

Senior Thesis Brief Description

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| Thesis Title | Renovation of existing building towards energy performance improvement |
| 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 |
| Student's Name | Panagiotis Georgiou |
| Students Reg. Number | 4101 |
| Supervisor | Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department |
| Supervisory Committee | Dr. George Michaelides, Ass. Professor, Civil Engineering Department Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department |
| Semester | Fall Semester 2013 |
| Short Description | In terms of this study an existing detached single storey building was investigated by means of its energy consumption. Specific measures for the upgrade of the energy performance of the building were examined. In terms of this study the national methodology of Cyprus with regard to the estimation of the energy consumption of the building was applied and specific measures were proposed towards reduction of the energy consumption. A parametric study was suggested and a sensitivity analysis was carried out in order to indicate the factors that have a major influence on the improvement of the energy behaviour of existing buildings. |