



## Introduction to Solar Energy

(Certificate of Attendance)

26 June – 1 July 2017

Sustainability Institute, Lynedoch, Stellenbosch

### Synopsis:

The course consists of an introductory study of solar energy systems and covers a wide range of solar related topics.

It will give an insight into solar resource assessment including standard solar measurement instruments, satellite derived solar data, solar modelling software and solar maps and layers.

The manufacture, system design and installation of photovoltaics are covered. PV systems that are covered include: off-grid, residential, commercial and utility scale systems. Concentrating Photovoltaics (CPV) and solar trackers are included.

The course also covers solar thermal systems. It includes basic principles of thermodynamics, heat transfer and optics. It then covers technologies such as concentrated solar power (CSP), solar water heaters (SWH) and solar cooking.

A full day is dedicated to site visits which typically include a solar manufacturing facility (either PV, inverter or SWH) and a commercial solar installation (typically a large rooftop PV installation on a wine farm or factory).

**No academic credits can be obtained by attending this course.**

### Who should attend:

Engineers, technologists and technicians active in the energy sector. Architects, planners and developers.

Government and local authority officials. Investors.

### Certification and Accreditation

The module has been registered with the Engineering Council of South Africa for Continuous Professional Development points. A Certificate of Attendance with an indication of the CPD points and level will be awarded to all participants who attend the full course from Monday morning to Saturday lunchtime.

### Venue and Time

This course will be presented at the Sustainability Institute, Baden Powell Drive, Lynedoch and will run Mo-Fri & Sa from 08:00 to 17:00 on 26-29 June 2017 and from 08:00 to 13:00 on 1 July 2017. Directions can be obtained from: [www.sustainabilityinstitute.net](http://www.sustainabilityinstitute.net)

### Travel and Accommodation

Limit accommodation is available at the Sustainability Institute's guesthouse on a full-board basis. This excludes transportation to and from the airport which is for your own account. Please contact the guesthouse at 021 881 3196 or [hospitality.si@sustainabilityinstitute.net](mailto:hospitality.si@sustainabilityinstitute.net) for reservations. The Stellenbosch Information Bureau can be contacted at tel. 021-883 3584 for delegates who want to make their own accommodation arrangements.

### Registration

The course is designed for a restricted number of attendees so as to personalize and maximize the learning experience. Bookings will be taken on a first come first served basis.

**Registration must be done online at:**

<http://apps.sun.ac.za/SCD/ApplicationForm.aspx?scoourseid=3351>

**No registration is final until you have received a confirmation by email from Stellenbosch University.**

**Registrations close on Friday 9 June 2017.**

### Course Fees

Course fee for the five and a half-day course:

- Course fee for the five and a half-day course: R9500
- **Cancellation of enrolment made up to and including 9 June 2017 will be subject to a 15% handling fee.** No refunds will be made after this date; however, substitutions will be accepted.

- **Attendance without payment will not be permitted.**
- In the case of unforeseen circumstances Stellenbosch University reserves the right to cancel the course or change the lecturer, in which case all fees will be reimbursed in full on request.
- The course fee includes all study material, tea/coffee and lunches.

### Presenters



**Mr. Riaan Meyer** holds a BEng in Electrical Engineering and an MScEng in Mechanical Engineering. He joined the CRSES in 2006 where he has worked on a number of solar related projects. In 2012 Riaan became the Managing Director of GeoSUN Africa, a spin-off company from the CRSES that focuses on solar resource related services and products. GeoSUN Africa is active in a number of Sub-Saharan African countries.



**Dr. Johann Strauss** is a senior lecturer in the Department of Electrical and Electronic Engineering. He holds a PhD in Electrical Engineering. His main research fields are electrical energy systems and efficient energy conversion. For the past few years he concentrated in particular on free-piston Stirling engines/linear generators and photovoltaic systems.



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