



COURSE CONTENT

SEDA Malaysia Off-Grid Photovoltaic (PV) Systems Design Course

a. Fundamental of Solar PV Technology

Chapter 1: SAFETY PRACTICES

Chapter 2: BASIC ELECTRICITY

Chapter 3: INTRODUCTION TO PHOTOVOLTAIC SYSTEMS

Chapter 4: BASIC SOLAR ENGINEERING

Chapter 5: PHOTOVOLTAICS TECHNOLOGY

Chapter 6: MOUNTING SYSTEMS

Chapter 7: OTHER BALANCE OF SYSTEM COMPONENTS

Chapter 8: END OF LIFE ISSUES

Chapter 9: CONCEPTS IN LIGHTNING PROTECTION

b. Design & Sizing of OGPV System

Chapter 1: OFF-GRID PHOTOVOLTAIC SYSTEMS

Chapter 2: ENERGY STORAGE

Chapter 3: CHARGE CONTROLLER

Chapter 4: OGPV INVERTER

Chapter 5: GENERATOR AND BATTERY CHARGER

Chapter 6: MATCHING LOAD RESOURCE, BATTERY AND PV

Chapter 7: SIZING OF OTHER BOS

Chapter 8: DESIGN USING ALL-IN-ONE INVERTER

Chapter 9: DESIGN OF WATER PUMPING SYSTEM WITHOUT ENERGY STORAGE