Faculty of Health, Science and Technology
Computer Science

Syllabus

Internet Stack Evolution: Challenges and Opportunities

Course Code:	DVAD64
Course Title:	Internet Stack Evolution: Challenges and Opportunities *Internetstackens utveckling: Hot och möjligheter*
Credits:	1.5
Degree Level:	Master's level
Progressive Specialisation:	Second cycle, has only first-cycle course/s as entry requirements (A1N)

Major Field of Study:
DVA (Computer Science)

Course Approval
The syllabus was approved by the Faculty of Health, Science and Technology 2018-09-09, and is valid from the Spring semester 2019 at Karlstad University.

Prerequisites
Upper secondary level English 6 or B. Computer Science 30 ECTS cr, or three years of work experience in the IT sector, or equivalent.

Learning Outcomes
Upon completion of the course, students should be able to:
- give an account of the concept "Internet ossification" and its underlying causes,
- explain the purpose of transport services and how these can help counteract the ossification of the internet stack,
- give examples of how transport services can be implemented and used.

Content
The module deals with how the internet stack can be further developed to meet the demands of new applications and communication environments. The present challenges and the risk of ossification are described. How transport services can help counteract ossification and be dynamically tuned based on application requrements and networking context are discussed. Examples of how to implement and use transport services are presented.

Reading List
See separate document.

Examination
Assessment is based on hand-in assignments and an oral exam.

Grades
One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

Engineering students are awarded one of the grades Pass with Distinction (5), Pass with Some Distinction (4), Pass (3) or Fail (U).

Quality Assurance
Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate
A course certificate will be provided upon request.

Additional information
DVAD64 cannot be included in the same degree programme as DVAD60 Future Internet Design and Service Quality.

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.