FIM782   Entreprenörskap och projektplanering, 7,5 högskolepoäng
Entrepeneurship and Project Management, 7.5 higher education credits

Avancerad nivå / Second Cycle

Fastställande

Kursplanen är fastställd av Institutionen för fysik 2013-10-11 och senast reviderad 2017-05-22. Den reviderade kursplanen gäller från och med 2017-05-22, vårterminen 2017.

Utbildningsområde: Naturvetenskapligt 100 %
Ansvarig institution: Institutionen för fysik

Inplacering

Kan även ges som fristående kurs.

Kursen kan ingå i följande program: 1) Physics, Master Program (N2PHY), 2) Complex Adaptive Systems, Master Program (N2CAS) och 3) Physics of Materials and Biological Systems, Master Program (N2PMB)

Huvudområde	*Fördjupning*
Fysik	A1N, Avancerad nivå, har endast kurs/er på grundnivå som förkunskapskrav

Förkunskapskrav

Bachelors degree in natural sciences or equivalent education.

Lärandemål

Understand and have knowledge about how to develop new commercial products and processes based on advanced research.

Find information in both patent and literature databases, analyze the content of patents and compare it with the content of related scientific articles, understand the basics in

patent writing and the requirement for getting a patent accepted.

Understand the basics of project management, its challenges and the way to deal with them by using the theories of organizational learning.

The course also strives for transferring knowledge about entrepreneurial activities and an understanding about various aspects of relevance for engineers when active in industry or academia.

Innehåll

The aim of the course is to present the entrepreneurship and project management as the knowledge of relevance in the development of commercial products and processes. The students will increase their understanding of the innovation transfer, in particular the patenting process, their ability to find information in patent databases and get knowledge about how patents are written and evaluated. The students will train in the art of transferring the potential value and impact of the innovation to the working business or how to present innovations for the society. The students will get familiarized with the concepts of project management in order to understand how professional project managers work. The course also aims to help students to understand the prevailing challenges of project management, and to deal with them, by means of the theories of organizational learning.

Module M1 is IdeaInnovationEntrepreneurship: it will give an insight into patent and literature databases, including the way patents are written and composed. This module consists of two projects, both performed in student project groups. The first project (SCOUT AND IDENTIFY) is to be summed up in a group written report (hand-in N2), while the second (EVALUATE AND PRESENT) is delivering a presentation by the whole group to all students of the course (presentation P1).

Together, the two projects will let you understand in depth a scientific article containing an innovative component; understand how such an innovation can be patented and how a patent is written and composed. Finally, you will train yourself in the art of

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transferring the potential value and impact of the innovation to the working business or how to present innovations for the society.

Module M2a Project Management Basics. This module is at Bachelor course level but delivered with crash course speed. During the first two weeks of the course, you are to study the concepts, methods and tools of project management. Central to this module is the course textbook, and the teaching is designed to support your reading of the book.

The contents include:
Project management past and present. Structures and frameworks. Projects and organizations. Stakeholders, strategy and success. Initial planning. Time planning. Rethinking time planning: The critical chain approach. Cost and benefit planning. Stakeholders and quality. Risk and opportunities management. Project organization: structures and teams. Management and leadership in projects. Control. Supply chain issues. Problem-solving and decision-making. Project completion and review. Improving project performance.

The aim of the theme is to familiarize you with the concepts of project management in order to understand how professional project managers work. A number of methods can be used during your projects of this course.

The examination is a two-hour written test (offered twice during the course).

Module M2b is Mastering Project Management. It aims to help you understand the prevailing challenges of project management, and to deal with them, by means of the theories of organizational learning. This theme consists of a number of lectures and a (mandatory) literature seminar. Examination is in form of a home exam.

Former för undervisning

Deliverable - N1: Short Action plan
Pass or Fail
Deliverable - PM test: Project Management Basics test (A two-hour written test offered twice during this course), graded

Deliverable - N2: Project SCOUT AND IDENTIFY (You write a report in groups.) Graded.

Deliverable - N3: Short Action plan
Pass or Fail

Deliverable - N4: The Literature Seminar preparatory work
(Hand-in before the deadline.) Pass or Fail

Deliverable - LS:Participating in the Literature Seminar
It is important that you get there on time. Attendance required

Deliverable - P1:Project EVALUATE AND PRESENT
It is important that you get there on time. Pass or Fail

Deliverable - N5: The Mastering Project Management Home Exam
Individually or in pairs. Circa one week. Graded

Deliverable - 'Going for a VG' (not compulsory)
Report individually or in groups. Graded

Undervisningsspråk: engelska

Former för bedömning
Student har rätt till byte av examinator, om det är praktiskt möjligt, efter att ha underkänts två gånger på samma examination. En sådan begäran ställs till institutionen och skall vara skriftlig.

Betyg
På kursen ges något av betygen Väl godkänd (VG), Godkänd (G) och Underkänd (U).

Kursvärdering