: Scalable Web Architecture, Processes, and Organizations for the Modern Enterprise, 2nd Edition, Addison-Wesley Professional, 2015 · Richards, M., Software Architecture Patterns. O'Reilly, 2015 · Steve Holzner: Design Pattern for Dummies, Wiley, 2006 <p>Subject Librarian: David Gebhardi, David.Gebhardi@unibz.it</p>
Altre informazioni	
Obiettivi di Sviluppo Sostenibile (SDGs)	Istruzione di qualità