Master Thesis Brief Description

Thesis Title Building Automation Systems for Energy Efficiency

Programme of Studies MSc in Sustainable Energy Systems

Course SES 525 Capstone Project II

Area of Study Computational Building Physics – Whole Building Energy Analysis

Student's Name Alexia Panou **Students Reg. Number** 11502606

Semester

Short Description

Supervisor Dr.-Ing. Paris A. Fokaides, V. Lecturer, Frederick University **Supervisory Committee** Dr. Agis Papadopoulos, Professor, Aristotle University Thessaloniki

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Dr. Fryni Giama, Lab. Teaching Staff, Aristotle University Thessaloniki

Spring Semester 2016

This project examined the effect that automation systems have on a building's energy efficiency. It defined the meaning of Building Automation System and in accordance with the European Standard on Building Automation defines the different types and levels of system automations, the BACS class and the way it affects the building's energy consumption. The existing automations on lighting, HVAC and domestic hot water systems were examined, the integration of automations in smart buildings and the latest trend on building automation, Internet of Things. Finally, a small scale case study

was presented to showcase the results.