

Program Information for
Master in Innovation, Entrepreneurship and Business
Development,
120 ECTS credit points

**(Masterprogram i innovation, entreprenörskap och affärsutveckling,
120 högskolepoäng)**

1. Decision

This document was established by the Educational Committee at the School of Management 2009-02-05. The document applies from the fall semester 2009 and onwards.

Program code: IEAIE

2. General information

Innovation and entrepreneurship are key drivers for the economic growth of countries, industries, companies and new firms. Future managers and policy-makers need to be able to deal with the challenges of innovation, entrepreneurship, and business development in the intersection of management, technology and economics. This program aims to bring theoretical understanding as well as practical skills to handle different problems and opportunities related to technology-based and business-driven innovation and entrepreneurship.

The program is a two-year master program where the first year is devoted to understanding and analyzing why and how companies innovate as well as why and how entrepreneurs recognize opportunities and engage in commercialization and how these processes could be managed. The first year will also emphasize the understanding and analysis of innovation and entrepreneurship from a national and regional perspective. In addition students will be introduced to issues of sustainable development.

During the second year there is a choice between two different tracks. The first track focuses on entrepreneurship and business creation working closely with BTH's incubator system. Here the focus is on issues concerning the creation and management of new businesses and the work is concentrated to the development of business plans and a "live" case of creating a new business.

In the second alternative the focus is on analytical and research skills concerning innovation and entrepreneurship. Here studies will go deeper into issues concerning innovation processes both within the organization and the eco-systems or the innovation system they are a part of. The studies during the second year also include courses in research methods and you finish the program with a thesis either in the form of a comprehensive business plan (track 1) or as a piece of academic research (track 2).

One credit point (högskolepoäng) in the Swedish system corresponds to one credit point in the European Credit Transfer System (ECTS).

3. Aims and learning outcomes

In addition to the aims regulated nationally, to be found in section 8, the following aims have been set for the programme.

On completion of the program the student will:

- be able to demonstrate a critical understanding of the fundamental concepts of innovation, entrepreneurship and business development
- be able to analyze the innovation and entrepreneurial challenges of an organization
- be able to incorporate a strategic innovation perspective into business development processes
- be able to demonstrate an understanding of the need to consider sustainability issues in relation to innovation and business development
- be able to apply current approaches to the management of technology and innovation
- be able to master tools for creativity, business creation and innovation
- be able to understand and analyze the available legal instruments for protecting intellectual property rights
- be able to understand and analyze issues of innovation and entrepreneurship from a regional and national economic perspective.
- make independent analyses and judgments of complex situations in a business context
- be able to effectively retrieve relevant information from different sources and to carry out advanced tasks in internationally mixed groups
- be able to evaluate and undertake rigorous research or in-depth investigations into matters of innovation, entrepreneurship and business development

4. Learning and education

The two-year programme is open to students with their first degree from different faculty-areas. The initial year of the programme thus aim to develop a common in-depth understanding of the area of innovation and entrepreneurship while at the same time making use of the diverse academic background of the student-group through the application of a problem-centred and cross-disciplinary approach to learning. This rests on the assumption that students have reached the level of academic maturity necessary for studies on the advanced level where independence and initiative are important.

During the second year of the programme two options of specialization are offered. In the more entrepreneurial track students will work in teams in a managed incubation process, which is supposed to result in a comprehensive business plan for a new venture. Throughout this process students have access to advisors with an extensive practical experience from business development as well as specialists from different functional areas.

In the other more research and academically oriented track teaching will be offered in seminar-like forms where research-oriented and methodological issues will be focused.

Since students are not required to have previous practical experience the programme will make extensive use of company visits and presentations from managers in industry as well as case studies on industry relevant issues and company based projects and assignments. The idea is for the programme to be liberating to students, getting them to think (critically) about real life issues and situations in novel ways and to develop habits of mind that stretch and expand their capacity to think creatively. This privileges a processual view of reality and a style of thought in which movement and the becoming of things are accentuated. The programme thus put equal emphasis on the learning of *what* and on learning *how to learn*.

The programme is taught in English and all learning resources used are in English.

5. Structure of the study program

The two-year program focus on central activities and processes linked to innovation, entrepreneurship and business development. During the first year of the program students are exposed to a diverse set of different perspectives on innovation, entrepreneurship and business development, which aim to contribute to an in-

depth understanding of the area. The students will meet management based approaches as well as approaches and concepts which focus on macro-oriented conditions.

Against this background students will be able to choose between two different tracks during the second year. One of these tracks has an entrepreneurial focus where students work in teams on a business development project in an incubation-like process.

The other track has a more traditional academic focus where critical analysis and in-depth understanding of the area of innovation are emphasized. This track is primarily for students interested in further academic studies at the research-level.

The programme is continually evaluated and developed which may cause the courses offered and the position of the courses to change.

Study period	Year 1	Year 2; Entrepreneurial Track	Year 2; Academic Track
1	The Innovative firm and entrepreneurship, 7,5 hp	Entrepreneurship, 7.5 credits	
1	Introduction to strategic sustainable development, 7,5 credits	User-centered Innovation 7.5 credits	Industrial Dynamics, 7.5 credits
2a	Innovative regions, 7,5 credits	Research methods and design I, 7.5 credits	
2b	Managerial economics, 7,5 credits	Business plan design 7.5 credits	Research methods and design II, 7.5 credits
3	Mgmt of Technology and Innovation, 7,5 credits	Master Project (Business Plan) 30 credits	Master Thesis 30 credits
3	Creativity, Innovation method and academic entrepreneurship, 7,5 credits		
4	Open Innovation and Open source, 7,5 credits		
4	Intellectual property rights, 7,5 credits		

Mandatory courses

Most of the courses in the programme are new and are not yet completely developed

Course code/ Number of credits	Title	Subject area/ Level	Content
IY24xx 7.5	The Innovative firm and entrepreneurship	Industrial Economics & Management Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • Entrepreneurship theory • Innovation processes • Alternative theories of the firm (from Coase to the resource based view and the dynamic capabilities approach)
MI2407 7.5	Introduction to strategic sustainable development	Environmental Engineering, Advanced, D	<ul style="list-style-type: none"> • Core concepts of strategic sustainable development • Current environmental problems in a systems perspective • Principles of sustainability • Cyclical versus linear processes • Tools and concepts relevant to sustainable development
FM2404 7.5	Planning; Innovative Regions	Planning, Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • The Lisboa strategy • Administrative versus functional regions • Agglomeration economies, clusters and inter-firm networks and systems of innovation • Knowledge flows and knowledge spillovers • Triple Helix • Creative regions • Innovation policy and strategy
IY24xx 7.5	Managerial economics	Industrial Economics & Management, Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • Porters five forces.... • Product differentiation • Monopolistic competition • Oligopolistic markets and strategic behavior • Institutions, transaction costs and markets

IY24xx 7.5	Mgmt of Technology and Innovation	Industrial Economics & Management, Advanced, D	<ul style="list-style-type: none"> • Investments in R&D • R&D and innovation policies
			<p><i>The course is under development</i></p> <ul style="list-style-type: none"> • Differences in appropriability conditions and behavior across industries • Technological paradigms and trajectories • Incremental versus radical innovation: • Strategic Management • Variations in innovation strategies within and across industries • Innovation in manufacturing versus innovation in services • The organization and location of R&D activities • Project Management • R&D strategy: exploration versus exploitation
IY24xx 7.5	Creativity, Innovation method and academic entrepreneurship	Industrial Economics & Management, Advanced, D	<p><i>The course is under development</i></p> <ul style="list-style-type: none"> • Innovation processes • Company-university cooperation in R&D and innovation • Academic commercialization systems • Idea generation and creativity • Creativity & Dev processes • Team and individual creativity • Creativity tools and methods
IY24xx 7.5	Open Innovation och Open source	Industrial Economics & Management, Advanced, D	<p><i>The course is under development</i></p> <ul style="list-style-type: none"> • R&D cooperation and strategic R&D alliances: vertical and horizontal linkages • The knowledge sources of innovations: invest in R&D or buy new technology • Open source • Open innovation

			<ul style="list-style-type: none"> • Distributed innovation • Innovation processes
RV24xx 7.5	Intellectual property rights	Law Advanced, D	<p><i>The course is under development</i></p> <ul style="list-style-type: none"> • Patent law • Licenses • IPR and Commercialization strategies • Copyright
<i>Entrepreneurial Track</i>			
IY24xx 7.5	Entrepreneurship	Industrial Economics & Management, Advanced, D	<p><i>The course is under development</i></p> <ul style="list-style-type: none"> • Theories about entrepreneurship • Barriers to entry • Theories for entrepreneurship • Spin-outs and spin-offs • The information paradox • The problem with asymmetric information • Financing of entrepreneurial start-ups • Entrepreneurship research • Entrepreneurship education
IY24xx 7.5	User-centered innovation	Industrial Economics & Management, Advanced, D	<p><i>The course is under development</i></p> <ul style="list-style-type: none"> • User and market research • User centered Innovation • Ethnographic approaches • Living Labs

IY24xx 7.5	Research methods and design I	Industrial Economics & Management, Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • Research design • Qualitative methods • Quantitative methods
IY24xx 7.5	Business Plan design	Industrial Economics & Management, Advanced, D	<i>The course is under development</i>
IY24xx 30	Master project	Industrial Economics & Management, Advanced, D	<i>The course is under development</i>
Academic Track			
IY24xx 7.5	Entrepreneurship	Industrial Economics & Management, Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • Theories about entrepreneurship • Barriers to entry • Theories for entrepreneurship • Spin-outs and spin-offs • The information paradox • The problem with asymmetric information • Financing of entrepreneurial start-ups • Entrepreneurship research • Entrepreneurship education
IY24xx 7.5	Industrial Dynamics	Industrial Economics & Management, Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • Structural changes in the economy: from agriculture to services • The internationalization and globalization of economies, production systems and companies • Product life cycles and industry life cycles
IY24xx 7.5	Research methods and design I	Industrial Economics & Management, Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • Research design • Qualitative methods • Quantitative methods
IY24xx 7.5	Research methods and design II	Industrial Economics & Management, Advanced, D	<i>The course is under development</i> <ul style="list-style-type: none"> • Advanced quantitative methods

IY24xx 30	Master thesis	Industrial Economics & Management, Advanced, D	<i>The course is under development</i>
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The aims and learning outcomes of the program are reached through the different courses included in the degree. Assessment and examination take place at course level and details concerning assessment and grading for the courses can be found in each respective course descriptor.

6. Selection

If there are more qualified applicants than available places on the program there is a selection made. The procedure for the selection is as follows;

The selection is based on the previous academic degree of the applicant. In the first step an assessment of the relevance of the degree is made. Here the applicant can score either 0; 0,5 or 1,0 points where the latter score marks the highest relevance.

In the second step the applicant's previous experience of thesis work is assessed. If the applicant has done a thesis or project work of less than 15 ECTS the score is 0,5, while a thesis of 15 ECTS or more equal a score of 1,0.

In the final step the two scores are added which means that the maximum score is 2,0.

7. Transition regulations for advancement

Students are expected to have passed a minimum of 75% of the courses during the first year of the Program before moving on to the second year. Students with less than 45 credits after the first year are to contact the study-counselor to discuss an individual study-plan, before the start of the third semester.

8. Excerpt from the national Degree Ordinance

Masterexamen

Omfattning

Masterexamen uppnås efter att studenten fullgjort kursfordringar om 120 högskolepoäng med viss inriktning som varje högskola själv bestämmer, varav minst 60 högskolepoäng med fördjupning inom det huvudsakliga området (huvudområdet) för utbildningen. Därtill ställs krav på avlagd kandidatexamen, konstnärlig kandidatexamen, yrkesexamen om minst 180 högskolepoäng eller motsvarande utländsk examen.

Undantag från kravet på en tidigare examen får göras för en student som antagits till utbildningen utan att ha haft grundläggande behörighet i form av en examen. Detta gäller dock inte om det vid antagningen gjorts undantag enligt 7 kap. 28 § andra stycket på grund av att examensbevis inte hunnit utfärdas.

Mål

Kunskap och förståelse

För masterexamen skall studenten

- visa kunskap och förståelse inom huvudområdet för utbildningen, inbegripet såväl brett kunnande inom området som väsentligt fördjupade kunskaper inom vissa delar av området samt fördjupad insikt i aktuellt forsknings och utvecklingsarbete, och
- visa fördjupad metodkunskap inom huvudområdet för utbildningen.

Färdighet och förmåga

För masterexamen skall studenten

- visa förmåga att kritiskt och systematiskt integrera kunskap och att analysera, bedöma och hantera komplexa företeelser, frågeställningar och situationer även med begränsad information,
- visa förmåga att kritiskt, självständigt och kreativt identifiera och formulera frågeställningar, att planera och med adekvata metoder genomföra kvalificerade uppgifter inom givna tidsramar och därigenom bidra till kunskapsutvecklingen samt att utvärdera detta arbete,
- visa förmåga att i såväl nationella som internationella sammanhang muntligt och skriftligt klart redogöra för och diskutera sina slutsatser och den kunskap och de argument som ligger till grund för dessa i dialog med olika grupper, och

- visa sådan färdighet som fordras för att delta i forsknings- och utvecklingsarbete eller för att självständigt arbeta i annan kvalificerad verksamhet.

Värderingsförmåga och förhållningssätt

För masterexamen skall studenten

- visa förmåga att inom huvudområdet för utbildningen göra bedömningar med hänsyn till relevanta vetenskapliga, samhälleliga och etiska aspekter samt visa medvetenhet om etiska aspekter på forsknings- och utvecklingsarbete,
- visa insikt om vetenskapens möjligheter och begränsningar, dess roll i samhället och människors ansvar för hur den används, och
- visa förmåga att identifiera sitt behov av ytterligare kunskap och att ta ansvar för sin kunskapsutveckling.

Självständigt arbete (examensarbete)

För masterexamen skall studenten inom ramen för kursfordringarna ha fullgjort ett självständigt arbete (examensarbete) om minst 30 högskolepoäng inom huvudområdet för utbildningen. Det självständiga arbetet får omfatta mindre än 30 högskolepoäng, dock minst 15 högskolepoäng, om studenten redan har fullgjort ett självständigt arbete på avancerad nivå om minst 15 högskolepoäng inom huvudområdet för utbildningen eller motsvarande från utländsk utbildning.

Övrigt

För masterexamen med en viss inriktning skall också de preciserade krav gälla som varje högskola själv bestämmer inom ramen för kraven i denna examensbeskrivning.

Högskolespecifikt för BTH

För masterexamen krävs minst 60 högskolepoäng på D-nivå i huvudområdet, varav det självständiga arbetet ska utgöra minst 30 högskolepoäng. Av de 120 högskolepoäng som krävs för examen får högst 30 högskolepoäng komma från grundnivå.