

**Department of Nursing Administration  
Nursing Education**

**Course Outline**

**Advanced Electrocardiogram (ECG) Workshop**

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**Course Title**

Advanced Electrocardiogram (ECG) Workshop

**Course Duration**

8 hrs (1 Day)

Please indicate if selected others: |            |

**Number of Run Per Year**

1

**Target Participants**

- Registered Nurses
- Choose your target participant.
- Choose your target participant.

Pre-requisite: | RNs must complete their Basic ECG course before enrol to Advance ECG course. |

**No. of Participants** *(Maximum number of participants allowed.)*

- |    20    |

**Aim**

- To provide the nurses with essential skills and knowledge in ECG rhythm interpretation.
- To be able to identify and management patient with ST Segment Elevation Myocardial Infarctions.

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**Course Objectives**

At the end of the workshop, participants will be able to:

1. describe the normal cardiac anatomy and physiology and normal electrical conduction through the heart.
2. identify and relate waveforms to the cardiac cycle.
3. state the indications for 12-lead ECGs.
4. state the types of leads and leads placement.
5. Identify normal and abnormal components on ECGs.
6. utilize a systematic process when approaching the interpretation of the ECGs.
7. identify Patient Assessment and ECG characteristics associated with ST Segment Myocardial Infarctions and critical conditions.
8. respond appropriately to the types of ST Segment Myocardial Infarctions and critical conditions associated with changes in the 12-lead ECG.

**Course Content**

**Duration**

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|--|-----------|
| 1) <b>Introduction to 12-lead ECG</b>  | 1.5 hours |
| <ul style="list-style-type: none"><li>• The types of leads and its placement</li><li>• Axes of 12-lead ECG</li><li>• Systematic Approach to read 12-lead ECG</li></ul> |           |
| 2) <b>Identifications of Abnormal 12-lead ECG</b>  | 2 hours   |
| <ul style="list-style-type: none"><li>• Types of Myocardial infarctions</li><li>• Paced Rhythm</li><li>• Types of Heart Blocks</li><li>• Lethal arrhythmias</li></ul>  |           |

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|----|---|-----------|
| 3) | <b>Roles and Responsibilities of the Nurse</b>  | 2 hours   |
|    | <ul style="list-style-type: none"><li>• Identify the lethal arrhythmias on the 12-lead ECG</li><li>• Response appropriately to the lethal arrhythmia accordingly to hospital protocol</li></ul> |           |
| 4) | <b>Case Studies Discussion</b>  | 1 hour    |
| 5) | <b>Assessment and Evaluation</b>  | 1.5 hours |

**Teaching Methodology** (e.g.; *Lecture, Video, Role play, Practical or Group discussion*)

- Pre-reading
- Lectures
- Case Studies Discussion

**Assessment Methodology** (e.g.; *Post-Test, Classroom Competency Assessment or Others*)

- MCQ Quiz

**Theory Test Passing Score** (if applicable)

- NA

**Trainers**

- Senior Nurse Manager
- Advanced Practice Nurse

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**Contact Person**

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