



## PROFESSIONAL AREA: CHEMISTRY

Professional area	Professional area	Educational level	General abilities (knowledge, skills, competences) (common for Groups 1 to 3)	Special “green” abilities (knowledge, skills, competences)	Digital abilities (knowledge, skills, competences)
CHEMISTRY	<b>Group 1</b>		<p>Chemistry professionals conduct qualitative and quantitative chemical analyses and experiments in laboratories for quality or process control and development of new products.</p> <p>Their knowledge and skills have to meet the requirements of 3<sup>rd</sup> and / or 4<sup>th</sup> ISCO-08 / ESCO skill level.</p> <p>They can:</p> <ul style="list-style-type: none"> <li>learn, implement and enhance existing knowledge in a concrete professional area</li> <li>implement, develop and improve new chemical methods and methodologies, concepts, products and processes</li> <li>gather environment specimens and data, and study their chemical form, structure and composition</li> </ul>	<b>Group 1</b>	<b>Group 1</b>
	<b>Life Science Professionals</b>	BSc, MSc, PhD			

		<ul style="list-style-type: none"> <li>design and conduct laboratory research, experiments and tests and analyze obtained results</li> <li>apply chemical knowledge for testing, development and improvement of materials, industrial products and the processes efficiency</li> <li>train and consult on technological aspects of special materials, products and processes</li> <li>conduct theoretical or practical training in one or more disciplines at different educational levels</li> </ul>	<p>to different targets: industry, business, government</p> <ul style="list-style-type: none"> <li>plan, develop and implement programmes / policies regarding chemical approaches for improvement of environmental habitats</li> </ul>	<p><b><u>Calendar and scheduling software:</u></b></p> <ul style="list-style-type: none"> <li>Scheduling software</li> </ul> <p><b><u>Electronic mail software:</u></b></p> <ul style="list-style-type: none"> <li>Email software</li> <li>Microsoft Outlook</li> </ul> <p><b><u>Desktop communication software:</u></b></p> <ul style="list-style-type: none"> <li>Google Meet</li> <li>Microsoft Teams</li> <li>Skype and etc.</li> </ul>	
	<b>Group 2</b>			<b>Group 2</b>	<b>Group 2</b>
	<p><b>Life Science Professionals</b></p> <ul style="list-style-type: none"> <li>Chemists, oils</li> <li>Chemists, plastic</li> <li>Chemists, polymers</li> </ul>	<p>BSc, MSc, PhD</p>	<ul style="list-style-type: none"> <li>provide different types of business and social services</li> <li>write scientific papers and reports detailing research and any new findings, which are then made available to the scientific community in scientific journals or at different scientific events</li> <li>supervise other workers</li> <li>be involved in the performance of combinations of all these activities</li> </ul>	<ul style="list-style-type: none"> <li>conduct applied research on the effect of oils, plastic and polymeric materials production on the protection, restoration and remediation of environmental habitats</li> <li>advice companies for different ways to enhance production efficiency and reduce its environmental impact</li> <li>monitor and analyze waste production during manufacture of plastic and polymer materials</li> <li>develop and implement new technologies or</li> </ul>	<p><b><u>Specific professional area software:</u></b></p> <ul style="list-style-type: none"> <li>Minitab</li> <li>Agilent ChemStation</li> <li>Chempute Software E-Notebook</li> <li>ChemSW Molecular Modeling Pro</li> <li>Molsearch Pro</li> <li>ChemSW Laboratory Document Control System LDCS</li> <li>National Instruments LabVIEW and etc.</li> </ul> <p><b><u>Office suit software:</u></b></p> <ul style="list-style-type: none"> <li>Microsoft Office</li> </ul>

			<p>improve existing ones for appropriate waste disposal</p> <ul style="list-style-type: none"> <li>• promote the use of Environmental Management Systems (EMS) to reduce waste and minimize environmental damage from industrial production of plastic and polymer materials</li> </ul>	<p><b><u>Internet browser software:</u></b></p> <ul style="list-style-type: none"> <li>• Web browser software</li> </ul> <p><b><u>Calendar and scheduling software:</u></b></p> <ul style="list-style-type: none"> <li>• Scheduling software</li> </ul> <p><b><u>Electronic mail software:</u></b></p> <ul style="list-style-type: none"> <li>• Email software</li> <li>• Microsoft Outlook</li> </ul> <p><b><u>Desktop communication software:</u></b></p> <ul style="list-style-type: none"> <li>• Google Meet</li> <li>• Microsoft Teams</li> <li>• Skype and etc.</li> </ul>
	<b>Group 3</b>		<b>Group 3</b>	<b>Group 3</b>
	<p><b>Life Science Professionals</b></p> <ul style="list-style-type: none"> <li>• Chemists, manufacture of products</li> <li>• Chemists, chemical quality control</li> </ul>	BSc, MSc	<ul style="list-style-type: none"> <li>• develop environmentally safe methods and strategies for chemicals' manufacture</li> <li>• conduct quality control test regarding chemical composition and structure of environmental specimens to ensure compliance with environmental specifications</li> <li>• compile and analyze test information to determine process or equipment</li> </ul>	<p><b><u>Specific professional area software:</u></b></p> <ul style="list-style-type: none"> <li>• Agilent ChemStation</li> <li>• Alarm management system software</li> <li>• Distributed control system DCS</li> <li>• Interlock shutdown systems</li> <li>• Coordinated incident management system CIMS software and etc.</li> </ul> <p><b><u>Office suit software:</u></b></p> <ul style="list-style-type: none"> <li>• Microsoft Office</li> </ul>

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			<p>operating efficiency or to diagnose malfunction during manufacture to fit environmental standards</p> <ul style="list-style-type: none"> <li>• provide and maintain a safe work environment in production facilities by participating in safety programmes, committees or teams and by conducting laboratory or plant safety audits</li> </ul>	<p><b><u>Internet browser software:</u></b></p> <ul style="list-style-type: none"> <li>• Web browser software</li> </ul> <p><b><u>Calendar and scheduling software:</u></b></p> <ul style="list-style-type: none"> <li>• Scheduling software</li> </ul> <p><b><u>Electronic mail software:</u></b></p> <ul style="list-style-type: none"> <li>• Email software</li> <li>• Microsoft Outlook</li> </ul> <p><b><u>Desktop communication software:</u></b></p> <ul style="list-style-type: none"> <li>• Google Meet</li> <li>• Microsoft Teams</li> <li>• Skype and etc.</li> </ul>
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