

Senior Thesis Brief Description

Thesis Title	Energy Audits in existing buildings
Programme of Studies	BSc in Civil Engineering, Frederick University, Cyprus
Course	CEP 400 Senior Project
Area of Study	Computational Building Physics – Whole Building Energy Analysis Experimental Building Physics – In-situ Measurements
Student's Name	Christos Karkanias
Students Reg. Number	5749
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Demetris Nicolaides, Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
Short Description	The purpose of this study was the implementation of an energy audit to an existing building. In terms of this study all major steps of an energy audit will be implemented. In situ measurements (IR thermography) were also conducted towards identifying potential ways of improving the buildings energy performance. The study focused on civil engineering issues, namely the improvement of the building shell energy performance. Specific measures were defined and their cost and performance was quantified.