



MSc Internship or “onderzoekstage”- Description of project

To be filled in by the student and the supervisor(s) at the beginning of the MSc. internship or “onderzoekstage”.

Student name and signature: Frans Simanjuntak

Student number: S3038971

Date: April 17th 2017

Supervisor and signature: Prof. Dr. ir. Marco Aiello

Second supervisor and signature: Dr. Alexander Lazovik

Daily supervisor and signature: Azkario Rizky Pratama

Number of Credits (EC): 15

Description of internship/research:

The title of the research is The Extension of Energy Consumption Monitoring.

Energy efficiency is one of the key drivers of smart house and it also contributes to better environment. It can be achieved by conserving energy and one way to conserve energy is to learn the energy behavior which can be done by performing consumption monitoring of all devices connected to the electricity source. By doing so, we can take necessary actions to save energy hence it helps reducing the cost/electricity bill.

In this research, we will be collecting raw data related to energy consumption, such as current, active power, reactive power, and apparent power. These data will be transferred to the server. Then, we will analyze them in order to find the consumption pattern of such devices.

The result of this research will be useful in the future because it will give us a clear insight of our energy consumption, so we can start saving the energy by tackling any energy guzzlers.

Planning of internship/research:

The research will be carried out in 10 consecutive weeks starting from the third week of April and it will be divided into three main steps: literature review, development and revision, and writing report. In the middle of the research, a midterm evaluation will be performed to check the progress. In the end, a report will be written to document all the findings of this work.

	April				May				June			
Planning	1	2	3	4	1	2	3	4	1	2	3	4
Literature Review		■	■	■								
Prototype Design and Development			■	■	■	■	■					
Midterm Evaluation							■	■				



Collecting Data					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Revision									<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Writing Report											<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>