

COURSE DESCRIPTION – ACADEMIC YEAR 2020/2021

Course title	Lean Start-Up and Entrepreneurship
Course code	76053
Scientific sector	INF/01
Degree	Master in Software Engineering for Information Systems (LM-18)
Semester	1
Year	1
Credits	6
Modular	No
Total lecturing hours	20
Total exercise hours	40
Attendance	compulsory
Prerequisites	open-minded towards innovation and new IT technology, comfortable to work with high uncertainty, and willingness to collaborate with students of different backgrounds
Course page	https://ole.unibz.it/ , https://leanstartup.bz
Specific educational objectives	<p>The course belongs to the type caratterizzanti – discipline informatiche.</p> <p>Lean Startup adopts a learning-by-doing style, and is designed for acquiring both theoretical and practical skills and knowledge on processes of high-tech and software-intensive startups.</p> <p>The main educational objectives are:</p> <ul style="list-style-type: none"> • Evaluating a software business idea and constructing a corresponding business model. • Conducting customer discovery and validation. • Experimenting iterative product releasing and validating the results. • Learning how to operate and make decisions in chaos with insufficient data.
Lecturer	Xiaofeng Wang
Contact LA	Piazza Domenicani 3, Room 3.15, xiaofeng.wang@unibz.it , tel. 0471 016181
Scientific sector of lecturer	INF/01
Teaching language	English
Office hours	During the lecture time span, Fridays from 15:00 to 17:00, arrange beforehand by email
Lecturing Assistant (if any)	--
Contact LA	--
Office hours LA	--
List of topics	<ul style="list-style-type: none"> • Nature and characteristics of innovative start-ups • Problem identification and validation with design thinking tools • Customer development process • Build-measure-learn loops

	<ul style="list-style-type: none"> • Continuous retrospectives for start-up learning • Supporting toolkits for start-up processes
Teaching format	Team projects supported by frontal lectures
Learning outcomes	<p>Knowledge and understanding: D1.3 To know in depth the scientific method of investigation applied to complex systems and innovative technologies that support information technology and its applications.</p> <p>Applying knowledge and understanding: D2.2 To be able to design and perform experimental analyses of information systems in order to acquire measures related to their behaviour and to evaluate experimental hypotheses in different fields of application, such as business, industrial or research; D2.4 To be able to define an innovative technical solution to an application problem that meets technical, functional and organisational constraints and requirements.</p> <p>Making judgments: D3.3 To be able to define work objectives compatible with the time and resources available; D3.4 To be able to reconcile the objectives of the project that are in conflict, to trade-off cost, resources, time, knowledge or risk; D3.5 To be able to work with large autonomy, also assuming responsibility for projects and structures.</p> <p>Communication skills: D4.2 To be able to present the contents of a scientific/technical report to an audience, including non-specialists, at a fixed time; D4.4 To be able to coordinate project teams and to identify activities to achieve project objectives; D4.7 To be able to carry out research and projects in collaborative manner.</p> <p>Learning skills: D5.2 To be able to keep up to date independently with developments in the most important areas of information technology; D5.3 In the context of a problem solving activity, to be able to extend knowledge, even if incomplete, taking into account the final objective of the project.</p>
Assessment	<p>Project work and oral exam:</p> <ul style="list-style-type: none"> • Project work to apply the Lean Startup methodology in a startup project (70% of the mark, team); • Oral exam to test the understanding of theories and knowledge application skills, and verification of project results (30% of the mark, individual). <p>Note: Positive project result is necessary to attend the oral exam. Both parts of results must be positive to pass the exam. In case of a positive mark, the project will count for all 3 regular exam sessions.</p>
Assessment language	English
Assessment typology	Monocratic

<p>Evaluation criteria and criteria for awarding marks</p>	<p>Evaluation criteria for project work:</p> <ul style="list-style-type: none"> • effective application of the Lean Startup methodology • good teamwork • innovativeness and quality of developed idea • the soundness and quality of pitch presentation <p>Evaluation criteria for oral exam:</p> <ul style="list-style-type: none"> • depth of understanding of the theory • clarity of answers
<p>Required readings</p>	<ul style="list-style-type: none"> • E. Ries, The Lean Startup: How Today’s Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses. Crown Business, 2011, p. 336. • S. G. Blank, The Four Steps to the Epiphany: Successful Strategies for Products that Win. Cafepress.com. <p>Other reading materials be published in the course websites.</p> <p>Subject Librarian: David Gebhardi, David.Gebhardi@unibz.it</p>
<p>Supplementary readings</p>	<p>Will be published on the course website.</p>
<p>Software used</p>	<p>Will be decided by the project teams.</p>