Course - Rust programming

- **Course title:** The Rust programming Language
- **Credits:** 5 HP
- **Examination format:** The examination is twofold:
  1) The final chapter of the *Rust Programming Language* book goes through how to setup a multithreaded web server. Starting from the final chapter of the book, setup a simulation of a networked control system where the control is performed centrally in a web server utilising multithreading, e.g., to log data and compute control signals.
  2) An oral presentation describing the project results.
- **Course content:** The content of the course is based on the book "The Rust Programming Language" by Klabnik and Nichols. The book is referenced on Rust's homepage[1] as a good source of Rust information. Additionally, practical exercises will follow the *Rustlings*[2] exercises (also referenced on Rust's homepage).

  The course consists of reading the course material from start to finish, learning about (among other things):
  - ownership (who can access a variable/an object),
  - packages, modules, and crates,
  - `cargo` (Rust's workspace/crate handler),
  - smart pointers in Rust, and
  - concurrency in Rust.
- **Examination date:** Autumn of 2022.
- **Students:** Martin Morin, Nils Vreman, Luka Bakovic, Max Nyberg Carlsson
- **Supervisor:** Martina Maggio
- **Examiner:** Martina Maggio

Signatures:

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Examiner	**Supervisor**

[1] `rust-lang.org/learn`

[2] `https://github.com/rust-lang/rustlings`