



EXPONENTIAL TECHNOLOGIES AND ETHICS

Course code	<i>MNG249</i>
Course title	<i>Exponential technologies and ethics</i>
Course type	<i>Compulsory</i>
Year of study	<i>I</i>
Semester	<i>Autumn</i>
ECTS	<i>3 ECTS; 12 hours of lectures, 12 hours of seminars</i>
Coordinating lecturer	<i>Dr. Eigirdas Žemaitis</i>
Study form	<i>Hybrid: in class and online</i>
Course prerequisites	<i>None</i>
Language of instruction	<i>English</i>

Course description

The course will enable students to analyse and explore exponential and breakthrough technologies, which have impact on business and society. Students will be able to identify emerging technologies and evaluate their business potential. In this course students will overview main exponential technologies and their implications on management issues. Students will understand technological ecosystem and its role in digital business creation. Students will learn how technology trends can be managed and what kind of digital business processes and activities need to be applied. Students will understand the importance of future emerging technologies scouting. Students will analyse potential ethical issues related with application of exponential technologies. After this course students will understand potential implications and opportunities of exponential technologies.

Aims of the course

The main aim of the course is to provide knowledge and understanding of exponential technologies and its application for the development of sustainable digital business projects. The course discusses various contemporary ethical issues and risks related with the exponential technology applications.

Learning outcomes

Course learning outcomes (CLO)	Degree level learning objectives (Number of LO)	Study methods	Assessment methods
CLO1 To be able to define the exponential technologies	LO 2	Individual study Reflection and discussions	Final exam
CLO2 To be able to critically evaluate exponential technologies and its importance to the digital business and innovation activities	LO 2	Group project Practicing, reflecting, and discussions	Group task, and individual essay
CLO3 To able understand digital technologies ecosystem and its role in business development	LO 2, LO 4	Individual study Practicing, reflecting, and discussions	Final exam, group task, and individual essay
CLO4 To be able to identify and analyse technology trends and emerging technologies.	LO 2	Group project	Group task, and individual essay
CLO5. Will be able to understand ethical implications of exponential technologies and will be able to create sustainable and responsible technological business	LO 2	Individual study Practicing, reflecting, and discussions	Final exam and individual essay



CLO6. Develop critical thinking ability and problem-solving skills through experiential learning.	LO 16	Lectures, seminars, group project	Exam, reflection, and feedback on other groups research projects
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Learning methods

In this course students will be encouraged to use future prediction articles and reports and will be encouraged to identify possible technology scenarios. Students will be able to create innovative exponential technology analytical projects by visiting companies and interviewing experts. Students will create innovative video projects, which reflects exponential technologies applications.

Cheating issues

The teaching and testing methods are chosen taking into account the purpose of the minimization of cheating opportunities. The ISM regulations on academic ethics will be fully applied in the course.

Week (and class)	TOPIC (Lectures)	IN-CLASS HOURS	
		Lectures	Seminars
1	Intro to disruption and exponential technologies.	1	1
2	Overview of disruptive technologies. Digital business perspectives..	1	1
3	Trend driven innovation. New business sources. Technological and social trends. Search of new opportunities for business.	2	2
4	Technology disruption cycles. Gartner hype cycle.	2	2
5	Blockchain technologies. Internet of things. Future of work. Virtual reality. Artificial intelligence.	2	2
6	Exponential technologies impact on business. Redefining operational process. Business model transformation.	1	1
11	Digital Ethics: emerging social and moral norms for technology applications.	2	2
12	Review session for the final exam.	1	1
Total:		12	12

Individual work, group work and assessment:

	EVALUATION (%)
Individual essay	20%
Final exam	40%
Group project presentation	40%
Total	100%



Course requirements:

1. **The final exam** will count for 40% of the final grade. It may consist of essay questions that will be based on the material presented in classes, seminars, and required readings.
2. **Individual essay** will count for 20 % of the final grade. It will include analysis of current technology trends and its ethical issues. For the individual essay students select ethical issue related with their business scope. Students also could choose to write essay on existing ethical case.
3. **The group project presentation** will count for 40% of the final grade. It will be based on a the existing group project in Continuous Business project course. In the group project students should analyse possibilities to use exponential technologies for their business ideas. Students should implement field research, get hands on information on emerging technologies, analyze of open data. Students prepare an action plan, how to use exponential technologies in their business ideas and prepare presentation.
4. **Re-taking of the final exam.** Students who receive a failing final grade will have the right to re-take the exam and individual essay. It will count for **60 %** of the final grade and will cover the content of the entire course. **Group assignment cannot be resubmitted at a later time.**

Main readings:

F. Corea. 2017. Artificial Intelligence and Exponential Technologies: Business Models Evolution and New Investment Opportunities. Springer.
McAfee, A., Brynjolfsson, E. 2017. Machine, platform, crowd: Harnessing our digital future.
Deloitte report. 2019. Future of risk in the digital era | Transformative change. Disruptive risk.
Gartner Top Strategic trends 2021.
<https://www.gartner.com/smarterwithgartner/gartner-top-strategic-technology-trends-for-2021/>

Additional readings will be provided on e-learning platform.