# HI2002 Routing in IP Networks 7.5 credits

**Routing i IP-nät**

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for HI2002 valid from Autumn 2019

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Information Technology, Information and Communication Technology

## Specific prerequisites

Knowledge corresponding to HE1033 Communication Networks

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

# Intended learning outcomes

## Course contents

- IP addressing, CIDR (classless interdomain routing)
- Functions and algorithms for routing within and between autonomous systems
- Distance vector protocols (RIPv1, RIPng and EIGRP)
- Link state protocols (OSPFv3 and OSPFv4)
- Exterior gateway routing protocol BGPv4
- Optimizing the routing table in an IP networks
- Multicast protocol
- IPv4 and IPv6
- Practical assignments and laboratory exercises are important parts of the course

## Course literature

Web based course material, CCNA4, Connecting Networks, or in printed version,
Implementing Cisco IP Routing (Route), latest version, Cisco Press
Any changes will be announced four weeks before the course starts.

## Examination

- LABB - Lab Work, 3.0 credits, grading scale: P, F
- TEN1 - Examination, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LABA - Lab Work, 1.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide
how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two
academic years.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.