

FINAL YEAR PROJECT 2019/2020

| No | Title | Synopsis | Requirement | Remarks | Research Area/lecturer |
|----|---|---|--|--|--------------------------------------|
| 1. | Design and fabrication of Communication System for MYSat | This project is to design, fabricate and test the communication system for MYSat. The work involves the integration of TNC, transceiver, beacon and antenna to produce a working communication system for satellite. | Basic knowledge in programming, embedded system/electronics and spacecraft subsystem design. | The student who involves of this project will be part of MYSat team. | Subsystem Design / Dr 'Aiffah |
| 2. | Analysis of ionospheric scintillation occurrence over Malaysia | This project will analyse the effects of ionospheric scintillation on GPS signals based on GPS data collected over Malaysia. The work involves: <ol style="list-style-type: none"> 1. Analysis of the ionospheric scintillation occurrence 2. Simulating ionospheric scintillation using a GNSS simulator. | Basic knowledge in Matlab programming. | Student needs to work using a GNSS simulator and GPS receiver | GNSS and the Ionosphere / Dr 'Aiffah |
| 3. | Preliminary Study of GNSS/GPS navigation implementation for UAV application | This project will begin with the study of the challenges in GNSS/GPS navigation implementation for UAV application. A simulation-based environment where different operational scenarios will be created using the GNSS simulator. The expected output of this project is the preliminary simulation of the scenarios and the analysis of the GPS solution. | Basic knowledge in Matlab programming. | Student needs to work using a GNSS simulator and GPS receiver | GNSS and UAV/Dr 'Aiffah |