



Programme syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

IT-tekniker, 120 högskolepoäng

IT Technician, 120 credits

Level

First Level

Establishment of Programme

Established by Organisational Committee 2009-03-26

Date of Ratification

Approved by Organisational Committee 2009-09-15

The programme syllabus is valid from autumn semester 2010

Prerequisites

General entry requirements.

Description of Programme

IT Technician is a broad computer programme, focusing on network and server systems where security is permeate throughout the programme. A large part of the programme is conducted in project form to get a modern computer programme that focuses on the needs of tomorrow. After completion of the programme the student can work as an IT Technician in both large and small companies and organizations. In addition, students have the skills for further studies in the subject.

Objectives

Knowledge and understanding

For a Higher education diploma the student shall have:

- demonstrated knowledge and understanding in the principal area (main field of study) of the study programme, including awareness of the disciplinary foundation of the field and knowledge of some applicable methodologies in the field.

Competence and skills

For a Higher education diploma the student shall have:

- demonstrated the ability to search for, gather and critically interpret the relevant information in order to formulate answers to well defined issues in the main field of study
- demonstrated the ability to present and discuss his or her knowledge with different audiences, and
- demonstrated the skills required to work autonomously with specific tasks in the main field of study.

Judgement and approach

For a Higher education diploma the student shall have:

- demonstrated knowledge about and be equipped to deal with ethical issues in the main field of study.

Programme-specific objectives

In order to reflect the progression of the programme, students must:

- account for network and server systems from an operational and security perspective
- setting up and deploying secure network and server systems
- present information, ideas, problems and solutions in the subject
- work and participate in computer science projects, and
- model, install, maintain and manage network and server systems.

Content

Organization

The programme has a programme coordinator who ensures that education is of good quality with good progression and ensures that communication between teachers and students works in a good way. Quality and progression is maintained through continuous dialogue with the subject coordinator.

In addition, program committees are held at least twice per academic year. The program committee consists of the program coordinator, at least one student representative from each grade and the teachers and other stakeholders in the programme.

Programme Overview

IT Technician is a broad computer programme, focusing on network and server systems where security is permeate throughout the programme.

Databases, hardware and automation of administrative tasks are other vital elements of education.

This is combined with network projects to get a modern programme focused on the needs of tomorrow.

The intention is that the student after this training will be offered the opportunity to complete his university degree to a degree in engineering and / or bachelor degree. Student should be able to study further education and / or completed advanced education in a forthcoming work.

Programme courses

First semester

Introduction to Computer Science for IT-Technicians 7,5 credits, Informatics, G1N.

Network Technology I 7,5 credits, Computer Science, G1N, mandatory.*

Windows Administration I 7,5 credits, Computer Science, G1N, mandatory.*

Operating Systems 7,5 credits, Computer Science, G1N.*

Second semester

Linux Administration I 7,5 credits, Computer Science, G1N, mandatory.*

Starting Out with C# 7,5 credits, Computer Science, G1N.*

Network Technology II 7,5 credits, Computer Science, G1N, mandatory.*

Systemadministration with PowerShell 7,5 credits, Computer Science, G1F.*

Third semester

Network Project 7,5 credits, Computer Science, G1N, mandatory.*

Linux Administration II 7,5 credits, Computer Science, G1F.*

Advanced LAN Technologies 7,5 credits, Computer Science, G1F.*

Database Engineering and Database Administration 7,5 credits, Computer Science,

G1F.*

Fourth semester

Network Security 7,5 credits, Computer Science, G1F, mandatory.*

Windows Administration II 7,5 credits, Computer Science, G1F.*

Computer Hardware Technology 7,5 credits, Computer Science, G1F, mandatory.*

Diploma Thesis in Computer Science 7,5 credits, Computer Science, G1E, mandatory.*

* Course in the main area.

The courses in the program may change places.

Work Experience

To provide the students with an insight into his future professional role, businesses are involved primarily in the form of guest lecturers.

Studies Abroad

Study abroad is done in consultation with the programme coordinator and in year two. The courses to be read abroad must be equivalent or relevant in relation to the education profile. These may be either broadening or advanced courses.

Scope of Programme

The programme works with sustainable development by ensuring that the training of students is modern and placed on learning from the historical developments in the field. This means that students gain knowledge that will be relevant and applicable over a longer period of time. Sustainable development is focused on the human and his needs and how the technology can ensure that those needs continue to be met.

The education and the courses included in the program are always aimed to be gender-neutral where the emphasis is on human rather than the sex that is.

The education uses in the marketplace commonly used techniques but also options are highlighted to show the diversity that exists within the area.

Constantly monitoring the world, both nationally and internationally is the basis for the areas addressed in the education.

Quality Development

Continuous evaluation and improvement of the program is done in consultation with students in the form of programme committee, through academic evaluations, through collaboration with businesses and other stakeholders, and by benchmarking against other universities.

Degree Certificate

After completing programme studies, corresponding to the requirements expressed in the Higher Education Ordinance Degree Ordinance as well as Linnaeus University Local Degree Ordinance, the student may apply for a degree.

Those who have completed the IT Technician Programme 120 credits may obtain the following degree:

Högskoleexamen

(Huvudområde: Datavetenskap)

University Diploma

(Main field of study: Computer Science)

The degree certificate is bilingual (in Swedish/English). The Degree Certificate is accompanied by a Diploma Supplement (in English).