Fourth Call for Applications of the ISE Training Courses for Solar Heating and Solar Photovoltaics

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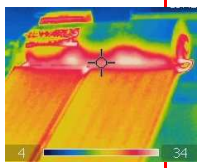
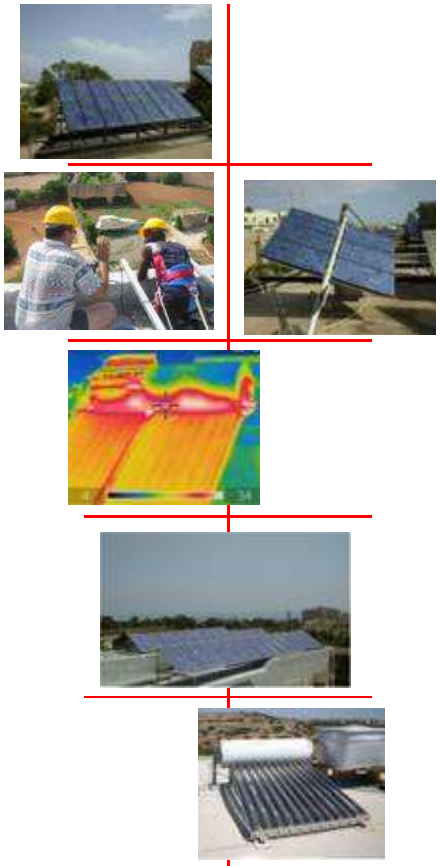
UNIVERSITY OF MALTA
Institute for Sustainable Energy

Training Courses in SOLAR ENERGY INSTALLATIONS

- The Institute for Sustainable Energy of the University of Malta is launching the second round of training courses in solar energy applications, due to start in October 2012, in the areas of Solar Heating and Solar Photovoltaic (Single and Three Phase) Installations.
- These courses are being organised for technicians and professionals who would require the necessary certification to install solar systems, as required by the EU Directive 2009/28/EC on the promotion of the use of energy from renewable sources.
- Sponsors of the courses are: Bajada Group, BMS Ltd., Energy Investment Ltd., Solar Solutions Ltd. and ALX Services Ltd.



What is New?



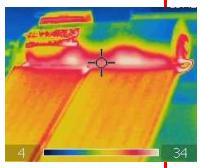
- Minimum Pre-requisites for ISE2101 Single-Phase Photovoltaic Course has been reduced from Level 5 MQF to **Level 4 MQF qualification in a relevant field + 2 years proven experience in photovoltaic installations**.
- All lectures are to be held at the University of Malta Campus, Tal-Qroqq, Msida, with **Live Video Conferencing** to the University of Malta – Gozo Campus.
- All practical sessions are to be held at the RES laboratory at the Institute for Sustainable Energy, Marsaxlokk.
- Lectures have been reduced from 3 times a week to twice a week or less and the course will span over a whole semester.
- Lecturing hours have been increased from 30 to 34 hours.

Minimum Pre-requisites: ISE 2102

ISE 2102: Technical Guidance on Solar Heating Systems Installations

(a) National (Malta) Qualification Framework (NQF/MQF) LEVEL 5, as defined by the Malta Qualifications Council Level 5, and specifically applied to 3-year Educational Training (VET) Higher Diploma Courses, that would be relevant to the field of study. This must include training experience in plumbing as applied in typical Maltese water systems, as well as basic knowledge in electrical wiring.

(b) Applicants who have a proven 2-year experience in installations of solar thermal systems but possess no formal qualifications beyond Secondary School certification will exceptionally be considered for admission.



Minimum Pre-requisites: ISE 2101

ISE 2101: Technical Guidance on Photovoltaic Systems Installations - Single Phase

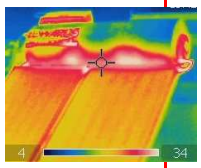
(in collaboration with the Department of Industrial Electrical Power Conversion)

(a) National (Malta) Qualification Framework (NQF/MQF) **LEVEL 4**, as defined by the Malta Qualifications Council Level 4, in a relevant field of study **PLUS** a minimum of 2 years proven experience in photovoltaic installations. **ADDITIONALLY**, the applicant must hold a **valid** Wireman License A or an Authorisation A [1]. A Level 5 or above qualification does not require experience but applicants must possess a valid wireman Licence A (Authorisation A).

(b) Architects, civil and mechanical engineers may take the course, but must have a valid License A or an Authorisation A, as a pre-requisite.

(c) Electrical Engineers do not require Licence A or an Authorisation A, as their engineering course adequately covers this requirement.

[1] New Regulation LN 225/2010 for new licences redefines the former Wireman License A equivalent to Authorisation A



Minimum Pre-requisites: ISE 2103

ISE 2103: Technical Guidance on Photovoltaic Systems Installations – Single & Three Phase

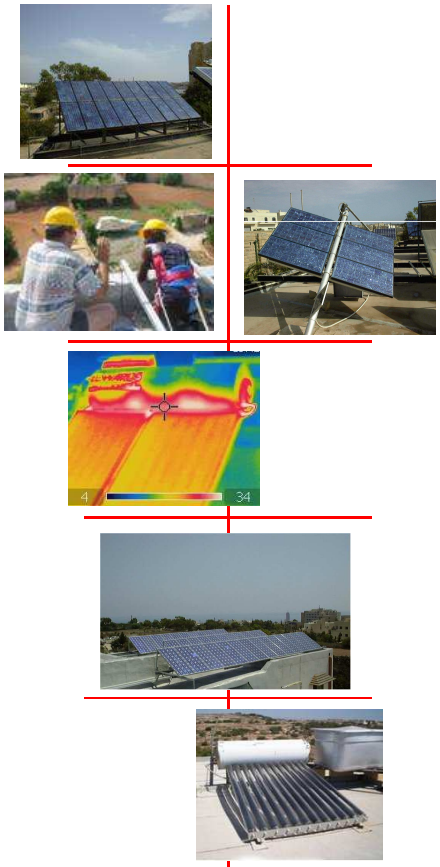
(in collaboration with the Department of Industrial Electrical Power Conversion)

(a) National (Malta) Qualification Framework (NQF/MQF) **LEVEL 5**, as defined by the Malta Qualifications Council. Level 5, and specifically applied to 3-year Educational Training (VET) Higher Diploma Courses, that would be relevant to the field of study. **Additionally**, the applicant must hold a **valid** Wireman **License B** or Authorisation B[1]. Upon successful completion, the students shall be eligible to apply for a License from the Malta Resources Authority to install single-phase and three-phase photovoltaic systems.

(b) Architects, civil and mechanical engineers may take the course, but must have License B or Authorisation B, as a pre-requisite**.**

(c) Electrical Engineers do not require Licence B or Authorisation B, as their engineering course adequately covers this requirement.

[1] New Regulation LN 225/2010 for new licences redefines the former Wireman License B equivalent to Authorisation B



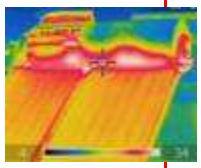
Registration & Course Fees

ISE2102: Solar Thermal Course 400 Euro
ISE2101: Solar Photovoltaic Course (Single Phase)400 Euro
ISE2103: Solar Photovoltaic Course (Single & Three Phase) 475 Euro

Prospective candidates are encouraged to contact the course academic coordinator EUR ING Charles Yousif for any queries.
E-mail: charles.yousif@um.edu.mt Tel: (+356) 21650675 - 21652249

Application details can be obtained from the Institute's website
http://www.um.edu.mt/ise

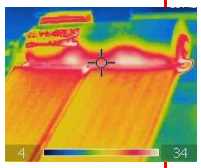
- **Applications are to be submitted by noon of 10th August 2011. No registration fees are required.**
- **Applicants can take only one course at any single time**
- **Due to a limited number of places, applications will be placed on a first come – first served basis (Date and Time of submission is noted).**
- **Accepted applicants shall be requested to pay full fees before commencement of the courses in October 2012.**



Courses Programme

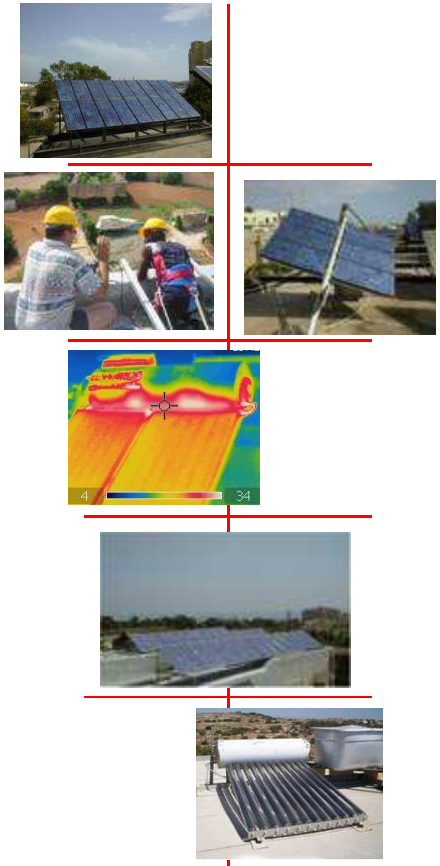
New

- Commencing 1st October 2012 till 25th January 2013
- Lectures venue: University of Malta, Msida with video conferencing to Gozo
- ISE2102 – Solar Thermal – Lectures twice a week dropping to once a week – Mon & Thu 15:00 – 17:00 (Few times on Fri).
- ISE2101 – Solar PV (Single Phase) – Tue & Wed 15:00 – 17:00 (Few times on Sat).
- ISE2103 – Solar PV (Single & Three Phase) – Tue & Wed 15:00 – 17:00 (sometimes till 18:00 and a few times on Sat)
- Examinations (January 2013):
  Written Exam (70%) - 3 hours
  Practical Exam (30%) – up to 3 hours (rotating)
  Grading follows University scale.
- **Pre-requisite for eligibility to apply for certification at MRA: Grade B (70%).**
- Re-sits will be made available for students who do not attain the minimum grade required of B.



Lecturers

- ISE 2102 – Solar Thermal
  - Ing. Robert Farrugia
  - Dr. Mario Fsadni
  - EUR ING Charles Yousif
  - Mr. Joseph Zerafa
  - Dr. Andre Buttigieg
- ISE 2101 & ISE 2103 – Solar PV
  - Prof. Luciano Mule Stagno
  - Prof. Cyril Spiteri Staines
  - EUR ING Charles Yousif
  - Mr. Joseph Zerafa
  - Dr. Andre Buttigieg



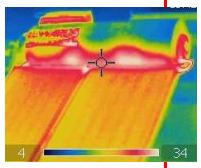
General Programme of Studies for Each Course

1st Part **12 hours**

- EU and local legislations (MEPA, Enemalta & MRA regulations)
- Basic principles of solar radiation
- Basic principles of solar components

2nd Part **12 hours**

- Design of solar systems
- Siting of solar systems
- Installation



3rd Part **10 hours**

- Commissioning
- Troubleshooting
- Maintenance
- Health and Safety

4th Part **10 hours**

- Practical work

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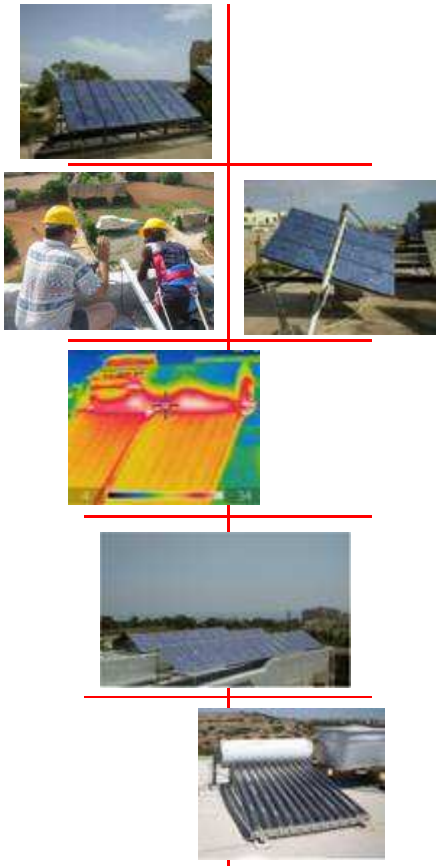
About the Institute for Sustainable Energy

As the primary Institute in Malta that deals with energy, the Institute for Sustainable Energy:

- supports the development of sustainable energy in Malta through collaborations with various Faculties and Institutes within the University, and with Government entities and industry;
- provides technical advice on various sustainable energy initiatives on the island including those involving energy conservation and efficiency, solar and wind energy, and bio-energy;
- organises training courses and seminars, accredited by the University of Malta, on technical aspects of energy;
- publishes reports and scientific papers on various areas of sustainable energy; and participates in several EU and other international projects of relevance to energy topics.



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