



# Selection of an Inertial Measurement Unit for a high-precision pointing CubeSat (Master Thesis/ Practical)

TOM is an Earth Observation mission with high requirements in attitude determination. For the Attitude Determination and Control System adequate sensors need to be selected to meet all requirements. One of those is an Inertial Measurement Unit (IMU), which consists of a 3-axis accelerometer, 3-axis gyroscope and 3-axis magnetometer.

## **Tasks**

- Analysis of available IMUs for high precision applications
- Selection of suitable IMU based on simulations
- Hardware-in-the-Loop testing and verification of selected IMU

## **Required Previous Knowledge**

Background in Sensor Technologies, Programming in C

## **Language**

German or English

## **Contact**

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