**Assignment 4: Lay down requirements, design and build an automated control for a container crane**

**Stage 1:** Briefly but accurately lay down the requirements by interviewing the instructor in his role as customer. Requirements should be structured as points and subpoints (indication 1-3 A4 sheets). Show to instructor for approval.

**Stage 2:** From the requirements draw up sequence diagrams showing all relevant events in get and put phase. Show to instructor for approval.

**Stage 3:** From the requirements design and adapt c.q. build 2 modules

1. Low level control (is manual control adapted to be controlled by sequence control as well as by operator)
2. High level control (sequence control) is able to replace human operator. Knows get and put sequence.

Configure a timing diagram showing at least the complete physical status. Show to instructor for approval.

*Points: 1 for free, 2 for stage 1, 3 for stage 2, 4 for stage 3, 2 bonus for visualizing all physics items (to be explained). Max total points 10, unused bonus is valid for other assignment. Note: Visualization is quite a lot of work here, so only add it if you have time to spare. No bonus if visualization was already added to assignment 3, since it is (almost) the same.*