Denna blankett fylls i av kursansvarig efter avslutad kursomgång.

Kursanalysen anslås på KTH:s webb under rubriken Kursens utveckling och historik, på Kursinformationssidan

Kurskod: EP1200	Kursnamn: Introduction to Computing Systems Engineering
Läsår: 2019	Period: P3
Högskolepoäng: 6	Antal studenter: 114 (including re-registered students) / Svarsfrekvens kursvärdering: 42%
Examinationsgrad/prestationsgrad: 60%	Läraktiviteter: lecture, seminars, projects, consultations

Examinationsmoment fördelade på högskolepoäng:
LABA - Laboratory, 1.5 credits, Grading scale: P, F
LABB - Laboratory, 1.5 credits, Grading scale: P, F
TEN1 - Examination, 3.0 credits, Grading scale: A, B, C, D, E, FX, F

Undervisande lärare: Gunnar Karlsson, Viktoria Fodor, György Dan
Examinator: Viktoria Fodor
Kursansvarig lärare: Viktoria Fodor

Beskrivning av eventuella genomförda förändringar efter tidigare kursanalys

For 2019 the following improvements were introduced:

1. We have reorganized the teaching allocation, so that all the groups meet the same teachers. The change has been made to address the worries of the student that different teachers emphasized different parts of the material.

2. We employed teaching assistants from students of previous years to give the consultations. This change has been made to foster more discussion and more questions in these sessions, since students appeared to be too shy to ask the teachers at the consultations.

3. Using the quiz functionality of Canvas, we added a significant amount of practice quiz questions, to help the students understand the key concepts in each chapter.

Sammanfattning av kursdeltagarnas svar på kursvärderingen
Grafer och citat från kursvärderingen kan läggas som bilaga om så önskas

We asked the students to fill in the course evaluation as the part of the last seminar, and a large part of the evaluations has been submitted. On the numerical scales the answers are between 4 and 5, which is an improvement compared to last years.

Many of the students like the topic of the course and find it both interesting and useful. Building an entire computer after one year of studying is indeed a nice achievement!

The main issue, reflected by the numerical evaluation, as well as by the individual answers is that students do not feel that they receive enough feedback before grading is done. To help studying, we introduced example quiz questions this year, and as a result, now students were better prepared for the quizzes at the lectures. The remaining problem is the grading of the programming projects. While tests are provided, it is not possible to prepare a test for all possible mistakes one can make. This might mean that students do not get maximum points, while they tested their programs successfully. We will emphasize this better in the coming year.

Kursens starka sidor utifrån kursvärderingen och lärares reflektion, även i förhållande till de förändringar som genomförts inför kursomgången

Many of the students like the course very much, and feel that the topic is relevant. The course is project based, which is appreciated by many. The seminars are interactive, many of the student participate actively. The course also allows the students to practice programming skills. The course also follows continuous examination, and as a result most of the students spend the necessary time for studying throughout the course.

Kursens svaga sidor utifrån kursvärderingen och lärares reflektion, även i förhållande till de förändringar som genomförts inför kursomgången

While the programming knowledge gained in the first year Python course is enough to complete the course, students who did not take that course seriously, have hard time to follow the projects. Furthermore, we need to improve the description and explanation of the projects in two points: it has to be clear that the submitted solutions have to be conceptually correct to give maximum points – this is not always possible to test by test programs. Second, we would like to encourage the students to discuss the projects among each other.

Ansvarig lärares sammanfattande synpunkter

The course have very ambitious objectives, and we are happy to see that many of the students perform very well. Ca. 10% of the students receive grade A, which requires excellent results for the quizzes, for the programming projects as well as at the exam. We successfully recruit student as teaching assistants as well.

In the coming years we will further improve how we communicate the requirements towards the students, as well as the opportunities for them to learn before the assessments.

Förslag på eventuella förändringar av kursen

From 2020 the number of the students following the course will nearly double. With the present course setup, it would not be possible to manage this large student group. Therefore, we will introduce significant changes, while at the same time we will also address the weak points of the course.

As main change, the seminars, that included the quiz writing and student presentations will be changed to traditional lectures, where the teachers will discuss the theoretic background extensively, but also discuss the programming projects, with emphasis on the most challenging parts. This way assessment will be clearly separated from learning.

The evaluation of the submitted projects will be automatized on a larger degree. Hopefully this will lead to more transparent grading.

Kursansvarig: Viktoria Fodor