FINAL YEAR PROJECT 2019/2020

No	Title	Synopsis	Requirement	Remarks	Research Area/lecturer
1.	Sun tracking solar panel	This project defines a way for mounting of solar panels so as to receive maximum radiation from the sun. Here an active tracker system is used where the panel is placed on the shaft of a motor and the motor is given proper rotation such that the panel is always facing the Sun to receive the maximum sunlight.	Basic knowledge in programming, embedded system/electronics and structure design.	Student needs to have basic knowledge on electronics and sensor.	Spacecraft Design / Dr. Siti Harwani
2.	MySat project management tool	This is project management for Mysat project and WBS. The project is specifically using tool to manage and organize the project.	Basic knowledge in project management and data management	Student to learn a new tool for project management such as SysML.	Spacecraft Design / Dr. Siti Harwani
3.	Space Farming using IoT module	This project will begin with the study of requirements for strawberry/potato to grow in growing room. The derived requirements will be used to study the method of planting in space environment. The expected output of this project is the preliminary design of growing room embedded with IoT module.	Basic knowledge in programming, embedded system/electronics, IoT and spacecraft subsystem design.	Student needs to works with another group of scientist relates to agriculture and biology.	Subsystem Design / Dr. Siti Harwani
4.	Solar Powered Auto Irrigation System	Irrigation is artificial supply of water to areas with scant rainfall or water supply. It is often required to control the supply of water by sensing the moisture content in the soil. This project defines a way to achieve this by using a pump which is powered by solar energy, so as to overcome the frequent unavailability of mains supply and controlling the switching of the pump motor based on the sensor input which senses the moisture content in the soil.	Basic knowledge in programming, embedded system/electronics, and spacecraft subsystem design.	Student needs to have basic knowledge on electronics and sensor.	Subsystem Design / Dr. Siti Harwani