



# THE SOLAR DESIGN COMPANY TRAINING COURSES

## PV\*SOL PREMIUM

### 1. Introduction

The Solar Design Company provides training in the latest versions of the various technical software packages produced by Valentin Software as well as general PV, Solar Thermal and Heat Pump technical skills. The Solar Design Company is the official UK training partner and distributor of Valentin software in the UK. This document summarises the intended course content and learning outcomes from the delivery of training sessions by The Solar Design Company for the following titles:

#### PV\*SOL premium

The overall aim of the training is:

1. To illustrate every dialogue within the software.
2. To explain terminology.
3. To practice typical systems design.
4. To produce full project reports, specific to attendees' requirements.

### 2. Course Overview

#### 2.1. PV\*SOL premium

Attendees will be shown how to enter data and use PV\*SOL premium to design and simulate performance of solar photovoltaic systems. They will also be shown how to interpret the results generated by the systems created and how to make any changes necessary to optimise configurations of modules and inverters. An economic analysis will be created and various report outputs, including 3D models and photo images will be produced. These will be customised to suit specific requirements. There will be opportunity to go over specific topics relevant to your requirements.

A typical training session for PV\*SOL premium is expected to take two days. The days will start at 9.00am (set up from 08:45am) and finish at around 5.00pm, with a lunch break from 12.15pm-1.15pm and two 15 minute tea breaks starting at around at 10.30am and 3.00pm.

The timetable below is specific for our mixed company sessions in Machynlleth, Mid Wales. More flexibility on topics and times is available by having us come to your offices to conduct the session just with your company.



## Day One: 2D design and core PV\*SOL principles

Time	Description
08:45 to 09:00	Arrive at the venue for registration and to get set up and comfortable
09:00 to 10:30	<b>Session 1:</b> Overview and basic navigation/concepts, using climate data, defining on-site consumption, basic system design, shading.
10:30 to 10:45	Tea Break
10:45 to 12:15	<b>Session 2:</b> Configuring Inverters and configuration limits, designing with multiple arrays, cable sizing, circuit diagrams.
12:15 to 13:15	Lunch
13:15 to 15:00	<b>Session 3:</b> 'Roof Layout' and 'PhotoPlan'.
15:00 to 15:15	Tea Break
15:15 to 17:00	<b>Session 4:</b> Running simulations, understanding and using the results. On-grid battery systems. Detailed explanation of 'Economic Analysis', comparing projects, worked examples.
17:00	End of course
17:00 to 18:00	<b>Off Grid Systems:</b> Optional extra module for design of off-grid systems. Contact us for details and prices.

## Day Two: 3D Design

Time	Description
08:45 to 09:00	Arrive at the venue for registration and to get set up and comfortable
09:00 to 10:30	<b>Session 5:</b> Basics of 3D visualisation: navigation, the top row of icons & general techniques of building construction.
10:30 to 10:45	Tea Break
10:45 to 12:15	<b>Session 6:</b> Adding textures, inverter selection, mounting on open area, stringing layout. Worked example to test understanding.
12:15 to 13:15	Lunch
13:15 to 14:45	<b>Session 7:</b> Ground mounted and flat roof systems.
15:00 to 15:15	Tea Break
15:15 to 17:00	<b>Session 8:</b> Manual Configuration of inverter connection, cable plan, 3D worked examples and course review.
17:00	End of course