



# IK251U Mobile Operator Business /Commissioned Course/ 5.0 credits

Mobiloperatöraffärer /uppdragsutbildning/

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

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

## Establishment

Course syllabus for IK251U valid from Spring 2011

## Grading scale

P, F

## Education cycle

Second cycle

## Main field of study

Electrical Engineering

## Specific prerequisites

## Language of instruction

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

## Intended learning outcomes

After the course the participants should be able to:

- Analyze telecom markets in terms of market segments, services, actors and type of regulation and

identify differences between different countries.

- Understand the basics of operating a mobile network and identify strengths and weaknesses.

- Make a high level mobile operator strategy given the market conditions.

- Dimension and create a high level design of a wireless network and analyze its cost structure.

## Course contents

The course consists of three integrated parts- Telecom Markets and Regulation, Wireless Broadband

Network Deployment and Economics, and Mobile Operator Business.

Telecom Markets and Regulation

- Market structure, actors, and business relations in telecom markets

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Telecom regulation, regulated markets, and services

- Spectrum management regimes (licensed/unlicensed - market/command

&

control)

Wireless Broadband Network Deployment and Economics

- Deployment strategies and dimensioning principles

- Cost structure of telecom and broad band networks

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Capital&operational expenditure (CAPEX&

OPEX), net present value, price erosion

## Mobile Operator Business

- Mobile services, mobile operator competition, and strategic planning
- Overview and pricing of mobile services, charging and billing, subscriptions
- Financing, investments and risk, revenue streams, willingness to pay, decision making factors

## Course literature

Course Compendium + handouts

## Examination

- OVN1 - Problem Assignments, 5.0 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.

## 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.