

GENERAL INFORMATION					
Subject name		TR5. Industry 5.0			
Semester	1	Character	Compulsory	Type of module	Transver sal
ECTS	3		Modality	On line	
Higher Education Institution(s)			KUT, ESTIA		
Lecturer(s)			Łukasz Bohdal Laura Laguna Christophe Merlo		
LEARNING AND TEACHING					
ESCO Occupation(s)		Chief Technology Officer (CTO)			
ESCO Skill & Competences (*no ESCO)		Digital transformation manager Monitor technology trends Emergent technologies Project management Set production facilities standards			
Learning outcomes		KU2, KU3, KU4, EP6, IN4			
Teaching methods		Lectures Seminars Flipped Classroom Case Studies Collaborative and Problem-Based Learning (PBL)			
Assessment methods		Short online quizzes Case studies Technical reports Oral presentation & defence			
CONTENTS					
Previous requirements (if necessary)					
Knowledge/Skill/Competence/Subject name					
Content index					
1. From Industry 4.0 to Industry 5.0 2. Technologies of I5.0. 3. Human-centric in modern manufacturing 4. Business models impacts <ul style="list-style-type: none">• Project management, risk management• Developing opportunities of new activities based 5. Transforming companies <ul style="list-style-type: none">• Technological transformations• Business processes transformations• Organisational and individuals impacts• Implementing a change management approach 6. Application through case studies from world of work.					
SUPPORTING BIBLIOGRAPHIC REFERENCES					
<ul style="list-style-type: none">• Ruiz-de-la-Torre, A., Rio-Belver, R.M., Guevara-Ramirez, W. and Merlo, C. 2023. Industry 5.0 and Human-Centered Approach. Bibliometric Review. Lecture Notes on Data					

Engineering and Communications Technologies, 160, 402-408. Doi:10.1007/978-3-031-27915-7_71

- Dilbagh Panchal, Dragan Pamucar, Anish Sachdeva, Mohit Tyagi.: Optimization of Industrial Systems by Mohit Tyagi (English) Hardcover Book. John Wiley & Sons INC International Concepts. ISBN-13 9781119750314, 2021.
- Mark French Fundamentals of Optimization Methods, Minimum Principles, and Applications for Making Things Better. Springer International Publishing AG, may 2018.
- Dean Angela.: Design and Analysis of Experiments. Springer Nature. ISBN 9783319522487, 2017.
- Platform Industrie 4.0. 2016. Industrie 4.0– Anstoß, Vision 2030. Berlin: Platform industrie 4.0, Federal ministry for economic affairs and energy.
- LaValle S., Lesser E., Shockley R., Hopkins M.S., Kruschwitz N., 2011. Big data, analytics and the path from insights to value. MIT Sloan Management Review, 52(2), 21–32.