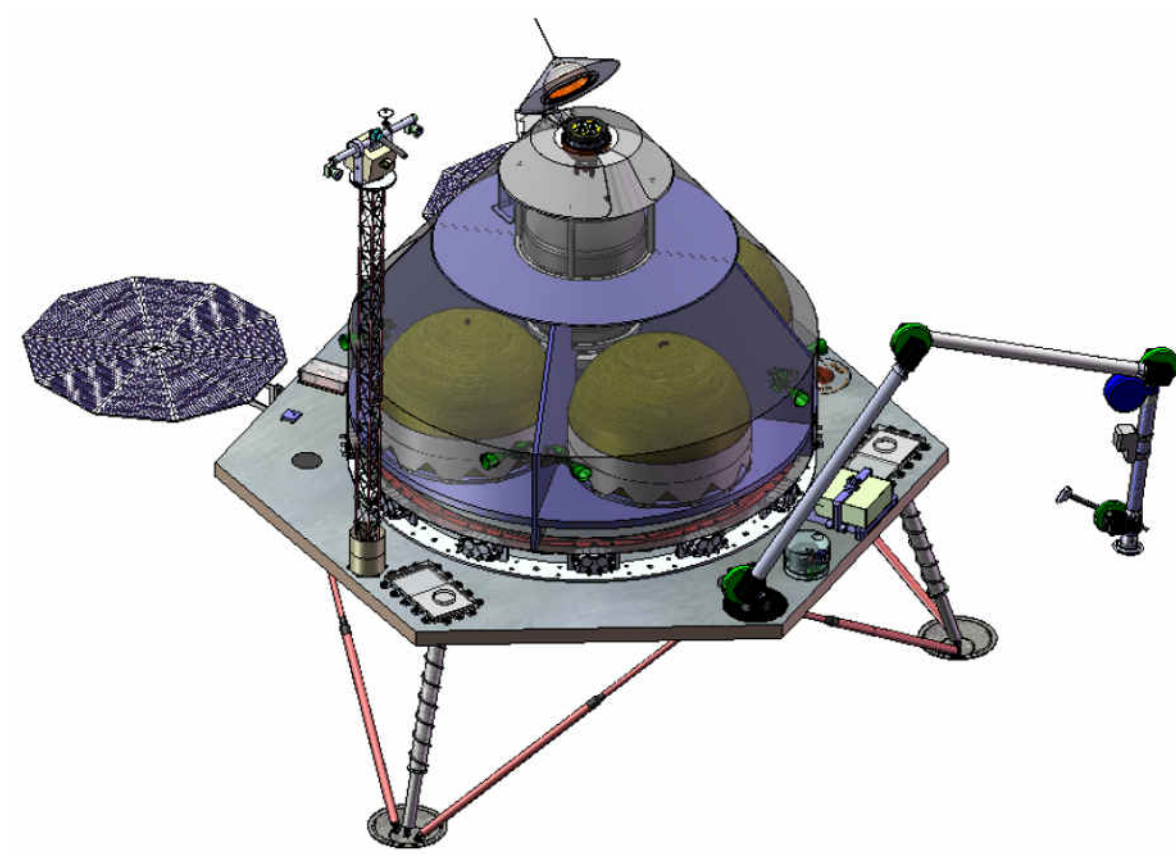


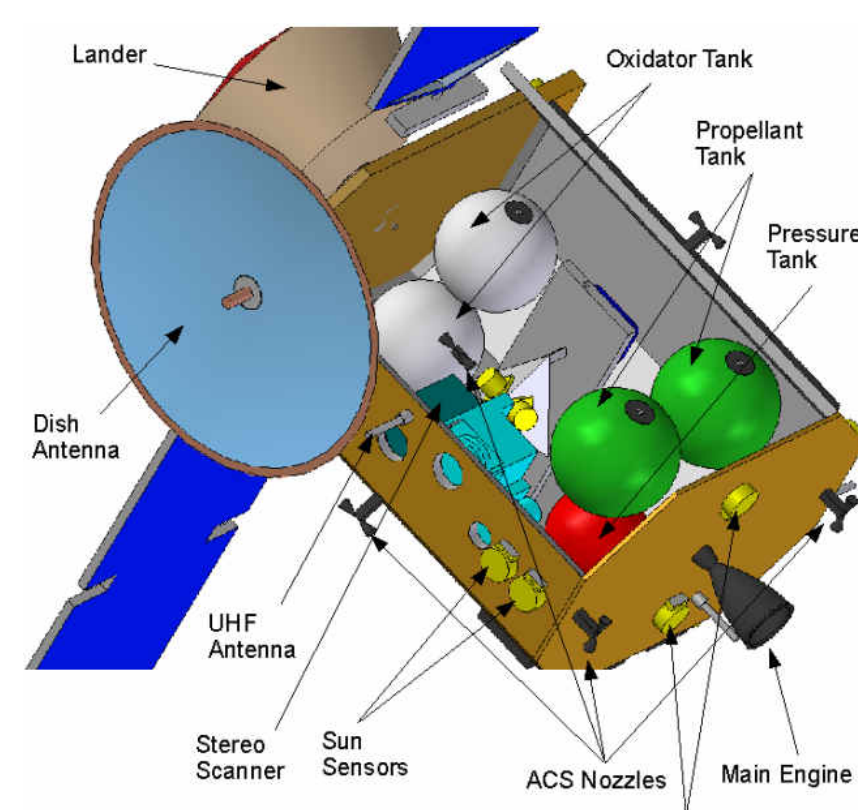
Problem-Based Lecture Courses

The basic idea is to perform a feasibility study on a sophisticated space mission with students in lecture courses

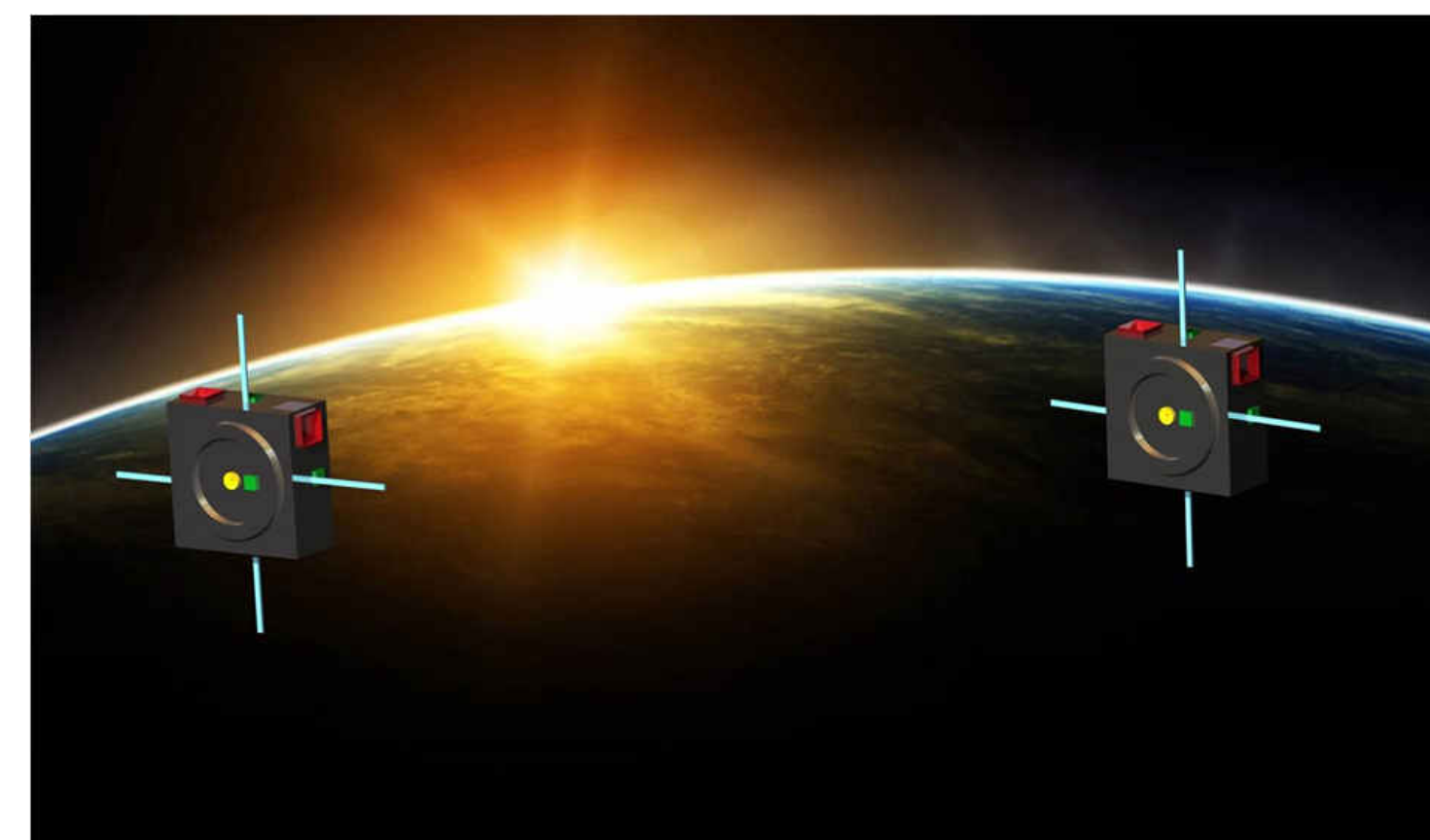
- The main goals, requirements and constraints are given by the lecturer or a client partner from industry
- A working environment comparable with projects in the economy is created by participation of reviewers from the department and the partners
- The mission is broken down into work packages that are distributed to the students and edited in iterated loops
- The courses are evaluated by the performance in review presentations and by a final documentation



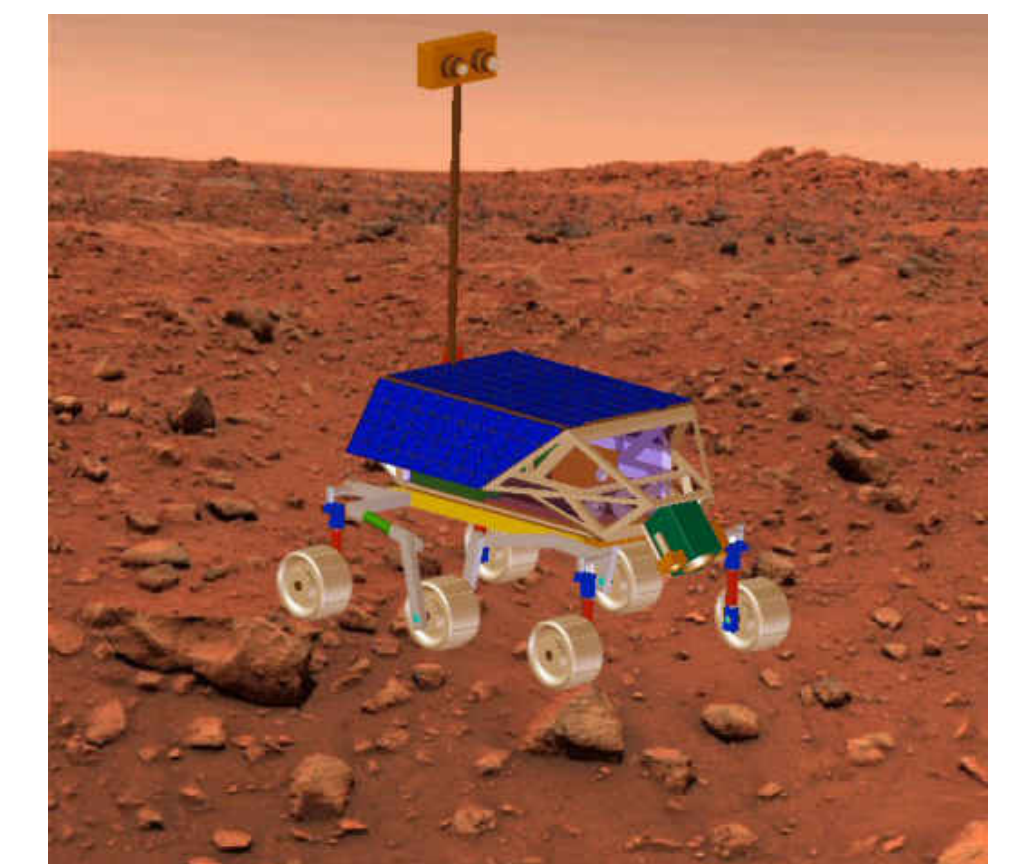
Sample return mission



Mars orbiter



Satellite formation flying

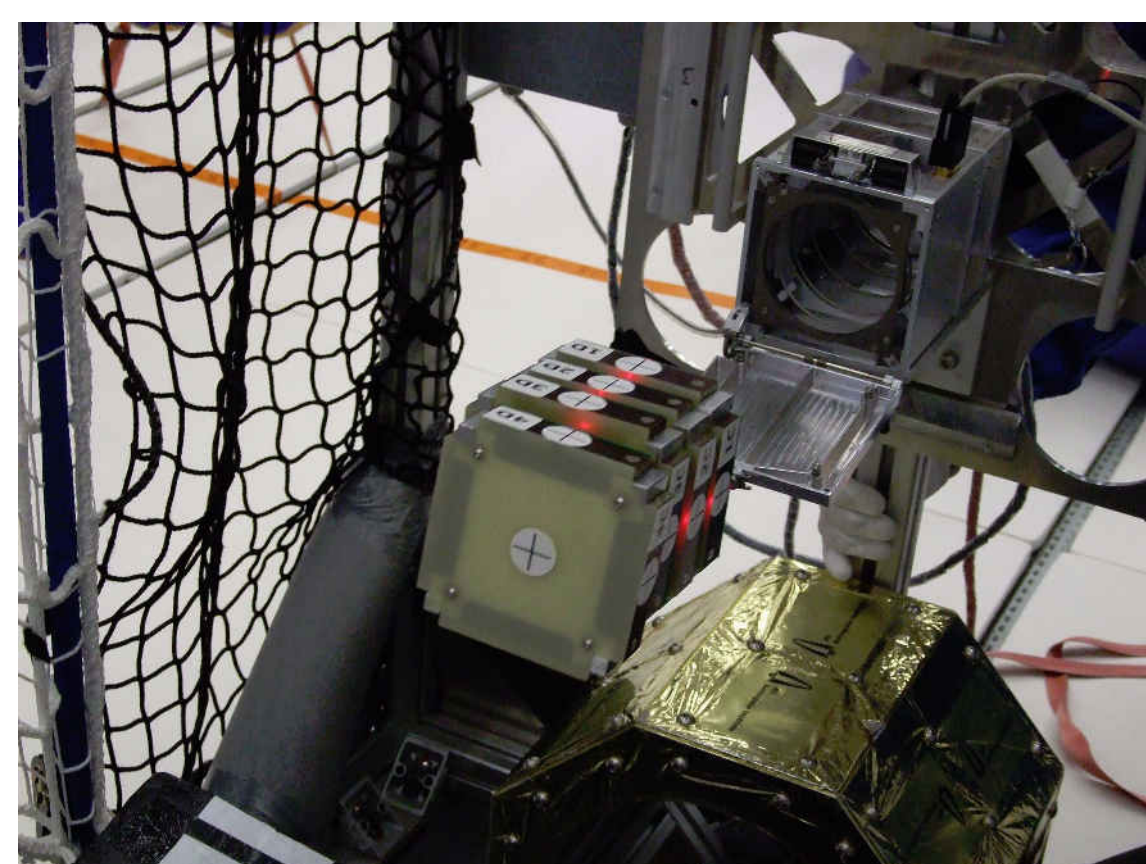


Micro mars rover

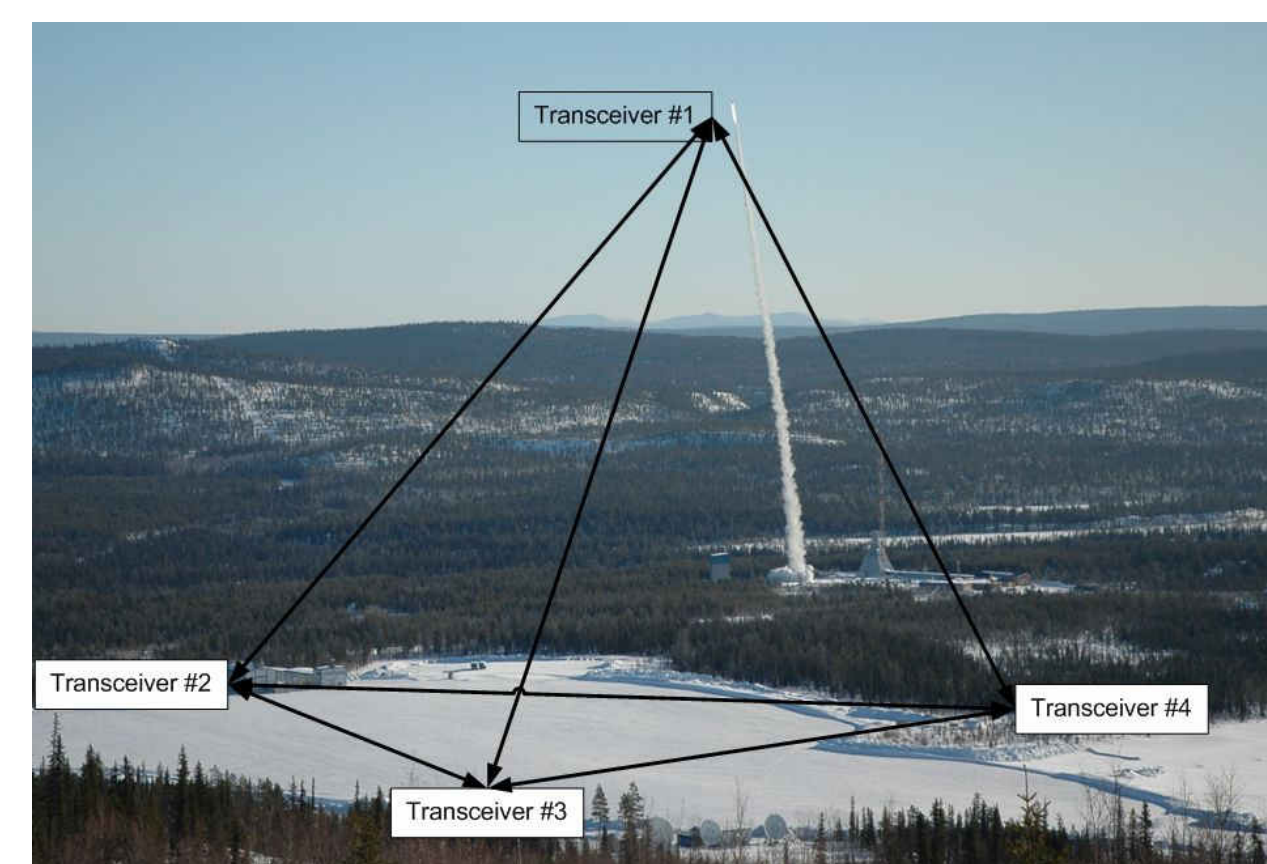
Space-Related Experiments

The basic idea is to involve students in the design and verification of components for spacecraft

- The projects are usually conducted in frame of a publicly funded campaign
- The design of the experiment can be topic of a project-oriented lecture course or theses
- Students work self-dependently on the project and gain practical experience
- Scientific staff gives technical and management support



Satellite separation test during parabola flight



Inter-satellite link test during sounding rocket flight



Sun sensor experiment during sounding rocket flight

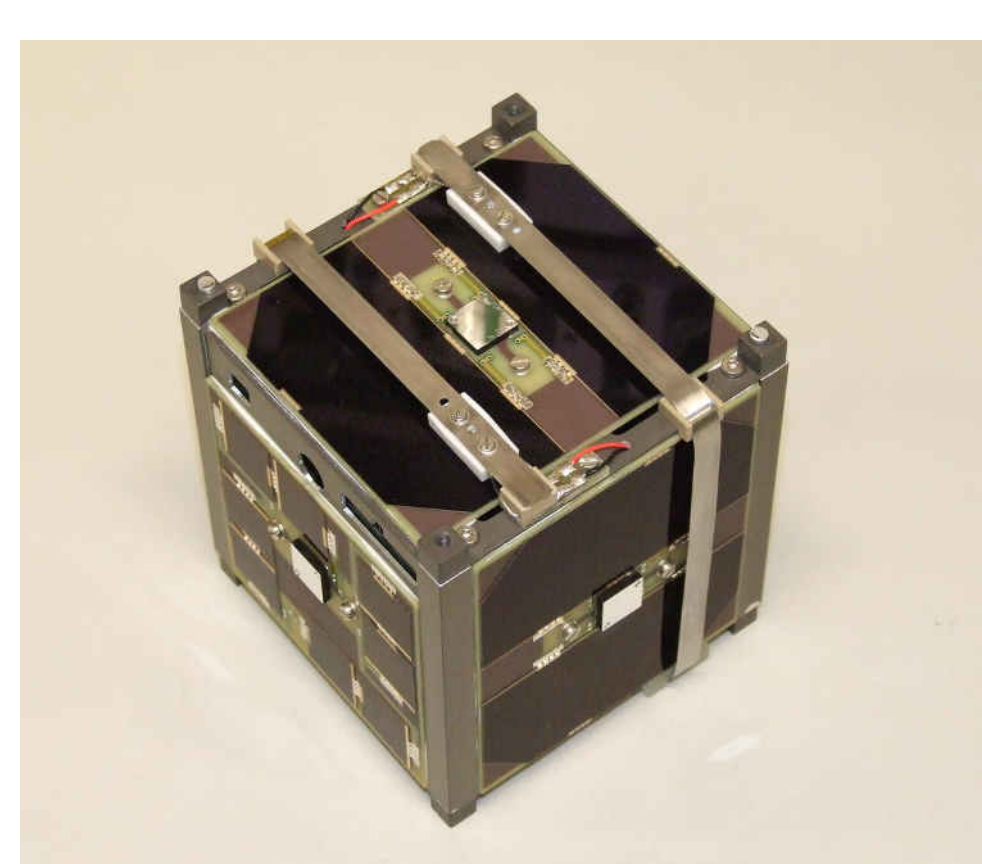


Boom deployment test during parabola flight

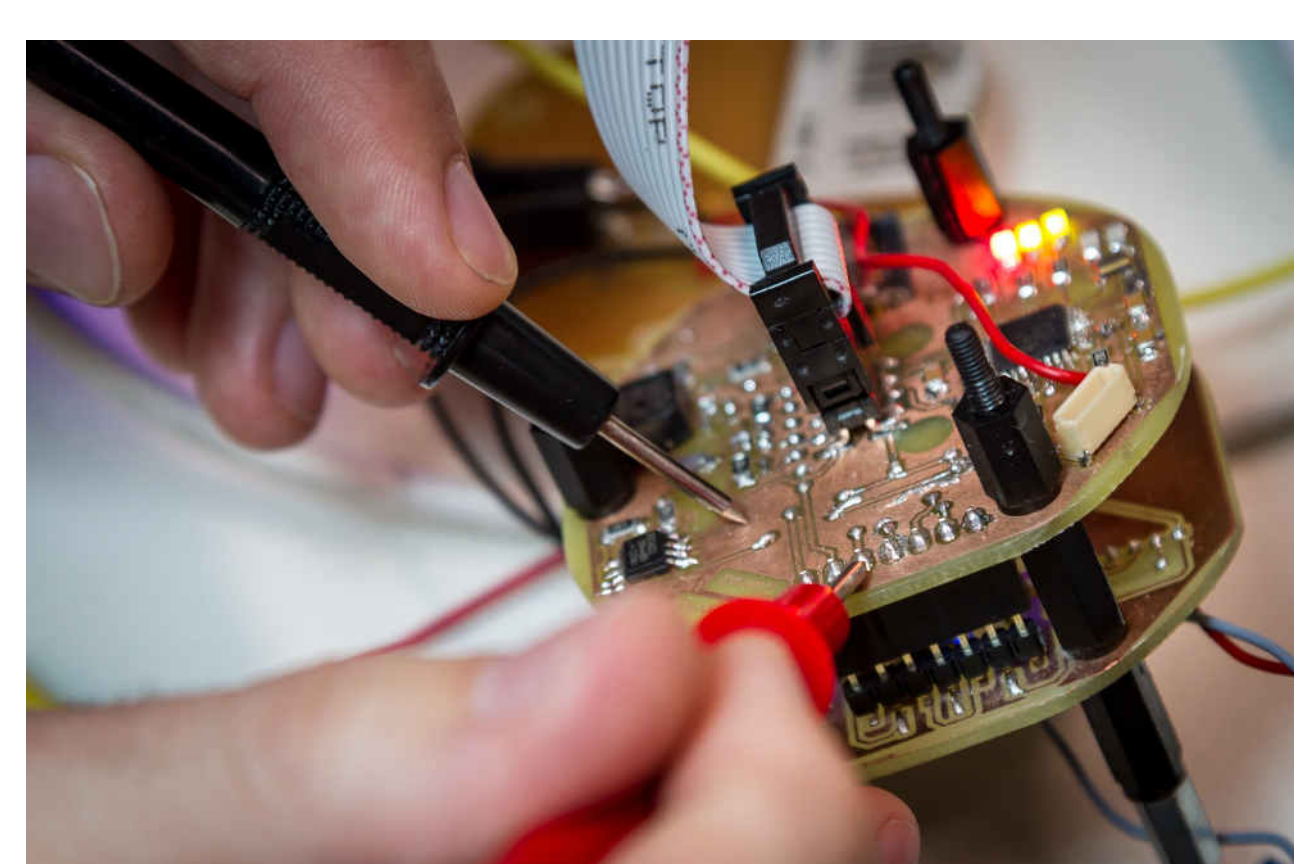
Hands-On Lecture Courses

The basic idea is that students develop real hard- and software in scope of lecture courses

- Some projects are publicly funded and some are conducted with budget from the household
- The main goals, requirements and constraints are given by the lecturer or the funding programme
- The mission is broken down into work packages that are distributed to the students and edited in iterated loops
- The courses are evaluated by the performance in review presentations and by a demonstration



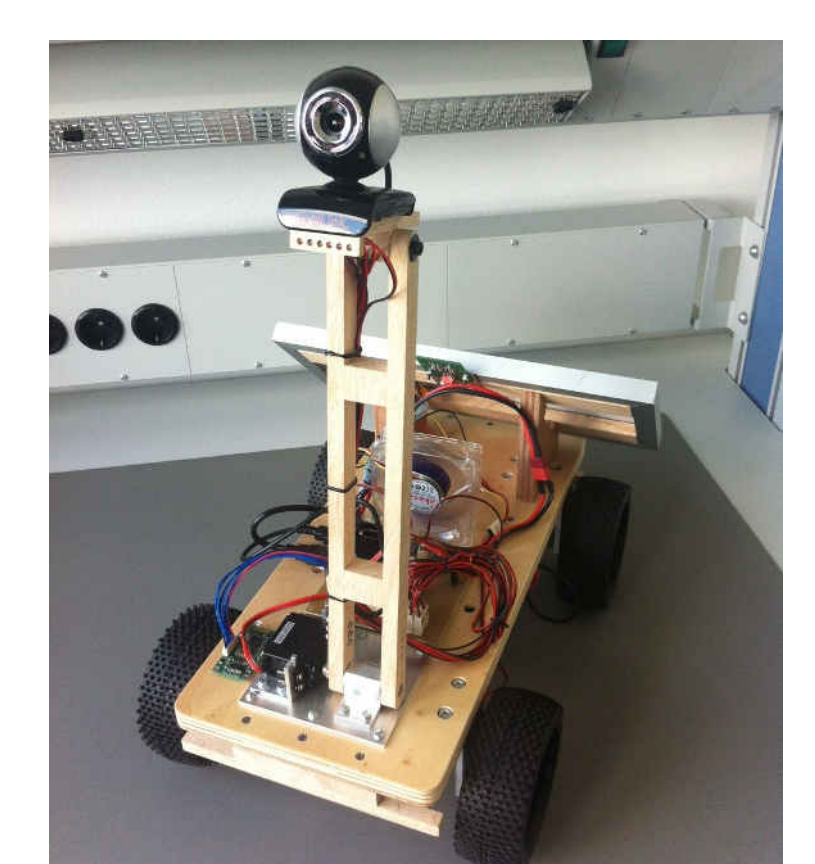
CubeSat



CanSat



Sounding rocket



Micro Mars Rover