

## Senior Thesis Brief Description

---

<b>Thesis Title</b>	<b>Infrared thermography (IRT) for building diagnostics and possible ways of improving the thermal performance of the building shell</b>
<b>Programme of Studies</b>	BSc in Civil Engineering, Frederick University, Cyprus
<b>Course</b>	CEP 400 Senior Project
<b>Area of Study</b>	Experimental Building Physics – In-situ Measurements
<b>Student's Name</b>	Panagiotis Konstantinou
<b>Students Reg. Number</b>	5934
<b>Supervisor</b>	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
<b>Supervisory Committee</b>	Dr. Petros Christou, Ass. Professor, Civil Engineering Department Dr. Antonis Michael, Lecturer, Civil Engineering Department
<b>Semester</b>	Spring Semester 2014
<b>Short Description</b>	The main objective of this project was the implementation of infrared thermography (IRT) for building diagnostic purposes. Through this project a detailed investigation and observation of building shells thermal behaviour was conducted and potential ways of improving buildings' thermal performance will be discussed. Infrared Thermography (IRT) was employed so as to analyse the thermal performance of existing building's main construction elements. Based on the IRT results, possible solutions to deal with thermal loss problems was defined under different climatic conditions. A database including all available building materials with advanced thermal properties was also delivered from this study.