

<b>Course title</b>	Electrical and Electronic Measuring Equipment, Basic Electrical Fault Finding			
<b>STCW Code alignment ref.</b>	<b>Table A-III/7</b> <i>Specification of minimum standard of competence for electro-technical rating</i>			
<b>Function</b>	Marine Engineering at the support level			
<b>Course code</b>			<b>Lecture</b>	
<b>Course version</b>	V1		<b>Tutorial</b>	
<b>Level</b>	4	<b>Directed learning hours</b>	<b>Blended</b>	75
<b>Credits</b>	10		<b>Practical</b>	
<b>Delivery mode</b>	Blended		<b>Workshop</b>	
<b>Internet Based Learning Indicator</b>	3	<b>Work integrated learning hours</b>		
<b>EFTS value</b>	.0833	<b>Independent learning hours</b>		25
<b>Pre-requisites</b>		<b>Notional learning hours</b>		100
<b>Co-requisites</b>				
<b>Attendance requirements</b>	80% attendance is recommended for course work;			

## Aim

Demonstrate knowledge and skills of safety requirements for working on shipboard electrical systems

## Learning outcomes

On successful completion of this course the student will be able to:

### Outcome 1 **Demonstrate basic knowledge of the implementation of satisfactory safety procedures**

- Demonstrate basic understanding of construction and operational characteristics of shipboard AC and DC systems and equipment

### Outcome 2 **Demonstrate the use of appropriate test equipment and accurately interpret results**

- Demonstrate basic understanding of using measuring instruments

### Outcome 3 **Demonstrate basic knowledge of procedures for the conduct of repair and maintenance in accordance with manuals and good practice**

- Demonstrate basic understanding for use of machine tools, hand tools and power tools

**Assessment**

Number	Type	Weighting	Learning Outcomes assessed
1	Practical assessment in the workshop	C	1- 2-3
2	Written test	C	1-3

**Resources required**

## Text books

Hall, Dennis T, 1996 Second Edition, Practical Marine Electrical Knowledge  
ISBN 1 85609 1821

Hall, Dennis T, 2014 Third Edition, Practical Marine Electrical Knowledge  
ISBN 978 1 85609 623 2

Schaum Theory and Problems of Basic Electricity  
ISBN 0 03 025240 8

## Videotel training video series

Practical Marine Electrical Knowledge (1) - Ships Electrical Systems - Safety and Maintenance

Practical Marine Electrical Knowledge (2) - Electrical Distribution

## Laboratory

Electrical and Electronics laboratory – test instruments

