

## DIGITAL BUSINESS FOR SUSTAINABLE FUTURE

Master course (ECTS: 7)\*

\* also for Bachelor students in their final year

### Course leader:

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### Aims of the course:

The aim of the course is to explain how digital business can support society in achieving sustainable development goals. In this course, students will gain an understanding of the sustainability concept and digital transformation as a key driver of change in cities and communities. The course will also provide students with an explanation of underlying technologies important for the digital transformation of organizations and society. Emphasis will be given on transforming society including smart cities and communities. The aim of the course is to present how digital transformation should be carried out in organizations and cities. The aim is also to provide information about essential smart city characteristics and different smart city initiatives as well as issues related to developing smart cities and communities.

The course will provide students with the opportunity to critically evaluate, optimise and manage various solutions and concepts for organizations and individuals in their endeavour to achieve desired sustainable development goals and higher digital maturity levels. The course will also provide the students with the opportunity to develop the skills of analysing different approaches of smart city development as well as managing obstacles for it. In this course, learners will gain understanding of digital transformation as a key driver of change towards modern business world including change management issues. Besides, the course will also focus on business analytics and dealing with big data as important conditions for taking proper decisions.

### Prerequisites:

None.

## Course content:

DATE	DAILY TOPIC/SESSION
Monday, 8 July	<b>Course introduction (1h)</b>
Tuesday, 9 July	Lectures (3h): <b>Digital transformation and sustainability</b> <ul style="list-style-type: none"> <li>• Presentation of basic concepts of digital transformation</li> <li>• The pillars of digital transformation</li> <li>• Sustainable development goals</li> </ul>
Wednesday, 10 July	Lectures (3h): <b>Digital business and technologies</b> <ul style="list-style-type: none"> <li>• Supporting technologies</li> <li>• Digital business and innovative business models</li> <li>• Digital transformation in the society</li> </ul>
Thursday, 11 July	Lectures (3h): <b>Digital society - smart and intelligent cities</b> <ul style="list-style-type: none"> <li>• Digital maturity</li> <li>• Characteristics of smart cities</li> <li>• Designing smart city services</li> <li>• Privacy issues in digital society</li> </ul>
Friday, 12 July	Lectures (3h): <b>Selected areas of smart cities</b> <ul style="list-style-type: none"> <li>• Smart people, economy and governance</li> <li>• Smart mobility</li> <li>• Nudging towards sustainable future</li> </ul>
Monday, 15 July	Lectures (3h): <b>Smart governance (big data and analytics)</b> <ul style="list-style-type: none"> <li>• Managerial implications: Decision support, Business Intelligence and Analytics</li> <li>• Security challenges in smart technologies</li> <li>• Guided practical work: applying BI&amp;A in smart governance</li> </ul>
Tuesday, 16 July	Lectures (3h): <b>Policy creation</b> <ul style="list-style-type: none"> <li>• Importance of digital Business Policies</li> <li>• Components of Effective Policies</li> <li>• Best practices</li> </ul>
Wednesday, 17 July	Lectures (3h): <b>Privacy and security issues</b> <ul style="list-style-type: none"> <li>• Data privacy in digital business</li> <li>• Cybersecurity Challenges</li> <li>• Ethical considerations</li> </ul>
Thursday, 18 July	Lectures (3h): <b>Field excursion</b> <ul style="list-style-type: none"> <li>• Living lab</li> </ul>
Friday, 19 July	<i>No lectures (day off)</i>
Monday, 22 July	Lectures (3h): <b>Adoption issues and Change Management</b> <ul style="list-style-type: none"> <li>• Barriers to Digital Adoption</li> <li>• Change Management Strategies</li> <li>• Measuring Impact and Adaptations</li> </ul>
Tuesday, 23 July	Lectures + Preparation for final examination (3h): <b>Group workshop</b> <ul style="list-style-type: none"> <li>• Mayor interactive game</li> <li>• Projects preparation</li> </ul>
Wednesday, 24 July	<b>Presentation of the projects</b>

## Course materials / List of readings:

Course materials will be published on the course website.

### Suggested readings:

- Selected chapters from Bernard W. Wirtz (2020). Digital Business and Electronic Commerce. Springer.
- Selected chapters from Oliver Gassmann, Jonas Böhm, Maximilian Palmié (2019). Smart Cities: Introducing Digital Innovation to Cities. Emerald Publishing.
- Selected chapters from Rodriguez Bolivar, M. P. (Ed.) (2015). Transforming city government for successful smart cities. New York: Springer.

### Additional readings:

- Israilidis, J., Odusanya, K., & Mazhar, M. U. (2021). Exploring knowledge management perspectives in smart city research: A review and future research agenda. International Journal of Information Management, 56, 101989.
- Indihar Štemberger, M., Erjavec, J., Manfreda, A., Jaklič, J. (2019). Patterns of approaches to digital transformation: an institutional arrangements perspective. Economic and business review. vol. 21, no. 3.

## Teaching and examination methods:

The methods of learning and teaching are based on modern learning, which includes interactive lectures, independent reading, work on case studies and the presentation of a project work.

Within specific sessions there guided practical work will be implemented providing students with direction and guidance for quality project preparation.

Students are expected to actively participate in lectures.

Examination method and evaluation criteria (weighted categories):

- Project: 80%
- In class group work: 20%

### Grading scale:

DEFINITION	%	LOCAL SCALE	ECTS SCALE	Grade (USA)
exceptional knowledge without or with negligible faults	92-100	10	A	A+, A, A-
very good knowledge with some minor faults	85-91	9	B	B+, B
good knowledge with certain faults	77-84	8	C	B
solid knowledge but with several faults	68-76	7	D	C+, C, C-
knowledge only meets minimal criteria	60-67	6	E	D+, D
knowledge does not meet minimal criteria	<60	5	F	