



# ME2806 From Science to Business 7,5 hp

From Science to Business

När kurs inte längre ges har student möjlighet att examineras under ytterligare två läsår.

## Fastställande

Kursplan för ME2806 gäller från och med HT07

## Betygsskala

A, B, C, D, E, FX, F

## Utbildningsnivå

Avancerad nivå

## Huvudområden

Industriell ekonomi

## Särskild behörighet

Students must have a minimum of 80 university points (120 ECTS respectively). Graduate students in medicine, engineering, humanities & sciences, law, and business are especially encouraged.

## Undervisningsspråk

Undervisningsspråk anges i kurstillfällesinformationen i kurs- och programkatalogen.

## Lärandemål

Biomedicine is becoming more interdisciplinary, yet more specialized at the same time. How to identify and integrate key ideas from the rapidly expanding primary literature becomes a critical skill not only to students and faculty in academia, but also to scientists and leaders in industry. The aim of this course is to introduce the students to some key concepts (Business models, Financial Strategies, Intellectual property, Product development, Ethics) as well as to key scientific areas in biotechnology. Through presentations by entrepreneurs who have brought science to business, the practical side of the concepts are made clearer. To provide some hands-on experience, the students will analyse the concepts in combination with specific science areas in multi-disciplinary team-projects.

## Kursinnehåll

This course combines weekly back-to-back lectures from leaders in biotechnology with a team project. It will introduce students to several current biotechnology-related research areas with a particular focus on their emergence and future directions. Case presentations of biotech companies specializing in these areas will complement each week's lectures. Students will also work on a group project under the guidance of a mentor with extensive experience in biotech business. The student project aims to identify an unmet need, analyze the business opportunity and the potential influence of the external environment in a potential pursuit of the opportunity. Analysis of the business opportunity includes assessing the potential market and how to penetrate it, as well as the estimated cost, time and risk inherited in developing the product. The key concepts discussed in the course should all be addressed in the analyses: Business model, Financial strategy, IP, Product development, Ethics.

### Structure

There will be approximately 2 weekly sessions lasting 3 hours each for 9 weeks. In addition to these sessions, the students will work with their team project outside of class.

### Teaching methods

This course consists of 6 hours of class/week, and a team-project that students work on outside of class. In order to enhance the students experience and increase their understanding of business opportunities within biotechnology, each team will have one or more mentors with extensive experience within biotech business, in particular with evaluating and following-up on new business opportunities.

## Kurslitteratur

### Preliminary Literature

Principles of Biotechnology, by David F. Betsch

Evolutionary Innovations - The business of Biotechnology, by Maureen McKelvey

Biotechnology Unzipped - promises and realities, by Eric S. Grace

Biotech Patents, by Li Westerlund

Current articles published in scientific journals on the issues of

Biotechnology business (product development, financing)

Several websites that present data and analyses, for ex

[www.bio.com/industryanalysis](http://www.bio.com/industryanalysis), [www.bioworld.com](http://www.bioworld.com)

## Examination

- PRO1 - Project, 7,5 hp, betygsskala: A, B, C, D, E, FX, F

Examinator beslutar, baserat på rekommendation från KTH:s handläggare av stöd till studenter med funktionsnedsättning, om eventuell anpassad examination för studenter med dokumenterad, varaktig funktionsnedsättning.

Examinator får medge annan examinationsform vid omexamination av enstaka studenter.

## Övriga krav för slutbetyg

The end product of the team-project is a 10-page paper and an oral presentation for a team of judges.

## Etiskt förhållningssätt

- Vid grupparbete har alla i gruppen ansvar för gruppens arbete.
- Vid examination ska varje student ärligt redovisa hjälp som erhållits och källor som använts.
- Vid muntlig examination ska varje student kunna redogöra för hela uppgiften och hela lösningen.