



COURSE SCHEDULE

SEDA Malaysia Off-Grid Photovoltaic (PV) Systems Design Course (Face-to-face Mode)

DAY	TIME	BOOK	CHAPTER	DESCRIPTION
1	09:00 – 09:15	Opening and Course Outline		
	09:15 – 10:45	Fundamental of Solar PV	Chapter 1	Safety Practices
		Fundamental of Solar PV	Chapter 2	Basic Electricity
		Fundamental of Solar PV	Chapter 3	Introduction to Photovoltaic System
	10:45 – 11:00	Break		
	11:00 – 12.30	Fundamental of Solar PV	Chapter 3	Basic Solar Engineering
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Fundamental of Solar PV	Chapter 4	Photovoltaic Technology
	15:30 – 15:35	Break		
15:35 – 17:00	Fundamental of Solar PV	Chapter 4	Photovoltaic Technology (continue)	
2	09:00 – 10:30	Fundamental of Solar PV	Chapter 5	Mounting structure
	10:30 – 10:45	Break		
	10:45 – 12:30	Fundamental of Solar PV	Chapter 6	Other BOS components
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Fundamental of Solar PV	Chapter 7	Other BOS components (continue)
	15:20 – 15:35	Break		
	15:35 – 17:00	Fundamental of Solar PV	Chapter 8	End of life issues
Fundamental of Solar PV		Chapter 9	Concept of lightning protection system	
3	09:00 – 10:30	Design & Sizing of OGPV	Chapter 1	OGPV system
		Design & Sizing of OGPV	Chapter 2	Energy Storage
	10:30 – 10:45	Break		
	10:45 – 12:30	Design & Sizing of OGPV	Chapter 3	Charge Controller
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Design & Sizing of OGPV	Chapter 4	OGPV Inverter
	15:20 – 15:35	Break		
	15:35 – 17:00	Design & Sizing of OGPV	Chapter 5	Generator and battery charger



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Galeria PJH, Aras 9, Jalan P4B, Persiaran Perdana, Presint 4, 62100 Putrajaya
 T : +603 - 8870 5800 F : +603 - 8870 5900 E : info@seda.gov.my

DAY	TIME	BOOK	CHAPTER	DESCRIPTION
4	09:00 – 10:30	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV
	10:30 – 10:45	Break		
	10:45 – 12:30	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV (continue)
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV (continue)
	15:20 – 15:35	Break		
	15:35 – 17:00	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV (continue)
5	09:00 – 10:30	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS
	10:30 – 10:45	Break		
	10:45 – 12:30	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS (continue)
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS (continue)
	15:20 – 15:35	Break		
	15:35 – 17:00	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS (continue)
6	09:00 – 10:30	Design & Sizing of OGPV	Chapter 8	Design using all-in-one inverter
	10:30 – 10:45	Break		
	10:45 – 12:30	Design & Sizing of OGPV	Chapter 8	Design using all-in-one inverter (continue)
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Design & Sizing of OGPV	Chapter 9	Design of water pumping system without energy storage
	15:20 – 15:35	Break		
	15:35 – 17:00	Design & Sizing of OGPV	Chapter 9	Design of water pumping system without energy storage (continue)
7	09:00 – 17:00	Practical		Practical Exercise



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DAY	TIME	BOOK	CHAPTER	DESCRIPTION
8	09:00 – 17:00	Practical Exam		Practical Exam
9	09:00 – 17:00	Tutorials		Tutorial Fundamental
	10:30 – 10:45	Break		
	10:45 – 12:30	Tutorials		Tutorial Fundamental
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Tutorials	Chapter 6	Tutorial OGPV design
	15:20 – 15:35	Break		
	15:35 – 17:00	Tutorials	Chapter 6	Tutorial OGPV design
10	09:00 – 12:00	Theory Exam		Theory Exam Design OGP (OGPV Design)
	12:00 – 14:00	Lunch		
	14:00 – 16:00	Theory Exam		Theory Exam Design OGPV (Fundamental)



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SEDA Malaysia *Off-Grid Photovoltaic Systems Design (Mixed Mode)*

Online:

DAY	TIME	BOOK	CHAPTER	DESCRIPTION
1	09:00 – 09:15	Opening and Course Outline		
	09:15 – 10:30	Fundamental of Solar PV	Chapter 1	Safety Practices
		Fundamental of Solar PV	Chapter 2	Basic Electricity
			Chapter 3	Introduction to Photovoltaic system
	10:30 – 10:40	Break		
10:40 – 12:10	Fundamental of Solar PV	Chapter 4	Basic Solar Engineering	
2	09:00 – 10:40	Fundamental of Solar PV	Chapter 5	Photovoltaic Technology
	10:40 – 10:50	Break		
	10:50 – 12:30	Fundamental of Solar PV	Chapter 5	Photovoltaic Technology (continue)
3	09:00 – 10:40	Fundamental of Solar PV	Chapter 6	Mounting structure
	10:40 – 10:50	Break		
	10:50 – 12:30	Fundamental of Solar PV	Chapter 7	Other BOS components
4	09:00 – 10:40	Fundamental of Solar PV	Chapter 7	Other BOS components (Continue)
	10:40 – 10:50	Break		
	10:50 – 12:30	Fundamental of Solar PV	Chapter 8	End of life issues
Chapter 9			Concept of lightning protection system	
5	09:00 – 10:40	Design & Sizing of OGPV	Chapter 1	OGPV system
			Chapter 2	Energy storage
	10:40 – 10:50	Break		
6	10:50 – 12:30	Design & Sizing of OGPV	Chapter 3	Charge controller
	09:00 – 10:40	Design & Sizing of OGPV	Chapter 4	OGPV inverter
	10:40 – 10:50	Break		
7	10:50 – 12:30	Design & Sizing of OGPV	Chapter 5	Generator and battery charger
	09:00 – 10:40	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV
	10:40 – 10:50	Break		
	10:50 – 12:30	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV (continue)



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DAY	TIME	BOOK	CHAPTER	DESCRIPTION
8	09:00 – 10:40	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV (continue)
	10:40 – 10:50	Break		
	10:50 – 12:30	Design & Sizing of OGPV	Chapter 6	Matching load resource, battery and PV (continue)
9	09:00 – 10:40	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS
	10:40 – 10:50	Break		
	10:50 – 12:30	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS (continue)
10	09:00 – 10:40	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS (continue)
	10:40 – 10:50	Break		
	10:50 – 12:30	Design & Sizing of OGPV	Chapter 7	Sizing of other BOS (continue)
11	09:00 – 10:40	Design & Sizing of OGPV	Chapter 8	Design using all-in-one inverter
	10:40 – 10:50	Break		
	10:50 – 12:30	Design & Sizing of OGPV	Chapter 8	Design using all-in-one inverter (continue)
12	09:00 – 10:40	Design & Sizing of OGPV	Chapter 9	Design of water pumping system without energy storage
	10:40 – 10:50	Break		
	10:50 – 12:30	Design & Sizing of OGPV	Chapter 9	Design of water pumping system without energy storage (continue)



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Face-to-face:

DAY	TIME	BOOK	CHAPTER	DESCRIPTION
13	09:00 – 17:00	Practical		Practical Exercise
14	09:00 – 17:00	Practical Exam		Practical Exam
15	09:00 – 17:00	Tutorials		Tutorial Fundamental
	10:30 – 10:45	Break		
	10:45 – 12:30	Tutorials		Tutorial Fundamental
	12:30 – 14:00	Lunch		
	14:00 – 15:20	Tutorials		Tutorial OGPV design
	15:20 – 15:35	Break		
	15:35 – 17:00	Tutorials		Tutorial OGPV design
16	09:00 – 12:00	Theory Exam		Theory Exam Design OGPV (OGPV Design)
	12:00 – 14:00	Lunch		
	14:00 – 16:00	Theory Exam		Theory Exam Design OGPV (Fundamental)