Course title	Disruptive Technologies and Digital Transformation				
Course code	DIS507				
Type of lesson	Compulsory				
Level	Postgraduate				
Year /Semester	1st / 1st				
ECTS	7.5	**Lectures/ week**	1	**Workshops/ week**	-
Aim and objectives of the course	**Course Purpose** The course " Disruptive Technologies " aims to describe and analyse the innovative technologies of our time, helping students to understand their characteristics and how they can create new opportunities for businesses. **Course Objectives** **Knowledge** • Description of the theory of technological innovation. • Critical thinking analysis of emerging technologies. • Comparison of positive and negative effects of technologies. **Skills** • Demonstrate emerging technologies from a technical point of view. • Designing strategies based on technological innovation. • Management of case studies and research projects. **Capabilities** • Explain the changes that emerging technologies are bringing to the market. • Linking technologies to competitive advantage. • Presenting technological innovation as a lifelong learning skill.				
Learning outcomes	**Description** • [LO1] Defining the different forms of innovation. • [LO2] Definition of technological innovation and its importance for businesses. • [LO3] Description of the impact of technological innovation on individuals, businesses and society. • [LO4] Explaining the importance of technology strategy for business **Analysis and Comparison** • [LO5] Exploring the key areas of a company's technology strategy.				

	• [LO6] Discussion of the differences in the areas of technology strategy for new and established firms. • [LO7] Analysis of the use of the Abernathy-Utterback technology evolution model. • [LO8] Comparison of the complementary uses of data storage and Big Data technologies. **Implementation and Design** • [LO9] Designing corporate strategies based on competitive advantage based on Big Data. • [LO10] Presenting technological innovation as a lifelong learning skill.		
Prerequisites	-	**Required**	-
Course content	**Week 1:** Introduction to technological innovation **Week 2:** Technology Evolution and Disruptive Innovation **Week 3:** Sources of innovation and technological development **Week 4:** Evaluation of innovations: Technological Life Cycle **Week 5:** Selection of innovative projects and Proof of Concept **Week 6:** Crowdfunding and strategies **Week 7:** Big Data and Artificial Intelligence **Week 8:** Internet of Things (IoT) **Week 9:** Cyber Security and Data Protection **Week 10:** Machine Vision and Automated Systems **Week 11:** Blockchain, Smart Contracts and NFT **Week 12:** Cloud Computing and Technology Services **Week 13:** Review- Preparations for the final exams.		
Teaching methodology	Mix of interactive lectures, active learning techniques and activities. More precisely: • Interactive online lectures • Notes and PowerPoint Presentations in digital format through the electronic platform • Basic textbook(s) and additional bibliography • Assignments • Interactive Activities		

	• Discussions in Forums through the electronic platform of real word case studies • Web links • Critical reflection on research article • Peer review on group working and discussion in forum • Educational videos on real world case studies and critical discussion in forum
Bibliography	***Compulsory bibliography*** • Garry D. Bruton and Margaret White, The strategic management of technology and innovation, Kritiki Publications SA • "Technology, Innovation and Entrepreneurship", Konstantello • Kalogerou, G. 2015. Management and development of innovations. [Text chapter]. In Kalogirou, G., Tsakanikas, A., Siokas, E., Panagiotopoulos, P., Protogerou, A., Mavrotas, G. 2015. Organization and Business Administration for Engineers. [Athens, Athens, Greece Academic Libraries. Chapter 9. ***Additional bibliography*** • Scott A. Shane, Technology Strategy for Managers and Entrepreneurs, Pearson, 2014 • Melissa A. Schilling, Strategic Management of Technological Innovation, 5th edition, McGraw-Hill, 2017 ***Hyperlinks, audiovisual material and other sources*** • Karpouzis E. (2023), "The use of Big Data by micro and small enterprises", Informative Notes FHW GSEBEE 23/2023, Athens: FHW GSEBEE, p. 28, p. 28. • Narayanana, V., Managing Technology and Innovation for Competitive Advantage, Upper Saddle River, NJ: Prentice Hall, 2001 • Rajkumar Buyya, Amir Vahid Dastjerdi, Internet of Things Principles and Paradigms, Morgan Kaufmann; 1 edition, 2016, pp. 3-28 • Miorandi D, Sicari S, De Pellegrini F, Chlamtac I. Internet of things: vision, applications and research challenges.Ad Hoc Networks 2012;10(7):1497-516. • Marc Pilkington, Blockchain Technology: Principles and Applications, 2016 • Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller and Steven Goldfeder, Bitcoin and Cryptocurrency Technologies, Princeton University Press, 2016 • Barnes, D., Blockchain manoeuvres: applying Bitcoin's technology to banking.The Banker, 2015

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McKinsey. the committed innovator: a discussion with investor Kevin O'Leary. link.
Interview with Konstantinos Daskalakis. Link.
Google course: Making friends with Machine Learning. Free. Link.

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