

SOLAR-REGISTER

including registration on
www.solar-register.nl

SOLAR-SPECIALIST ONLINE



SOLAR-SPECIALIST ONLINE

The foundation for designer and consultant

The course consists of the following modules:

Solar-Allround E-learning

Solar-Design

Exam Solar-Specialist

€ 1895,- per person ex. VAT



Theory course



Online and self-study



4 live 2-hour online lessons, E-learning and self-study



Study materials included, access to online learning environment, diploma and registration

SOLAR-ALLROUND E-LEARNING

FOR WHO

All (new) employees and entrepreneurs in the installation industry dealing with solar energy and wanting to **know the 'sense and nonsense' about solar energy.**

LEVEL

You do not need any prior knowledge to take this course. The course is at Senior secondary vocational level (MBO+). You complete the E-learning Solar-Allround (English) at your own pace and at your own convenience.

CONTENT

- Basic concepts of energy
- The law of conservation of energy
- Energy and power
- Efficiency
- The capacity factor
- Voltage and current
- How do solar panels work
- Standard test conditions (STC)
- Yield calculation
- Business cases and economy
- The E-learning is concluded with a test. After passing the test, you will receive the Solar-Allround certificate.

ADVANTAGES SWITCH2SOLAR SOLAR-ALLROUND E-LEARNING (ENGLISH)

- Stay flexible, you decide the time, place and pace
- Save travel time and travel costs
- Make a kick-start in the solar industry

HOW DOES IT WORK?

After we have received your registration and payment, we will send you an e-mail with a login code for your online learning environment, where you can follow the E-learning Solar-All-round. You can use the E-learning for 2 months and study at any time. Study load is approx. 8 hours total.

FOLLOW-UP TRAINING

After completing Solar-Allround, you will participate in the scheduled online classes of Solar-Design.

During this course, you will go through the design of a solar power system: from sunlight to connection to the power grid.



SWITCH2SOLAR
Boost Your Energy Skills

FOR WHO

Installers, consultants and designers of solar power systems. After attending the course **you will understand exactly how a PV system works and are able to independently design a high-yielding system.**

LEVEL

Intensive training at Senior secondary vocational level (MBO+) / higher education level (HBO) level, for participants with technical affinity also possible without experience (after Solar-Allround). For this course, it is important that you have basic maths skills.

During the online lessons (English) there is room for asking questions. The pace is high in the online lessons.

Solar-Design online is covered during 4 live 2-hour online classes. These online classes are recorded and can be watched at a later time. Check our website for the dates of these online classes.

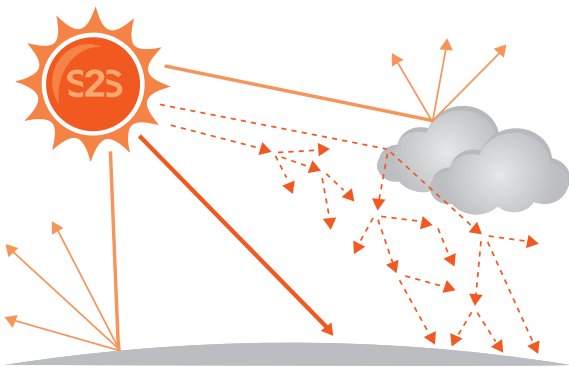
CONTENT

PROPERTIES OF LIGHT AND SHADOW

- Direct and diffuse light, albedo
- Irradiance sum: variations between years
- Typical Meteorological Year
- Shade types and implications for solar power system

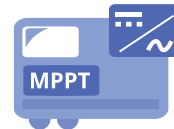
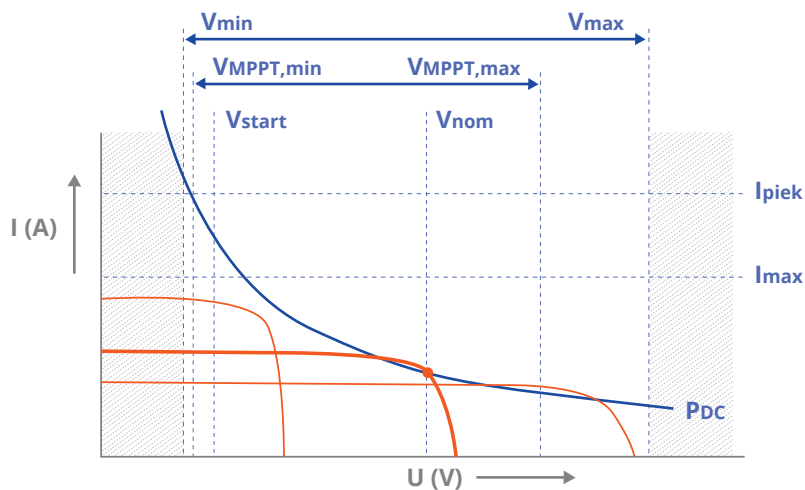
PROPERTIES OF SOLAR CELLS AND PANELS

- Cell and panel technologies
- Electrical properties of solar cells and panels
- IV curve at STC (Standard Test Conditions) and deviations from STC
- Fill factor
- Quality testing and degradation
- Temperature coefficients
- Read datasheets
- Exercise with comparison of (electrical) properties of different solar panels





WITH SOLAR-DESIGN YOU ARE ABLE TO CREATE AN OPTIMAL DESIGN



INVERTERS

- Functions
- System types
- Electrical properties (AC and DC)
- Read datasheets
- Problem with electrical properties inverters - Arrays of poly-strings
- IV curves for arrays for series and parallel, at STC and NOCT
- Layout plans and string plans
- Designing optimally functioning solar power systems:
- Matching arrays to inverters based on electrical properties
- Design rules
- Issue with design options for arrays

OTHER COMPONENTS

- DC cable losses
- Substructures
- Basic rules meter box connection

DESIGN DOCUMENTATION

DESIGN SOFTWARE

- Features
- Recognise and use design parameters from training



SWITCH2SOLAR
Boost Your Energy Skills

The Solar Specialist online course consists of the modules Solar-Allround E-learning and Solar-Design and can be completed with an exam:

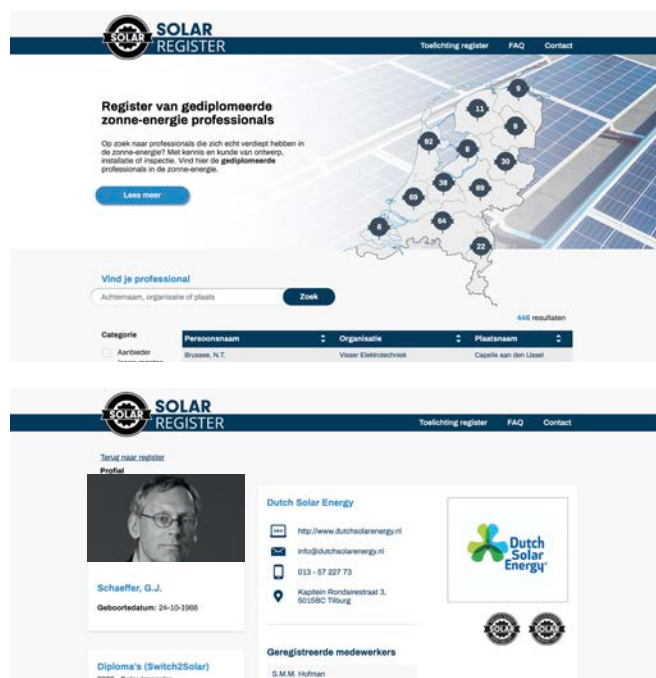
SOLAR-SPECIALIST EXAM

With the Solar Specialist exam, you show that you have mastered the material well and that you really understand solar power systems.

The exam consists of 2 parts. The first part consists of both multiple-choice and open-ended questions to demonstrate your understanding and mastery of the material.

The second part of the exam tests your ability to apply your knowledge using a practical case study.

You have 3 hours for the total theory exam. The exam will be administered for participants from the Netherlands and Flanders by Switch2Solar in the middle of the Netherlands (Lexmond). Other participants can contact Switch2Solar to discuss the possibilities.



LOGO & REGISTRATION

After graduation, you get the right to use the Solar Specialist logo (e.g. on business cards, website and car).

In addition, you will be registered on www.Solar-Register.nl

