**Robot Technology**

**Overview**

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| Level | 3 (Semester 6) |
| Duration | 4 weeks |
| Lectures | 10x40 minutes/week for 2 weeks |
| Practicals/tutorials | 5x2 hours/week for 3 weeks |

**Learning Outcomes**

1. Understanding of robot motion planning
2. Ability to utilise a variety of sensors to obtain information about a robot’s environment
3. Ability to program a robot using standard software tools
4. Ability to deal with errors in sensing and movement
5. Ability to have a robot pursue and achieve its goals

**Syllabus**

* The Robot Operating System (ROS)
* Kinematic constraints on robot motion
* Overview of different sensing modalities
* Computer vision and image processing
* Localisation
* Planning and search
* Robot architectures