

Master Thesis Brief Description

Thesis Title	Modelling Frederick's Building Using BIM for Energy Evaluation Improvement of energy efficiency of the building
Programme of Studies	MSc in Sustainable Energy Systems
Course	MES 580 Master Thesis
Area of Study	Sustainable Energy Technologies – Biofuels Assessment
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Supervisory Committee	Dr Michalis Menicou, Assoc. Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
Semester	Fall Semester 2019
Short Description	The purpose of this analysis is to simulate the BIM model of an existing building – Frederick Building – in order to evaluate energy consumption. The software used for BIM modelling is Revit Autodesk 2020, and the built in Insight 360 is used to evaluate the energy model. The intention is to recommend solutions to reduce the primary energy consumption of buildings using fossil fuel technologies in order to set the European greenhouse gas emission reduction targets.