

Senior Thesis Brief Description

Thesis Title	Optimization of Quantity Surveying KPIs for large construction projects
Programme of Studies	BSc in Quantity Surveying, Frederick University, Cyprus
Course	ASSP 450 Senior Project
Area of Study	Computational Building Physics – Sustainability Assessment
Student's Name	Maria Konnidou
Students Reg. Number	7946
Supervisor	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
Supervisory Committee	Dr. Christakis Onisiphorou, Lecturer, Civil Engineering Department Dr. George Papadopoulos, V. Lecturer, Civil Engineering Department
Semester	Spring Semester 2015
Short Description	Key Performance Indicators (KPIs) are important for the efficient monitoring and evaluation of different projects, including large construction projects. KPIs offer a reliable quantitative measure of evaluating and comparing different projects, and may prove to be a useful tool for a quantity surveyor towards improving the performance of the provided services. The main scope of this project was the definition of KPIs which are applicable in large construction projects. The main emphasis was given on economic related KPIs, whereas environmental KPIs were also investigated. In order to accomplish this study, linear programming was also employed to enable the optimization of the employed KPIs. The delivered KPIs was tested in two pilot projects and the delivered results were compared. Also a sensitivity analysis of the significance of the delivered KPIs was performed, in order to identify the most important KPIs for large construction projects.