

1. Title	Perform risk assessment for electrical and mechanical work						
2. Code	EMCUSH506A						
3. Range	Apply the knowledge and skills of risk assessment with the understanding of the electrical and mechanical work to perform risk assessment. The competency of this unit is applicable to safety management of the electrical and mechanical services.						
4. Level	5						
5. Credit	3						
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <table border="0"> <tr> <td style="vertical-align: top;">6.1</td> <td style="vertical-align: top;">Engineering work and environment</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Understand the engineering work and environment according to engineering working guidelines and on-site observation</li> <li>◆ Understand the potential risks and hazards according to the accident reports</li> </ul> </td> </tr> <tr> <td style="vertical-align: top;">6.2</td> <td style="vertical-align: top;">Perform risk assessment</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> <li>◆ Apply risk assessment skills to perform risk assessment for electrical and mechanical procedures, such as HAZOP (Hazard and Operability), FTA (Fault Tree Analysis), fault-finding analysis, status analysis, and the use of tools under different circumstances and handling of dangerous goods and scope of application</li> <li>◆ Compile risk assessment reports for engineering procedures, including               <ul style="list-style-type: none"> <li>• Hazards and their identification</li> <li>• Risk assessment methods</li> <li>• Calculation and assessment of risks</li> <li>• Methods to reduce or eliminate risks</li> <li>• Conclusions and recommendations</li> </ul> </li> </ul> </td> </tr> </table>	6.1	Engineering work and environment	<ul style="list-style-type: none"> <li>◆ Understand the engineering work and environment according to engineering working guidelines and on-site observation</li> <li>◆ Understand the potential risks and hazards according to the accident reports</li> </ul>	6.2	Perform risk assessment	<ul style="list-style-type: none"> <li>◆ Apply risk assessment skills to perform risk assessment for electrical and mechanical procedures, such as HAZOP (Hazard and Operability), FTA (Fault Tree Analysis), fault-finding analysis, status analysis, and the use of tools under different circumstances and handling of dangerous goods and scope of application</li> <li>◆ Compile risk assessment reports for engineering procedures, including               <ul style="list-style-type: none"> <li>• Hazards and their identification</li> <li>• Risk assessment methods</li> <li>• Calculation and assessment of risks</li> <li>• Methods to reduce or eliminate risks</li> <li>• Conclusions and recommendations</li> </ul> </li> </ul>
6.1	Engineering work and environment	<ul style="list-style-type: none"> <li>◆ Understand the engineering work and environment according to engineering working guidelines and on-site observation</li> <li>◆ Understand the potential risks and hazards according to the accident reports</li> </ul>					
6.2	Perform risk assessment	<ul style="list-style-type: none"> <li>◆ Apply risk assessment skills to perform risk assessment for electrical and mechanical procedures, such as HAZOP (Hazard and Operability), FTA (Fault Tree Analysis), fault-finding analysis, status analysis, and the use of tools under different circumstances and handling of dangerous goods and scope of application</li> <li>◆ Compile risk assessment reports for engineering procedures, including               <ul style="list-style-type: none"> <li>• Hazards and their identification</li> <li>• Risk assessment methods</li> <li>• Calculation and assessment of risks</li> <li>• Methods to reduce or eliminate risks</li> <li>• Conclusions and recommendations</li> </ul> </li> </ul>					
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to perform effectively risk assessment and to write proposals for electrical and mechanical work and environment, and come up with conclusions and recommendations.</p>						
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses the competency of using basic risk assessment methods.						