

1. Title	Design marine electrical equipment									
2. Code	EMSRDE404A									
3. Range	Apply design principles of marine electrical equipment to performing general tasks in design studio and making design drawings.									
4. Level	4									
5. Credit	6									
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;">Specifications, basic construction and range of application of marine electrical installations</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Be familiar with general marine electrical installations, including transformers, DC/AC motor, AC generators and lighting ◆ Be familiar with marine power supply and distribution system ◆ Be familiar with electrical specifications and cable requirements </td> </tr> <tr> <td style="vertical-align: top;">6.2</td> <td style="vertical-align: top;">Techniques of designing marine electrical installations</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Apply design principles and specifications for marine electrical installations to designing general marine electrical installations and accessories ◆ Draw drafts of marine electrical installations </td> </tr> <tr> <td style="vertical-align: top;">6.3</td> <td style="vertical-align: top;">Professionalism in designing marine electrical installations</td> <td style="vertical-align: top;"> <ul style="list-style-type: none"> ◆ Follow in-house guidelines and legislations related to marine electrical installations, ensuring that the installation design meets safety standard </td> </tr> </table>	6.1	Specifications, basic construction and range of application of marine electrical installations	<ul style="list-style-type: none"> ◆ Be familiar with general marine electrical installations, including transformers, DC/AC motor, AC generators and lighting ◆ Be familiar with marine power supply and distribution system ◆ Be familiar with electrical specifications and cable requirements 	6.2	Techniques of designing marine electrical installations	<ul style="list-style-type: none"> ◆ Apply design principles and specifications for marine electrical installations to designing general marine electrical installations and accessories ◆ Draw drafts of marine electrical installations 	6.3	Professionalism in designing marine electrical installations	<ul style="list-style-type: none"> ◆ Follow in-house guidelines and legislations related to marine electrical installations, ensuring that the installation design meets safety standard
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7. Assessment Criteria	<p>The integrated outcome requirements of this unit of competency are:</p> <p>(i) Capable to design general marine electrical installations and accessories ; and</p> <p>(ii) Capable to draw drafts of marine electrical installations.</p>									
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of electrical equipment (such as: EMCUDE109A “Identify general properties of different types of typical electrical and mechanical engineering materials” and EMSRIN202A “Basic layout of marine electrical installations”).									