



Unit 1: Advanced manufacturing – companies’ mindset and current trends

Subunit 2: Current trends: process and product technologies

Activity (1): Current trends

Learning Outcomes	Knowledge	Skills	Responsibility and Autonomy
<p>(paste the appropriate LOs from the LOs Matrix)</p>	<p>Basic knowledge of:</p> <ul style="list-style-type: none"> - Current trends on product technologies - Current trends on process technologies 	<p>List of 9 main technologies that are transforming industrial production</p> <p>Identify and describe key characteristics of products in advanced manufacturing</p> <p>Identify and describe key characteristics of processes in advanced manufacturing</p> <p>Analyse the possibilities of implementation of product technologies and process technologies in advanced manufacturing on specific examples from the industry</p> <p>Provide examples of technologies transforming industrial production in international and local companies</p>	<p>Demonstrate knowledge and skills obtained for development of cooperation between VET and business sector</p>
<p>Type of activity</p>	<input checked="" type="checkbox"/> PDF <input type="checkbox"/> PPT <input checked="" type="checkbox"/> Image/Infographic <input checked="" type="checkbox"/> Video		<input checked="" type="checkbox"/> Test/Quiz <input type="checkbox"/> Game <input type="checkbox"/> Other (specify) <hr/>
<p>Duration</p>	<p>Estimated in minute</p> <p>180</p>		
<p>Activity (to be inserted into Moodle and seen by learners)</p>	<p>Tasks:</p> <ul style="list-style-type: none"> • read through printed PDF about industry 4.0 trends • watch the videos 		

	<ul style="list-style-type: none"> ● research: find videos about the topic ● make an infographic and present it to other students (use Canva, PPT...) ● short quiz in Moodle classroom <p>To complete the activity: Watch the following videos:</p> <p>Industry 4.0 global trends: https://www.youtube.com/watch?v=VhqMyZMws3Q</p> <p>What is smart manufacturing? https://www.youtube.com/watch?v=EV1Ygw6_rCs</p> <p>Read the article about trends: Trends in Advanced Manufacturing Technology Innovation Olivier de Weck, Darci Reed, Sanjay Sarma, Martin Schmidt Massachusetts Institute of Technology</p> <p>https://www.als2018.com/pdf/ALS2018%20ppt_5.6%20Thriving%20in%20Industry%204.0%E2%80%93%20The%20Festo%20Way.pdf</p>
Assessment	Student will answer short quiz on the topic.
Resources	Equipment: PC, laptop, tablet, smartphone, Internet connection
Further reading	Industry 4.0 Trends in Management of intelligent Manufacturing Systems Lucia Knapcikova, Michal Balog