Master course (grp. 2): Computers and networks (CAN)

Om kurset

uddannelse	Computer Science
Undervisningssprog	English
Kursus starter	02-09-2013
Kursus slutter	31-01-2014
ECTS	7.5
Eksamenstidspunkt	January 2014

Evaluering

The excellent performance: The student demonstrates

- solid knowledge, insight and overview of the subject area;
- demonstrates solid description, competent application, and critical reflection with respect to the command and application of theories and methods;
- demonstrates certainty, conceptual accuracy, and independent and clear organization with respect to structuring and communication.

The good performance: The student demonstrates

- knowledge of and insight into the subject area;
- demonstrates clear description and relatively competent application with respect to the command and application of theories and methods;
- demonstrates clear presentation and organization with respect to structuring and communication.

The performance meeting the minimum requirements: The student demonstrates

- sufficient however limited knowledge of the subject area;
- demonstrates a sufficient account of command and application of theories and methods;
- demonstrates a sufficient, but uncertain presentation with regard to structuring and communication.

forudsætninger

This course requires some programming skills, such as having passed courses in introductory programming, data structures and algorithms, and one programming project.

Indhold

The purpose of this course is to provide you with a basic understanding of how computers do what they do. By studying the fundamental organizing principles of computer systems, you are better able to understand, design, and implement complex systems. Upon successful completion of this course, the computer will no longer seem a “black box” to you. The course provides knowledge of computer organization and architecture.

	Fundamentals of computer networking and data communication will also be provided. The main objectives of this course are the understanding of the major components of a computer system, how these components are interrelated, and their characteristics that affect system performance. The topics covered include computer organization and architecture, data representation, digital logic, assembly language programming, memory systems, input/output systems, system software, network protocols, and network organization.
Kursusdage	Will be announced later.
kursusform	Lectures and exercises.
mål	At the completion of the course, you will be able to: • Understand basic computer architecture and demonstrate use of the associated vocabulary • Explain the organization of a computer as levels of virtual machines. • Describe the operation of the CPU and explain how it is used to execute instructions. • Write simple assembly language programs. • Demonstrate knowledge of memory and I/O. • Demonstrate an understanding of the basics of operating systems software. • Discuss network architecture standards. • Describe ISO reference and Internet models.
Vurdering	Will be announced later.
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Underviser	Keld Helsgaun (keld@ruc.dk)
STADS stamdata	kandidat 1. modul aktivitetskode : U24037 prøveform : mundtlig bedømmelse : 7-trinsskala censur : Ekstern censur