

## Systems & Control Engineering

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## Welcome to the Department of Systems and Control Engineering

This Department focuses on teaching and research in the modern area of Systems and Control Engineering which encompasses the trans-disciplinary application of systems theory, signal processing, system modelling, automatic control and machine intelligence.

Systems and Control addresses the challenge of designing and developing complex systems or processes that are able to operate automatically and as autonomously as possible, as well as the development of computational techniques for the extraction of useful information from different types of signals. These include applications such as automatic controllers for industrial equipment and robotic systems; automated interpretation of digitised images and video; control of air, space, land and marine vehicles; biomedical devices for prosthetic control by physiological signals; brain-computer interfacing, and much more.

The Department of Systems and Control Engineering runs a taught course leading to an **M.Sc. in Signals, Systems and Control**. It delivers several study-units in various degree programmes on system modelling, signal processing, system dynamics, classical and modern control theory, intelligent control, automation and robotics. In addition, the department offers supervision of postgraduate students on research based study programmes including **M.Sc. (by Research)** and Ph.D. studies. For further information on courses offered please follow the **teaching** link.



The **staff** members of the department pursue innovative research in signal and image processing, computer vision, biomedical engineering, linear and nonlinear system theory, automatic control, intelligent systems and modelling of complex dynamic systems. Please follow the **research** link for additional information on these activities and collaborations.

The scope of activities of the department is summarised in the following figure:

