

Subunit 1.1: Basics

Activity 1.1.4: Industry 4.0 and VET

Learning Outcomes	Knowledge	Skills	Responsibility and Autonomy
<p>(paste the appropriate LOs from the LOs Matrix)</p>	<ul style="list-style-type: none"> <li>• fundamental knowledge of advanced manufacturing:                             <ul style="list-style-type: none"> <li>o key characteristics of 1st, 2nd, 3rd and 4th industrial revolution</li> </ul> </li> <li>• principles of industry 4.0</li> </ul>	<ul style="list-style-type: none"> <li>• Identify and illustrate the 4 development stages of industrial revolution</li> <li>• compare key characteristics of 3rd and 4th industrial revolutions in order to recognise the benefits of the 4th industrial revolution in comparison with the 3rd one</li> <li>• identify key principles of industry 4.0</li> <li>• explain how to apply key characteristics of industry 4.0 to examples from its respective VET field/ industry sector</li> <li>• provide examples of the use of advanced manufacturing in different sectors</li> <li>• show benefits of implementing advanced manufacturing for the improvement of product quality, cost reduction, flexibility to adapt to changes in the market and reduction of time to get new products to market</li> <li>• distinguish between terms and concepts of digitization, digitalization and digital transformation</li> <li>• differentiate between digitalization and Industry 4.0 in order to recognise the evolution</li> <li>• demonstrate knowledge and skills obtained for development of cooperation between VET and business sector of the industrial</li> </ul>	<ul style="list-style-type: none"> <li>• demonstrate knowledge and skills obtained for development of cooperation between VET and business sector</li> </ul>



		<p>production paradigm</p> <ul style="list-style-type: none"> <li>list 9 main technologies that are transforming</li> <li>industrial production</li> </ul>	
<p>Type of activity</p>	<input checked="" type="checkbox"/> PDF <input type="checkbox"/> PPT <input 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>60 minutes</p>		
<p>Activity (to be inserted into Moodle and seen by learners)</p>	<p>Industry 4.0 is giving manufacturers faster, more flexible, and more efficient processes to produce higher-quality goods and lower costs. because of this, the workforce experienced. One of the biggest changes. Research shows that sectors that are highly vulnerable to automation, may need to upskill or shift their focus to a new discipline to stay in the game, therefore to maintain a competitive and innovative economy, it is important that already during vocational education and training the basis is provided to properly face the recent developments in “working world 4.0”.</p> <p>To complete this activity:</p> <ol style="list-style-type: none"> <li>Watch the following video (10 minutes): „Web 4.0 &amp; Industry 4.0   Bringing us progress or making us jobless?“ <a href="https://www.youtube.com/watch?v=q_GuEGvCurA">https://www.youtube.com/watch?v=q_GuEGvCurA</a></li> <li>Watch the following video (5 minutes): „Industry 4.0 Jobs“ <a href="https://www.youtube.com/watch?v=e3UojHPoyhQ">https://www.youtube.com/watch?v=e3UojHPoyhQ</a></li> <li>Watch the following video (5 minutes): „Fourth Industrial Revolution: creating new job opportunities“ <a href="https://www.youtube.com/watch?v=L89GIBPuRj8">https://www.youtube.com/watch?v=L89GIBPuRj8</a></li> <li>Read about the project VET 4.0 and check out the eLearning for Students and Teachers (20 minutes): <a href="http://www.vet-4-0.eu/About.html">http://www.vet-4-0.eu/About.html</a></li> <li>Read the following chapters (p. 1-5 and 18-19, with special focus on Exhibit 10, p. 19) (15 minutes): <a href="https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx">https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx</a></li> <li>On the basis of the Exhibit 10, reflect upon your professional profile and the future skills needed (p. 19, <a href="https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx">https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx</a>)</li> </ol>		
<p>Assessment</p>	<p>On the basis of the Exhibit 10, reflect upon your professional profile and the future skills needed (p. 19, <a href="https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx">https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx</a>)</p>		



	<a href="#">the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx)</a>
Resources	PC, laptop, tablet, phone, Internet connection
Further reading	<a href="https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx">https://www.mckinsey.com/~media/McKinsey/Featured%20Insights/Future%20of%20Organizations/Skill%20shift%20Automation%20and%20the%20future%20of%20the%20workforce/MGI-Skill-Shift-Automation-and-future-of-the-workforce-May-2018.ashx)</a>

