ME1003 Industrial management

The course is a 6 ECTS basic level course given by Indek, a part of the ITM-school, four times each year; period 1 (in English), 2, 3 and 4 (in Swedish).

Course objectives

Engineering is more than technology. To participate in technology-based businesses as an engineer, carry out projects, develop businesses and lead teams and employees in today’s companies, knowledge in industrial management is needed. In practice, the key to success lies in an understanding of technical and economical aspects of decisions. This course provides you with basic knowledge within the area of industrial management. This means that you, after the course, should:

1. Be able to explain how a business as well as leadership, organizing, strategic planning, and management control functions in an industrial organisation.
2. Be able to interpret an annual report from an industrial organisation, as well as be able to calculate and design the different parts of it at a basic level.
3. Be able to explain the structure of the industrial company’s streams of payments.
4. Be able to choose, construct, interpret and use cost calculations as part of the decision support for the industrial company’s different situations.
5. Be able to connect industrial management to your future area of work.
6. With the departure in your view on industrial management, be able to explain how the different parts of the area fit together related to the objectives of the industrial organization.

Main content

The industrial company and its conditions (industrial management, industrial dynamics, structural changes in the world of business, industrial operations, organization & leadership, entrepreneurship, production & project, industrial marketing, men at work), cost-volume-profit analysis, costing, investment appraisal, finance, cash flow analysis, financial analysis, bookkeeping & accounting, and management control. Also, the areas of sustainability, gender, ethics, communication and teamwork are somewhat covered.

Prerequisites

No prerequisites are required except general admission.

Further courses

Behavioural management control builds on Industrial management. There are also a lot of courses at Indek that has Industrial management as a prerequisite.

Education

The course consists of 41 hours of lectures (often with “clickers”), exercises, tutoring and seminar. The lecturing departs from the content in the course literature, news in business, and material provided for the lectures. The seminar is voluntary and gives plus points at the first ordinary exam.

Home page of the course

The home page of the course is atilda, www.bilda.kth.se. Inform the course coordinator at kullven@kth.se if you do not have access to it. On the home page, slides and other material is provided. You will also hand in the continuous questions there.

Teachers

The responsible teacher of the course is Håkan Kullvén, kullven@kth.se, who also holds the lectures. The course also has eleven guest lecturers from different parts of Indek, and one guest from a company.

Language
All education is in English in period 1, and in Swedish in period 2, 3 and 4 (there are, however, also support on the other language at the course home page). You can choose if you want to use literature in English or in Swedish, and the continuous questions as well as the exam is provided in both languages.

Course literature
The course book is *Accounting and finance for non-specialists* by Peter Atrill & Eddie McLaney, Prentice Hall. As an alternative, *Företagsekonomi 100* by Per-Hugo Skäravad & Jan Olsson, Liber (in Swedish) can be used. Please observe, however, that all references are made to *Accounting and finance for non-specialists* in period 1 and to *Företagsekonomi 100* in period 2, 3 and 4. For all literature, it is the latest edition that is used.

The latest published annual report from Atlas Copco is part of the literature. It will be handed out at the first class, and is also available on the course home page.

All students should have a “clicker” that will be handed out in the beginning of the course. The clicker is used to answer questions during the lectures. You borrow this without any cost, but if you do not hand it back in reasonable condition at the end of the course, you will be charged SEK 300.

Course registration
You have to choose the course at your international office. You will then be *enrolled* to the course, and will be part of the list of students. Enrolled students should put their *signature* on the list of participants. You will then be *registered* on the course, which is a prerequisite for getting a grade from it. The list of participants is circulated during the first three lectures. If you haven’t signed the list on one of these three occasions, please mail afzal.lotfi@indek.kth.se to register.

Examination
The course is examined by a class exam. The exam consists of 100 exam points. Since the continuous questions (that are voluntarily, see below) can give a maximum of 20 plus points, the maximum possible exam points is 120. For the grade Fx you need at least 40, for E 50 at least, for D at least 60, for C at least 70, for B at least 80, and for A at least 90 exam points. The grade Fx can be transformed to the grade E if all problems are corrected in a good way and you prove that you have learnt from this. It is obligatory to apply for the class exam if you wish to participate in it.

Continuous questions
Students that wish to do so can participate in the eight continuous questions that will be handed out during the course. You then have to reflect on this problem and how it could be applied to your future area of work (if you e.g. participate in a program in transportation, you can reflect on how a certain model can be used by Ford). As a minimum, you need to study the latest annual report from that company. Your answer, which should be between 100 - 400 words in length, can, for plus points on the first ordinary exam, be handed in at the course home page before the stipulated deadline. A teacher or an assistant will then assess your answer on the following criteria: Do you use relevant theories and models? Do you refer to the slides and the literature with page numbers when appropriate? Do you connect appropriately to your company when applicable? Is it enough in quantity to answer the question? In other words; have you tried to learn this area? Each hand-in can give 2 plus points; so the maximum number of plus points for the exam of that period from this is 16. If your answer is not accepted for one of the questions, you have a week from deadline to correct the mistake. If this is done in a good way, you can get 1 plus point for that answer.

When all the lectures have been held, you can put together and work more with the continuously handed in answers, so that you have a report that covers all the areas that have been dealt with. This report should be of no more than 5 pages, and should deal with each question separately. If you want to, you can choose one of the seminars of the course to participate in, and to this you bring one printed copy of your report which you give to the teacher. You and all other students will then (randomly) receive a report each to give your comments on, with the help of a suggested solutions manual. The teacher inform you about expected answers, and you will check the report and do notations about problems, interesting discussions, reflections and so on on the report that you have received – as a support to the student that has written it. When the
seminar is over, you will get your own report back together with the comments from the other student. Then, with this as a starting point, you improve the report and hand it in at bilda before the stipulated deadline. If you have participated in the seminar also handed in the report, you get 4 plus points for the exam.

Please note: The plus points can only be counted on the first ordinary exam of the course.

Avoid plagiarism
The course builds on individual work with continuous questions, and plagiarism isn’t allowed. Information about plagiarism can be found at www.kth.se/plagiarism.

Registration of grades
The grades are presented on ”My pages” within three weeks after the written exam.

Reassessment
On a written, motivated, request, a reassessment of the exam can be considered by mail to the course coordinator. This should be done no later than three weeks from the date when the results were announced at “My pages”.

Complement
If you receive the grade Fx, you can hand in a complement. If the complement is well performed, you will get the grade E, if it isn’t, you get an F.

New assignments
New assignments are given each period. So; no extra assignments to individual students are given – you always have the possibility to, within a reasonable time, participate in a new exam.

Examiner
Examiner is Håkan Kullvén, assistant professor at Indek, SingSing room 255, phone 46 73 500 4580. Questions about the course should be asked at the course home page at bilda (if you have access to it) or to kullven@kth.se.

Evaluation
An evaluation is given in the beginning, the middle, and the end of the course at bilda.

Indek office
Indek office is situated in SingSing, Lindstedsvägen 30. The doors to SingSing are usually open workdays from 8 AM to 4 PM. The office is usually open workdays from 9.30 AM to 3.30 PM. At periods of manpower shortage, the office is closed for lunch between 12.30 AM and 1 PM.
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