



LUND  
UNIVERSITY

School of Economics and Management

## INFN30, Informatics: Mobile Industry Dynamics, 7.5 credits

*Informatik: Mobilbranschens affärsdynamik, 7,5 högskolepoäng*  
Second Cycle / Avancerad nivå

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### Details of approval

The syllabus was approved by The Board of the Department of Informatics on 2013-09-20 and was last revised on 2016-06-03. The revised syllabus applies from 2016-08-29, autumn semester 2016.

### General Information

The course can be taken as part of the MSc Programme in Information Systems, or as a separate course.

*Language of instruction:* English

Main field of studies	Depth of study relative to the degree requirements
Informatics	A1N, Second cycle, has only first-cycle course/s as entry requirements
Information Systems	A1N, Second cycle, has only first-cycle course/s as entry requirements

### Learning outcomes

The objective of this course is for the students to achieve a thorough overview of the commercial landscape and dynamics of the mobile industry – from the old world of telecoms to the new world of software. The mobile industry is moving faster than any other – creating new market sectors, replacing inflexible business models and displacing incumbents; an industry where history has been written by billion-dollar networks but where the future is being written by software developers in a garage.

Areas covered in the course are the competitive technology landscape, the dynamics and culture of handset manufacturers and network operators, the regional market differences, the business models of Google and Apple, the dynamics of the application market, the developer economics and the trends that are shaping the next five years of connected devices.

On completion of the course, students will be able to understand the business models and strategies of both the old guard (the handset manufacturers and network operators) and the new generation (the newcomer PC and Internet players).

### **Knowledge and understanding**

For a pass on the course, the student shall demonstrate knowledge of and understanding of

- the history of the mobile industry, from the 1990s to the 2010s
- the key players in the mobile value chain
- regional differences across US/Japan/Korea/Europe/Asia
- the building blocks of modern smartphones
- key contenders in smartphone software today
- outline types of software developers and list examples
- what does open source mean, key licenses and the importance of governance models K8 - how business models vary across operators, handset manufacturers and developers
- the business models of Apple and Google and the evolution of Internet players.

### **Competence and skills**

For a pass on the course, students shall demonstrate competence and skills individually or in groups to

- describe the core mobile value chain and list examples of key players
- describe how the economics have changed for handset OEMs (Original Equipment Manufacturer) and network operators
- compare different business models between the 'old guard' and newcomer players
- describe the business model of Apple and Google
- explain the differences between mobile software platforms and web platforms
- describe how mobile applications differ as a paradigm from web 1.0 and web 2.0
- explain how Android is both open and closed at the same time
- describe how open source is used as a business model.

### **Judgement and approach**

For a pass on the course, students shall demonstrate the ability to

- critically assess how the mobile industry is beginning to resemble the PC industry
- critically analyse how the business models of Apple and Google differ from those of handset OEMs and network operators
- critically explain how openness is used as a business strategy
- assess the openness of 'open source' projects (what questions would you ask to an 'open source' project?)
- discuss and analyse the mobile industry trends.

## **Course content**

The following topics will be covered:

- The Mobile Industry Background and Dynamics
- Mobile Value-chain Evolution
- Industry Consortia
- The World of Handset OEMs

- The World of Handset Software
- The Software Platform Landscape
- The World of Apps
- Developer Economics
- The Android Game Plan
- Open Source Economics
- Industry Trends.

## Course design

Teaching includes lectures, classes and workshops.

The course includes compulsory components, which are stated in the schedule.

## Assessment

The assessment is based on a written exam and group assignments.

Re-exams will be held in close proximity to the ordinary examination period.

*Academic misconduct* such as cheating, plagiarism, fabrication and falsification is considered a serious offence in higher education (see Chapter 8 of the Higher Education Ordinance). The disciplinary measures that may be taken as a result of such offences are caution or suspension for a limited period of time from the university (and all the faculties of the university).

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

## Grades

Marking scale: Fail, E, D, C, B, A.

**Grade** (Definition) Points or percentage out of maximum points. Characteristic.

**A** (Excellent) 85-100. A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**B** (Very good) 75-84. A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**C** (Good) 65-74. The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought and lives up to expectations.

**D** (Satisfactory) 55-64. The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

**E** (Sufficient) 50-54. The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

**F** (Fail) 0-49. The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

To pass the course, the students must have been awarded the grade of E or higher.

## Grading rules and definitions

Grades are awarded according to a graded scale from A (highest) to F (lowest), with E as the minimum passing grade.

When the exam/assignment is not graded, the grades G (Pass) or F (Fail) will be applied.

### Course grades

When calculating course grades, the graded components will be weighted according to the following formula:

The number of credits for the exam is multiplied with the exam score. The total value is then divided by the total number of credits for the exams/assignments included. The resulting average is then rounded off to the nearest whole number. The number indicates the relevant course grade in accordance with the grading definitions above.

For exams/assignments which are graded and scored, the grades A to F will be used in accordance with the grading definitions above. The exam score will be used directly in the calculation.

For exams/assignments which are graded but not scored, the grades A to F will be used and converted as follows: A = 92, B = 80, C = 70, D = 60, E = 52.

Exams/assignments which are not graded but awarded with G (Pass) or F (Fail) will not be included in the calculation of the course grade.

## Entry requirements

General and completed courses: "Informatics: Introduction to Information Systems, 1-30 cr", "Informatics: Level 2, 31-60 cr" and "Informatics: Bachelor Degree Project, 15 cr" and further 15 credits informatics/information systems at Bachelor level or the equivalent or 90 credits in relevant technical or business subject areas. English 6/English Course B.

An exception for the general entry requirement in Swedish will be granted when the course is given in English.

## Further information

The Director of the MSc Programme in Information Systems has on 1 June 2011 decided that this course may be included in the programme.

It is compulsory to attend the introduction meeting, where a roll call will be taken. Absence without notification means that the admitted student will lose his/her seat on the course.

For transitional provisions with regard to previous courses, please contact the study adviser for an individual assessment.

If the course is discontinued, there may be limited opportunity for re-examination. Please contact the study adviser for information.

### *Amendments*

2012-05-03: General editorial changes.

2015-03-03: New set of exams from Autumn term 2015.

2015-12-04: Added that the course includes compulsory components and that attendance on the introduction meeting is compulsory.

2016-06-03: New grading rules from Autumn term 2016.

## Subcourses in INFN30, Informatics: Mobile Industry Dynamics

Applies from H15

- 1501 Group assignment 1, 2,0 hp  
Grading scale: Fail, E, D, C, B, A
- 1502 Group assignment 2, 2,0 hp  
Grading scale: Fail, E, D, C, B, A
- 1503 Written test, 3,5 hp  
Grading scale: Fail, E, D, C, B, A

Applies from H11

- 1101 Group Assignments, 4,0 hp  
Grading scale: Fail, E, D, C, B, A
- 1102 Written Test, 3,5 hp  
Grading scale: Fail, E, D, C, B, A