



The Energy Center, KNUST

2012 Short Courses and Workshops

Solar Thermal Power Technologies

Course Objectives:

To equip participants with skills to undertake project design, analysis and feasibility studies in Solar Thermal Technologies.

Course Description:

Overview of solar thermal technology and trends; Solar radiation resource assessment and data processing; Intro to design of flat plate collectors; Heat transfer analysis of flat-plate collectors and application to air heating,

Target Participants:

Power and transmission utilities, practising engineers and scientists, researchers, graduate students, etc

Date: 23 Jan–3 Feb, 2012 **Fee:** \$400 **Places**

Available: 20



Installation & Monitoring of Grid-Connected Solar PV Systems

Course Objectives:

To equip participants with the know-how in the design, installation and monitoring of key parameter in grid- connected solar photovoltaic systems.

Course Description:

Power conditioning, maximum power point tracking (MPPT) Technical standards for grid integration, Inverter sizing, etc.

Target Participants:

Power generation transmission and distribution utilities, practising engineers, graduate students, etc

Date: 6–11 Feb 2012, **Fee** \$250 **Places**

Available: 20

Energy Policy & Planning

Course Objectives

To provide students with the current tools and instruments for planning sustainable national and regional energy systems.

Course Description

Global and local trends and developments in Renewable Energy Technologies, Introduction to Long-range Energy Alternatives Planning (LEAP), review of national and regional renewable energy policy documents in both developing and industrialized nations.

Target participants

Energy Institutions, planners, policy makers, etc.

Date: 13 – 24 Feb, 2012 **Fee:** \$400 **Places**

Available: 30



Renewable Energy Project Analysis (RETScreen & WASP)

Course Objectives:

To enhance skills of participants at using world-class tools in the analysis of renewable energy and energy efficiency projects.

Course Description

Overview of tools available in RETScreen Clean Energy Analysis Software; Application of RETScreen for Solar PV project analysis; Assessment of Wind and Solar Water Heating using RETScreen;

Target Participants:

Practising engineers and energy economists, renewable energy project developers, energy planners, graduate students, etc

Date: 27 Feb-10 Mar 2012 **Fee:** \$400 **Places**

Available: 30

Design and Installation of Stand-Alone Solar PV Systems

Course Objectives

To train participants to design, install and manage off-grid solar PV systems.

Course Description

Solar radiation resource assessment; characteristics of commercially available PV Cell technologies; PV System Design Installation, System maintenance and Management

Date: 14–18 May, 2012 **Fee:** \$170 **Places Available:** 25

Biofuels Technology and Economics

Course Objectives

To train participants to acquire skills in the extraction and processing of biofuels from various feed stocks.

Course Description

Classification and assessment of feedstocks for bio-fuel production; mechanical, thermal and chemical techniques for biofuels extraction and processing; comparison of performance and emission characteristics of biofuels and conventional petroleum fuels; economic evaluation of biofuels extraction and processing

Date: 14 –18 May 2012 **Fee:** \$ 170 **Places Available:** 25

Biogas Systems Design & Construction

Course Objectives

The course aims at training participants in the design, construction and management of biogas systems.

Course Description

Biogas feedstock assessment; estimation of recoverable biogas under design conditions; Cost assessment of biogas projects, etc.

Target participants:

Practising engineers and technicians and researchers

Date: 21–25 May 2012 **Fee:** \$170 **Places Available:** 25

WORKSHOPS

- **Second Generation Biofuels Workshop 28 – 30 August, 2012**
- **2nd International Solar Energy Experts Workshop (I-SEE) 29 – 31 May, 2012**

The 2nd I-SEE Workshop will bring together experts in energy technology and policy, with the view to learn from the store of knowledge within the West African sub-region in particular and Africa as a whole. Participation is usually by invitation, however persons not invited, but who wish to participate may send their request to the event organizers through the contact provided in this brochure.

Contact Information

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GENERAL NOTICE TO APPLICANTS

All fees paid include snacks, lunch and course manuals, but does not include accommodation in Kumasi. Persons who require assistance in arranging accommodation may contact us.

ECOWAS citizens do not need entry visa to Ghana, non-ECOWAS citizens may also contact us for the necessary support in obtaining entry visas.

All the events both trainings and workshops will take place at The Energy Center of the Kwame Nkrumah University of Science and Technology, Kumasi Ghana.

A 25% discount is available for qualified female participants in training programmes and workshops.

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