

B Course Info (15 YHP)

PU21PO Kommunikationsprotokoll (YH3556005-1)

Communication Protocols

This course contains an introduction to communication protocols and the standard model (OSI) for modern communication protocols. In this course the students get familiar and learn the most commonly used communication protocols like UART, I2C, CAN, TCP/IP, etc. in embedded systems. In the course the students also learn to use tools like logic analyser to analyze protocol data.

Teacher: Faroch Mehri (email: faroch.mehri@ya.se and phone: 0730301292)

Contact and communication: itslearning, Zoom, slack

You can contact the teacher from 09:00 to 16:00 all working days, Mondays to Fridays .

Lectures

Time: Weeks 50 - 05 (Thursdays. 16:00 - 20:00)

The lectures are run on Zoom, room Software Developer VT2021 Trollhättan (3556).

The literature/materials are uploaded to itslearning before the lectures and it is important to watch/study the materials before the lectures in order to prepare yourself for the lectures.

In this course most of the lectures are followed by an exercise.

Planning

Week	Contents/Lectures	Activities/Assignment/Comment
50	Introduction and OSI Model UART, RS-323, RS-458 Inter-Integrated Circuit (I ² C)	2 Exercises
51	Controller Area Network (CAN)	1 Exercises
02	Serial Peripheral Interface (SPI) Local Interconnect Network (LIN)	1 Exercise
03	Ethernet and TCP/IP	2 Exercise
04	Bluetooth	1 Exercise Assignment
05	Provisioning, Update Over The Air Message Queuing Telemetry Transport	1 Exercise

Examination

The examination of the course is done by an individual assignment.

Grading

The criteria for G(Godkänt) and VG(Väl Godkänt) will be specified in the assignment.

Resources

1. The uploaded materials to itslearning