

EGREEN 2-weeks Students Training Workshop

Date: 1st to 12th of July 2019

**Venue: Innsbruck University, Faculty of Technical Sciences
Technikerstrasse 13, 6020 Innsbruck, ICT Building,**

Coordinator: Prof. Wolfgang Streicher and Apeksha Shandilya

TIMELINE AND CONTENTS:

Week 1: Lectures Solar Energy in Buildings and HVAC, and
Learning Energy Efficiency in Buildings and Energy Modelling

Week 2: Project preparation and Presentation of students work in groups.

WEEK-1

Date	Room No.	Time	Content	Lecturer/Trainer
Mon. 01/07/19	HSB-8	09.00 – 12.00	Welcome and Introduction to Energy Efficient Building Design (Streicher)	Prof. Wolfgang Streicher
		13.30 – 17.00	Basics and Theory in Building Energy Modelling, Introduction to SketchUp-EnergyPlus-OpenStudio	Apeksha S.
Tue. 02/07/19	HSB-8	09.00 – 12.00	Theory in Solar Thermal Systems (Basics, Components, Systems, Design and Building integration.	Prof. Wolfgang Streicher
		13.30 – 17.00	Introduction to Solar Thermal simulation SHW AND other simulation tools (Polysun, Tsol) (Streicher)	
Wed. 03/07/19	HSB-5	09.00 – 12.00	Modelling of a Single Office Space, Definition of Boundaries, Schedules, Constructions and Loads. Variant studies: Overhangs and Orientation Defining dynamic shading controls, configure Daylighting sensors	Dr. Martin Hauer & Apeksha S.
		13.30 – 17.00	HVAC and DHW modelling – Overview what is possible in OS/Energy Plus	
Thu. 04/07/19	HSB-8	09.00 – 12.00	A multi-zone Building Example, Establishing a common construction database for local standards.	Dr. Martin Hauer/Apeksha S.
		13.30 – 17.00	Modelling of local Residential/ non-Residential house in SketchUp, Proposed project work for the presentation.	
Fri. 05/07/19	HSB-8	09.00 – 12.00	Systems in Buildings (Heat pumps...)	Prof. Wolfgang Streicher
		13.30 – 17.00	Finite differences in HVAC – general modelling and simulation	

WEEK-2

Date	Room No.	Time	Content
Mon. 08/07/19 to Thu. 11/07/19	HSB-8	09.00 – 17.00	Students will prepare project in the guidance of trainers A group of 2 or three model a house: One for sketchup and E Plus – One solar Thermal and HVAC, maybe one on ventilation.
Friday 12/07/19		09.00 – 17.00	Students will present their work in-front of the UIBK faculties Certificate distribution.

Note:

- 1. Excursion is planned in one day of the 2nd week in the Heat Pump, solar Thermal and PV Manufacturing Company (SIKO GmbH, Day yet has to be confirmed) and Light Academy (Bartenbach GmbH), Austria.**
- 2. Some extracurricular activities and trip to mountain can be organized depending on student's interest and willingness on the weekend.**