

## **Programme Curriculum for Master Programme in Economic Growth, Population, and Development**

### **1. Identification**

Name of programme	Master Programme in Economic Growth, Population, and Development
Scope of programme	60/120 ECTS
Level	Master level
Programme code	EAETU
Decision details	Board of the School of Economics and Management
Amendment details	2018-07-12

### **2. Programme description**

This programme aims to explore the general history of production and distribution, population and living standards, institutions and social organisation. The programme offers knowledge to carry out investigations and analyses concerning changes of social and economic conditions under different circumstances.

The program of study is organized into three tracks. Depending on ambitions and interests, participants choose to specialize in:

- Track 1: Economic History
- Track 2: Economic Demography
- Track 3: Economic Development

Applicants are to decide on which track they are applying for when applying for the programme.

Knowledge of the past is essential for understanding today's world and shaping the future. In **Track 1: Economic history** you will develop advanced insights into the long-term development of societies. By combining analytical tools from economics and the social sciences with a contextual understanding of conditions in the past, you will become able to use the accumulated human experience to solve current-day problems. Central themes studied are growth, stagnation, crises and distribution of resources. The track combines broad scholarly education with hands on exercises in research methods. As a student you will improve your skills to review previous research and scholarly debates, formulate and frame research problems, apply quantitative and qualitative methods, handle databases, integrate and communicate your knowledge in writing and orally. The track makes you equipped for research and analytical work in private businesses, government organizations, publishing and academia.

The first and second years combines core courses with a wide selection of elective courses, culminating in a period of independent thesis writing. The core courses of the first year cover the

global economy, population and living standards, research design and comparative approaches. The second year features core courses in econometrics and institutional change, as well as opportunities for specialized advanced tutorials on key themes in economic history. Both years include a wide range of elective courses in topics such as human capital and education, economic growth, innovations, energy systems, demographic change, emerging economies and time series analysis.

Lund University is internationally renowned for its research in economic history and hosts one of the largest independent Economic History departments in the world. As a student, you take full advantage of this thriving environment, and benefit from the diversity of field-leading experts. Researchers are active in the course design and teaching, ensuring high quality course content with a focus on pushing forward the research frontier.

**Track 2: Economic Demography:** The track is a joint undertaking between the departments of Economic History, Economics and Statistics at the Lund School of Economics and Management (LUSEM), with all course work being placed at LUSEM. The programme is divided into three component parts - a part of compulsory program-specific courses in economic demography, an elective part of department-specific courses related to economic demography, and, during the second year, an elective part making it possible for field work and data gathering, for studies within our exchange programs abroad or for further courses within this or other master programmes in Lund. The department-specific courses provide the methodological skills necessary for demographers within a discipline-specific framework.

The full master programme comprises two years of full-time study, but there will be a provision to leave after one year with a Master of Science (60 credits). The course structure of the programme is described below, where the first year gives broad knowledge of the socioeconomic aspects of demography and the tools needed to understand and study these processes, while the second year provides more detailed knowledge necessary for a career as a demographer. Within the programme student are able to specialize on economics, economic history, or statistics. After completing the master programme, it is possible to apply for the PhD programmes in the three disciplines depending on specialization.

The first term of each year is divided into four courses of 7.5 ECTS each, while the second term consists of two courses of 7.5 ECTS and one thesis comprising 15 ECTS. The courses in the first term of each year run parallel with each other, with two courses during the first half of the term, and two during the second half. During the second term of each year the courses will run parallel during the first half, while the second half of the term is devoted to thesis work.

**Track 3: Economic Development.** How to measure, explain and promote economic development outside the industrialized North has been vividly debated in both scholarly and policy circles for well over half a century, resulting in different approaches to development strategies and policies. Economic development essentially rests on three pillars: income per capita growth, distribution of the fruits of growth and structural change. The interaction of these elements constitutes the process of development. The *Economic Development* track will engage students in a variety of aspects and analyses of how and why the process of development in some places gets underway and in other places tend to stall. The programme will cover debates and theories on the reasons for economic backwardness and successful catching up; the institutional underpinnings of long term growth; qualitative and quantitative techniques in managing and modelling empirical material. The programme will provide students with knowledge necessary to assess and understand development pathways and dynamics of economic change. Students are trained in analytical skills and independent work specialising in global development with a focus on the developing world in a historical and comparative perspective.

The first year provides predominately key mandatory coursework on the emerging economies, Asia-Pacific, institutional analysis and research design coupled with the opportunity to further explore topics of your choice from a broad selection of courses. Similarly, the second year provides predominately mandatory coursework made up of quantitative methods and three tutorials on several

key aspects of the development process coupled with a choice of topics from a broad selection of courses. Both years end with independent paper writing or degree project depending on whether you chose to study the one or two-year Master.

#### *Career opportunities*

Graduates of this programme are particularly equipped for analytical work in private business as well as government organisations and publishing that requires capability of intellectual judgement, evaluation and analysis of economic facts and ideas, and good communication skills.

#### *Connection to further studies*

Successful completion of the programme will enable students to apply to doctoral programmes in economic history.

### **3. Learning outcomes**

The programme builds on previous studies at the undergraduate level in social sciences. In accordance with the Higher Education Ordinance, a Master of Science (120 credits) is awarded to students who at the completion of the programme accomplish the following:

#### **Track 1: Economic History**

In accordance with the Higher Education Ordinance, a Master of Science (120 credits) is awarded to students who at the completion of the programme accomplish the following:

#### *Knowledge and understanding*

- demonstrate knowledge and understanding in the field of Economic History, including both broad knowledge in the field and substantially deeper knowledge of certain parts of the field, together with deeper insight into current research and development work; and
- demonstrate deeper methodological knowledge in the field of Economic History
- demonstrate knowledge about the methodology of historical analysis by qualitative as well as quantitative means
- demonstrate knowledge about the general history of production and distribution, population and living standards, institutions and social organizations
- demonstrate knowledge about factors that have influenced social and economic change

#### *Competence and skills*

- demonstrate an ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
- demonstrate an ability to critically, independently and creatively identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits, so as to contribute to the development of knowledge and to evaluate this work;
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing, in national and international contexts; and
- demonstrate the skills required to participate in research and development work or to work independently in other advanced contexts.
- demonstrate an ability to work individually as well as in groups with students from different cultures in order to solve practical problems as well as to manage a more extensive project.

*Judgement and approach*

- demonstrate an ability to make assessments in the field of Economic History, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;
- demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

*Independent project (degree project)*

For a Master of Science (120 credits) students must have completed an independent project (degree project) worth at least 30 higher education credits in the field of Economic History, within the framework of the course requirements. The independent project may comprise less than 30 higher education credits, but not less than 15 higher education credits, if the student has already completed an independent project at the second level worth at least 15 higher education credits in their main field of study.

Students have the possibility to leave the programme after one year and in accordance with the Higher Education Ordinance obtain a Master of Science (60 credits) with a major in Economic History. The degree is awarded to students who at the completion of the programme accomplish the following:

*Knowledge and understanding*

- demonstrate knowledge and understanding within the field of Economic History, including both a broad command of the field and deeper knowledge of certain parts of the field, together with insight into current research and development work; and
- demonstrate deeper methodological knowledge in the field of Economic History
- demonstrate knowledge about the methodology of historical analysis by qualitative as well as quantitative means
- demonstrate knowledge about factors that have influenced social and economic change

*Competence and skills*

- demonstrate an ability to integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
- demonstrate an ability to independently identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits;
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing; and
- demonstrate the skills required to participate in research and development work or to work in other advanced contexts.
- demonstrate an ability to work individually as well as in groups with students from different cultures in order to solve practical problems as well as to manage a more extensive project.

*Judgement and approach*

- demonstrate an ability to make assessments in the field of Economic History, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;
- demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

*Independent project (degree project)*

For a Master of Science (60 credits) students must have completed an independent project (degree project) worth at least 15 higher education credits in Economic History, within the framework of the course requirements.

### **Track 2: Economic Demography**

In accordance with the Higher Education Ordinance, a Master of Science (120 credits) is awarded to students who at the completion of the programme accomplish the following:

#### *Knowledge and understanding*

- demonstrate knowledge and understanding in the field of Economic Demography, including both broad knowledge in the field and substantially deeper knowledge of certain parts of the field, together with deeper insight into current research and development work; and
- demonstrate deeper methodological knowledge in the field of Economic Demography.

#### *Competence and skills*

- demonstrate an ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
- demonstrate an ability to critically, independently and creatively identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits, so as to contribute to the development of knowledge and to evaluate this work;
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing, in national and international contexts; and
- demonstrate the skills required to participate in research and development work or to work independently in other advanced contexts.
- demonstrate an ability to work individually as well as in groups with students from different cultures in order to solve practical problems as well as to manage a more extensive project.
- demonstrate an ability to evaluate, and critically analyse theoretical and empirical literature within the context of economic demography.
- be able to independently apply relevant theoretical and empirical models on demographic issues within her/his own discipline-specific framework.

#### *Judgement and approach*

- demonstrate an ability to make assessments in the field of Economic Demography, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;
- demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

#### *Independent project (degree project)*

For a Master of Science (120 credits) degree students must have completed an independent project (degree project) worth at least 30 higher education credits in the field of Economic Demography, within the framework of the course requirements. The independent project may comprise less than 30 higher education credits, but not less than 15 higher education credits, if the student has already completed an independent project at the second level worth at least 15 higher education credits in their main field of study.

Students have the possibility to leave the programme after one year and in accordance with the Higher Education Ordinance obtain a Master of Science (60 credits). The degree is awarded to students who at the completion of the programme accomplish the following:

*Knowledge and understanding*

- demonstrate knowledge and understanding within the field of Economic Demography, including both a broad command of the field and deeper knowledge of certain parts of the field, together with insight into current research and development work; and
- demonstrate deeper methodological knowledge in the field of Economic Demography

*Competence and skills*

- demonstrate an ability to integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
- demonstrate an ability to independently identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits;
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and

arguments behind them, in dialogue with different groups, orally and in writing; and

- demonstrate the skill required to participate in research and development work or to work in other advanced contexts.
- demonstrate an ability to work individually as well as in groups with students from different cultures in order to solve practical problems as well as to manage a more extensive project.
- demonstrate an ability to evaluate theoretical and empirical literature within the context of economic demography.
- be able to apply relevant theoretical and empirical models on demographic issues within her/his own discipline-specific framework.

*Judgement and approach*

- demonstrate an ability to make assessments in the field of Economic Demography, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;
- demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

*Independent project (degree project)*

For a Master of Science (60 credits) students must have completed an independent project (degree project) worth at least 15 higher education credits in Economic Demography, within the framework of the course requirements.

**Track 3: Developing Economies**

In accordance with the Higher Education Ordinance, a Master of Science (120 credits) is awarded to students who at the completion of the programme accomplish the following:

*Knowledge and understanding*

- demonstrate knowledge and understanding in the field of Development and Growth, including both broad knowledge in the field and substantially deeper knowledge of certain parts of the field, together with deeper insight into current research and development work; and
- demonstrate deeper methodological knowledge in the field of Development and Growth
- demonstrate knowledge about the methodology of historical analysis by qualitative as well as quantitative means
- demonstrate knowledge about the general history of production and distribution, population and living standards, institutions and social organizations
- demonstrate knowledge about factors that have influenced social and economic change

*Competence and skills*

- demonstrate an ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
- demonstrate an ability to critically, independently and creatively identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits, so as to contribute to the development of knowledge and to evaluate this work;
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing, in national and international contexts; and
- demonstrate the skills required to participate in research and development work or to work independently in other advanced contexts.
- demonstrate an ability to work individually as well as in groups with students from different cultures in order to solve practical problems as well as to manage a more extensive project.

#### *Judgement and approach*

- demonstrate an ability to make assessments in the field of Development and Growth, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;
- demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used; and
- demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

#### *Independent project (degree project)*

For a Master of Science (120 credits) students must have completed an independent project (degree project) worth at least 30 higher education credits in the field of Economic History, within the framework of the course requirements. The independent project may comprise less than 30 higher education credits, but not less than 15 higher education credits, if the student has already completed an independent project at the second level worth at least 15 higher education credits in their main field of study.

Students have the possibility to leave the programme after one year and in accordance with the Higher Education Ordinance obtain a Master of Science (60 credits) with a major in Development and Growth. The degree is awarded to students who at the completion of the programme accomplish the following:

#### *Knowledge and understanding*

- demonstrate knowledge and understanding within the field of Development and Growth, including both a broad command of the field and deeper knowledge of certain parts of the field, together with insight into current research and development work; and
- demonstrate deeper methodological knowledge in the field of Development and Growth
- demonstrate knowledge about the methodology of historical analysis by qualitative as well as quantitative means
- demonstrate knowledge about factors that have influenced social and economic change

#### *Competence and skills*

- demonstrate an ability to integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even when limited information is available;
- demonstrate an ability to independently identify and formulate issues and to plan and, using appropriate methods, carry out advanced tasks within specified time limits;
- demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing; and
- demonstrate the skills required to participate in research and development work or to work in other advanced contexts.

- demonstrate an ability to work individually as well as in groups with students from different cultures in order to solve practical problems as well as to manage a more extensive project.

*Judgement and approach*

- demonstrate an ability to make assessments in the field of Development and Growth, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development work;  
 - demonstrate insight into the potential and limitations of science, its role in society and people's responsibility for how it is used; and  
 - demonstrate an ability to identify their need of further knowledge and to take responsibility for developing their knowledge.

*Independent project (degree project)*

For a Master of Science (60 credits) students must have completed an independent project (degree project) worth at least 15 higher education credits in Development and Growth, within the framework of the course requirements.

#### 4. Course information

The programme is organized into three tracks and applicants must specify which track they are applying for when applying for the programme. The tracks partly share courses. The programme of study on all tracks is divided into two semesters, which are further divided into four study periods. Period 1 extends from late August to late October, period 2 from late October to mid-January, period 3 from mid-January to late March, and Period 4 from late March to early June.

#### Track 1: Economic History

Semester 1 (Autumn), year 1		Semester 2 (Spring), year 1	
Period 1 Sept-Oct	Period 2 Nov-Dec	Period 3 Jan-March	Period 4 April-May
The global economy and long-term economic growth 7.5 ECTS	Research design 7.5 ECTS	Advanced analysis of economic change 7.5 ECTS	Paper and/or degree project 15 ECTS
Econometrics I or Econometrics II 7.5 ECTS	Population and living standards 7.5 ECTS	Elective course 7.5 ECTS	

Semester 1 (Autumn), year 2		Semester 2 (Spring), year 2	
Period 1 Sept-Oct	Period 2 Nov-Dec	Period 3 Jan-March	Period 4 April-May
Elective course 7.5 ECTS	Elective course 7.5 ECTS	Institutions, economic growth, and equity 7.5 ECTS	Degree project 15 ECTS
Tutorial 7.5 ECTS	Tutorial 7.5 ECTS	Tutorial 7.5 ECTS	

*Course information Track 1: Economic History*



**Track-specific courses (mandatory)***The global economy and long-term economic growth (7.5 ECTS)*

This course studies historical processes of growth, convergence and divergence in the global economy over the past millennium. Two different approaches are applied. One considers theories of economic growth, about how production is generated by capital and labour and the level of technology. The other takes the perspective of the international economy and studies international trade, migration, and movements of capital.

*Research design (7.5 ECTS)*

The course presents the student with research methods used within the social sciences in general, and within economic history specifically. The course will carefully deal with the importance of source criticism to any well-planned research. It will then, through a detailed examination of various quantitative and qualitative methods, discuss the validity of these methods to various research questions and data. The overarching goal of the course is to provide students with the tools necessary to prepare a well-structured research assignment.

*Population and living standards (7.5 ECTS)*

This course deals with the interplay between population and living standards in a long-term perspective. It focuses on three broader themes. In the first, different models of the pre-industrial economic demographic system are studied, and the legacy of these models (e.g. Malthusianism) and their relevance today is assessed. Different demographic indicators of living standards, such as life expectancy, infant mortality and demographic responses to economic fluctuations, are discussed and compared with other well-being indicators in an assessment of the long-term global development of standard of living. The second theme deals with the importance of population dynamics, especially fluctuations in fertility, and thus cohort size, on living standards in industrial society. The third theme focuses on the role of families and households in providing welfare and security of its members. Both the development over time and global comparisons are central in this theme.

*Advanced analysis of economic change (7.5 ECTS)*

This course analyses the major debates in development economics from a long-term perspective. Questions central to the course are: ‘can we determine historical roots of why some countries are rich and others poor, and if so, how do we approach this?’; ‘what is the role of the different factors of production in long run economic development?’; and ‘what role do critical historical junctures play in long run development?’.

During the course, students will learn about the different methods used in modern research through an in depth study of the literature and hands on econometric exercises. Explorative methodologies versus hypothesis testing are discussed. Exercises are performed with the help of econometric software whereby students are trained in the use of statistical tools but also in understanding and interpreting quantitative results in an historical context.

*Econometrics I (7.5 ECTS)*

This course provides the student with a fundamental understanding of the theoretical and methodological problems associated with quantitative approaches to economic history. The first part consists of basic theory and methods relating to multivariate linear regression, limited dependent variable regression and time series analysis. It also considers how to apply these methods through examples of how such methods are used in economic history. This part also introduces computer software (e.g. Stata) for quantitative analysis. In the second part of the course, students analyse a quantitative problem using actual data from economic history, and report results in individual papers.

*Econometrics II (7.5 ECTS)*

This course provides the student with more advanced theory and methods relating to causal approaches surpassing the multivariate linear regression, limited dependent variable regression and

time series analysis covered by Econometrics I. It also considers how to apply these methods through examples of how such methods are used in economic history. It discusses issues like selection bias, the bad control problem, and unobserved heterogeneity and the pitfalls associated with them as well as the possibilities to deal with these issues. This part advances the knowledge of empirical analysis making use of computer software (e.g. Stata). In the second part of the course, students independently analyse a more advanced quantitative problem using actual data from economic history, and report results in individual papers, showing awareness of the pros and cons of various causal approaches in econometrics.

The course is mandatory year 1 for students who have previously studied econometrics at a level corresponding to Econometrics I.

*Institutions, economic growth and equity (7.5 ECTS)*

This course studies the relations between institutions, modern economic growth, and equality. Problems in the world of today are taken as a point of departure for an historical analysis that covers countries and regions in different parts of the world. Four themes are focussed. One is about the emergence of institutions such as property rights and markets, and their role for economic growth. The second is about the importance of the distribution of resources for institutional development. The third is about the importance of the growth of knowledge and education for the creation of equality of opportunity. The fourth is about the emergence of the modern welfare state as well as current challenges to its future.

Tutorials: Advanced topics in economic history

During the second year, the department offer a selection of courses on a tutorial basis or in seminar form. They all discuss research related problems within their respective fields and involve students in the seminar discussions, based on readings from international research. It is mandatory to take two of these courses during the second year. The specific courses offered may vary from year to year, examples are given below:

*Financial history (7.5 ECTS)*

*History of economic ideas (7.5 ECTS)*

*Inequality and growth (7.5 ECTS)*

*Historical economic geography (7.5 ECTS)*

*Labour markets and industrial relations (7.5 ECTS)*

Thesis work (15+15 ECTS)

### **Elective courses at the Department of Economic History**

The following are examples of elective courses offered by the Department of Economic History. In addition, there may be courses offered by other departments that are possible to include in the track.

*Growth over time and space (7.5 ECTS)*

Innovation and technical change is central to long term economic growth but it is treated very differently in economic theories. In a comparative manner this course presents technical change within major theoretical approaches: neoclassical growth models, endogenous growth models and evolutionary structural models. Particular attention is given to an economic historical model combined with a spatial theoretical framework of regional trajectories of growth. The model is based upon complementarities around innovations forming development blocks that are driving processes of structural change. Thus, the interplay between innovations, economic transformation and economic growth is studied with an emphasis on major carrier branches both historically and in contemporary times. Innovations are analysed in relation to variations over time in, e.g., relative prices, entrepreneurial activity, investments, labour demand and employment. It is shown how this, at an aggregate level, shows up in phases of spatial convergence and divergence, respectively.

*Causes of demographic change (7.5 ECTS)*

The course gives an introduction to demographic data, measurement and description of demographic phenomena. The course consists of two parts:

Demographic methods. Basic demographic measures and concepts are discussed, such as rates, the lexis diagram, life tables, fertility, nuptiality, mortality and migration measures.

Theories and evidence on global demographic change in an historical perspective. The long term demographic development in the world is discussed and related to different theoretical explanations.

*Development of Emerging Economies (7,5 ECTS)*

This course examines growth dynamics of the developing world during the last decades, explored in a comparative and historical perspective. The question of why some developing economies have been able to set in motion catching-up processes, while others remain stagnant, will be discussed aided by historical-theoretical perspectives with the main focus on countries in Pacific Asia, Africa South of the Sahara and Latin America. It will be theoretically and empirically assessed to what extent the growth of the so-called global South might be sustained.

The course is divided into two parts. The first puts heavy emphasis on readings and lectures on analytical perspectives of development and catching up from the viewpoint of classical, although current, questions such as: the role of agricultural transformation, growth-inequality, market integration, possibilities for and experiences of industrial policy, technology transfer, social capabilities, market-state relationship, governance and domestic resource mobilization, poverty/human development. The second part of the course is more student-driven and is devoted to seminar assignments where highly topical themes are discussed on the basis of available empirical data. Examples of questions to be addressed might be: south-to-south investments flows, the impact of China, the extent to which growth is commodity-driven, issues of improving competitiveness and productivity, forces behind poverty reduction.

*China and the Asia Pacific (7.5 ECTS)*

This course explores and explains the processes of rapid industrialisation and socio-economic modernisation in China and the Asia Pacific drawing on a historically -comparative institutional approach. Fundamental factors and forces behind the economic transformation are analysed against the background of leading theories of economic development and social change. The course is divided into two parts. The first part uses institutional theory to analyse the emergence of the so called East Asian model and its relevance for China. The institutional underpinnings of China's transformation to market economy are analysed in comparison with previous and contemporary development experiences in the Asia Pacific, from Japan to the ASEAN countries. Themes dealt with include agricultural modernisation and industrial policy and concepts such as developmental state, export-led growth, and growth with equity are applied and critically analysed. The second part deals with current trends and forces of globalisation in the Asia Pacific region and China's role as a leading regional economy. Trade policies, the impact of foreign investments and patterns of regional integration are explored and analysed.

*Economics of Innovation (7.5 ECTS)*

This course covers several areas of innovation economics, such as their characteristics, their driving forces of innovation and how innovation affects economic growth. It covers several sub-themes, such as:

*Market structures and innovation* - describes how competitive structures and imperfect competition may induce innovation in different industries.

*Institutions and innovation* - drawing on the systems of innovation literature, this theme addresses how the institutional framework affects innovation.

*Innovation, Energy and Sustainability (7.5 ECTS)*

Climate change has, more than anything else, imposed innovative challenges for present human energy systems. This course begins with an overview of global energy systems based on oil, carbon, nuclear and hydro power as well as supplementary systems. Three areas are given particular emphasis: firstly, energy end use efficiency, its historical development and future prospects; secondly, renewable energy and the ongoing change at its technological frontier; thirdly, transports, their

different systems, use of energy and impact on the environment as well as ongoing technological change. Both positive and normative aspects of the interplay between economic growth and energy are treated. Among the first aspects is the so called decoupling of energy and GDP, for example whether the third industrial revolution implies a reduction of energy use. Normative aspects consider institutional and political factors which determine incentives for innovation.

*Human capital in a historical perspective (7.5 ECTS)*

Human capital is often considered as an important determinant to economic growth and a strategic factor with respect to productivity. It is also assumed to affect peoples' lives in many other ways, from personal well-being to promotion of social equality. In this course, the theoretical foundations as well as empirical evidence are reviewed and critically examined. Human capital is, moreover, discussed in relation to related concepts in economic growth theory such as research and development, social capital and social capability. A vital issue is that of causality: Does human capital cause economic growth or is it an effect of it? This and many other problems are analysed from a historical point of view, considering human capital formation as well as the role of human capital in modernisation, in particular in the first, second, and third industrial revolution.

*Consequences of Demographic Change (7.5 ECTS)*

The course examines the impact of demographic change on the social and economic fabric of society, with a focus on issues of importance to today's policymakers. The impact of population aging will be examined in detail, as will the possible benefits / pitfalls of migration as a potential solution to population aging. The course will also examine the impacts of demographic change on individuals, through a discussion of the effects of cohort size on economic outcomes. The changing prospects for women in today's economy will also be analyzed within the framework of changing family structures. Governmental transfers dependent upon age structure, such as pension systems, will be studied, as will other aspects of intergenerational transfers.

*Econometrics II (7.5 ECTS)*

This course provides the student with more advanced theory and methods relating to causal approaches surpassing the multivariate linear regression, limited dependent variable regression and time series analysis covered by Econometrics I. It also considers how to apply these methods through examples of how such methods are used in economic history. It discusses issues like selection bias, the bad control problem, and unobserved heterogeneity and the pitfalls associated with them as well as the possibilities to deal with these issues. This part advances the knowledge of empirical analysis making use of computer software (e.g. Stata). In the second part of the course, students independently analyse a more advanced quantitative problem using actual data from economic history, and report results in individual papers, showing awareness of the pros and cons of various causal approaches in econometrics.

*Internship (7,5 ECTS)*

Through an internship in an organization the course aims at giving the students a working experience relevant for his/her master's studies. The course is independent from the university's teaching and the student is expected to independently find and apply for the internship. The length of the internship should correspond to at least two months full-time work. The provider of the internship could be of different kind but could normally be in the categories government agency, intergovernmental or supranational organization, non-governmental organization, or a private firm. The organization and the work assignments for the internship must be approved by the Department of Economic History.

**Track 2: Economic Demography**

Semester 1 (Autumn), year 1		Semester 2 (Spring), year 1	
Period 1 Sept-Oct	Period 2 Nov-Dec	Period 3 Jan-March	Period 4 April-May
Causes of Demographic Change 7,5 ECTS	Research Design 7.5 ECTS	Consequences of Demographic Change 7,5 ECTS	Degree project 15 ECTS
EKHM25 Econometrics II (Econometrics I) 7.5 ECTS	Elective course 7,5 ECTS	Elective course 7,5 ECTS	

Semester 1 (Autumn), year 2		Semester 2 (Spring), year 2	
Period 1 Sept-Oct	Period 2 Nov-Dec	Period 3 Jan-March	Period 4 April-May
Elective course 7,5 ECTS	Elective course 7,5 ECTS	Elective course 7,5 ECTS	Degree project 15 ECTS
Tutorial 7.5 ECTS	Tutorial 7.5 ECTS	Tutorial 7.5 ECTS	

*Course information Track 2: Economic Demography*

**Track-specific courses (mandatory)***Causes of demographic change (7.5 ECTS)*

The course gives an introduction to demographic data, measurement and description of demographic phenomena. The course consists of two parts:

Demographic methods. Basic demographic measures and concepts are discussed, such as rates, the lexis diagram, life tables, fertility, nuptiality, mortality and migration measures.

Theories and evidence on global demographic change in an historical perspective. The long-term demographic development in the world is discussed and related to different theoretical explanations.

*Econometrics II (7.5 ECTS)*

This course provides the student with more advanced theory and methods relating to causal approaches surpassing the multivariate linear regression, limited dependent variable regression and time series analysis covered by Econometrics I. It also considers how to apply these methods through examples of how such methods are used in economic history. It discusses issues like selection bias, the bad control problem, and unobserved heterogeneity and the pitfalls associated with them as well as the possibilities to deal with these issues. This part advances the knowledge of empirical analysis making use of computer software (e.g. Stata). In the second part of the course, students independently analyse a more advanced quantitative problem using actual data from economic history, and report results in individual papers, showing awareness of the pros and cons of various causal approaches in econometrics.

The course is mandatory year 1 for students who have previously studied econometrics at a level corresponding to Econometrics I.

*Research design (7.5 ECTS)*

The course presents the student with research methods used within the social sciences in general, and within economic history specifically. The course will carefully deal with the importance of source

criticism to any well-planned research. It will then, through a detailed examination of various quantitative and qualitative methods, discuss the validity of these methods to various research questions and data. The overarching goal of the course is to provide students with the tools necessary to prepare a well-structured research assignment.

*Consequences of Demographic Change (7.5 ECTS)*

The course examines the impact of demographic change on the social and economic fabric of society, with a focus on issues of importance to today's policymakers. The impact of population aging will be examined in detail, as will the possible benefits / pitfalls of migration as a potential solution to population aging. The course will also examine the impacts of demographic change on individuals, through a discussion of the effects of cohort size on economic outcomes. The changing prospects for women in today's economy will also be analyzed within the framework of changing family structures. Governmental transfers dependent upon age structure, such as pension systems, will be studied, as will other aspects of intergenerational transfers.

Tutorials: Advanced Topics in Economic Demography

Five different courses are offered on a rotating basis: Health and Mortality, Population Aging, Marriage and Fertility, Immigration and Integration and Historical Demography. They are offered on a tutorial basis or in seminar form. They all discuss research related problems within their respective fields and involve students in seminar discussions, based on readings from international research. It is mandatory to take two of these courses during the second year.

*Health and Mortality (7.5 ECTS)*

*Population Aging (7.5 ECTS)*

*Marriage and Fertility (7.5 ECTS)*

*Immigration and Integration (7.5 ECTS)*

*Historical Demography (7.5 ECTS)*

*Data Management (7,5 ECTS)*

Thesis work (15+15 ECTS)

**Elective courses at the Department of Economic History**

The department-specific courses aim to complement the special economic demography courses so as to give the student the theoretical and methodological skills necessary within her/his choice of discipline-specific framework. While the courses are designed to be incorporated in this master programme, they are established within the existing framework of courses offered by the respective departments and are not exclusively for students in this programme.

*Population and Living Standards (7.5 ECTS)*

This course deals with the interplay between population and living standards in a long-term perspective. It focuses on three broader themes. In the first, different models of the preindustrial economic demographic system are studied, and the legacy of these models (e.g. Malthusianism) and their relevance today is assessed. Different demographic indicators of living standards, such as life expectancy, infant mortality and demographic responses to economic fluctuations, are discussed and compared with other well-being indicators in an assessment of the long-term global development of standard of living. The second theme deals with the importance of population dynamics, especially fluctuations in fertility, and thus cohort size, on living standards in industrial society. The third theme focuses on the role of families and households in providing welfare and security of its members. Both the development over time and global comparisons are central in this theme.

*Human capital in a historical perspective (7.5 ECTS)*

Human capital is, in short, the stock of skills that a country's population or labor force possesses. It is an important determinant to economic growth and a strategic factor with respect to productivity. It also affects individuals' lives in many ways through the promotion of personal well-being and economic equality. This course explores a range of topics relating to human capital formation by

using historical, comparative, and current policy perspectives. Theory, methodological approaches, and empirical evidence on a range of topics are reviewed. Topics include the role of education in economic growth and distribution, the role of education and training for wage growth and career, and group differences in labor market outcomes, health and well-being. Lectures, seminars, and exams deal with human capital formation, the role of human capital during the first, second, and third industrial revolutions, and with the relation between human capital and income inequality across time and space.

*Institutions, Economic Growth and Equity (ECTS)*

This course studies the relations between institutions, modern economic growth, and equality. Problems in the world of today are taken as a point of departure for an historical analysis that covers countries and regions in different parts of the world. Four themes are focussed. One is about the emergence of institutions such as property rights and markets, and their role for economic growth. The second is about the importance of the distribution of resources for institutional development. The third is about the importance of the growth of knowledge and education for the creation of equality of opportunity. The fourth is about the emergence of the modern welfare state as well as current challenges to its future.

*The Global Economy and Long-term Economic Growth (7.5 ECTS)*

This course studies historical processes of growth, convergence and divergence in the global economy over the past two centuries. Two different approaches are applied. One takes the perspective of the international economic exchange and studies international trade, cross-border migration, and movements of capital and technology. The other considers theories of economic growth, about how production is generated by capital and labour and the level of technology.

*Advanced Analysis of Economic Change (7.5 ECTS)*

This course analyses the major debates in development economics from a long-term perspective. Questions central to the course are: ‘can we determine historical roots of why some countries are rich and others poor, and if so, how do we approach this?’; ‘what is the role of the different factors of production in long run economic development?’; and ‘what role do critical historical junctures play in long run development?’.

During the course, students will learn about the different methods used in modern research through an in depth study of the literature and hands on econometric exercises. Explorative methodologies versus hypothesis testing are discussed. Exercises are performed with the help of econometric software whereby students are trained in the use of statistical tools but also in understanding and interpreting quantitative results in an historical context.

*Internship (7,5 ECTS)*

Through an internship in an organization the course aims at giving the students a working experience relevant for his/her master’s studies. The course is independent from the university’s teaching and the student is expected to independently find and apply for the internship. The length of the internship should correspond to at least two months full-time work. The provider of the internship could be of different kind but could normally be in the categories government agency, intergovernmental or supranational organization, non-governmental organization, or a private firm. The organization and the work assignments for the internship must be approved by the Department of Economic History.

**Elective courses at the Department of Economics**

*Advanced Econometrics (7,5 ECTS)*

This course gives the basis that is needed to enable students to empirically analyse economic data without making unrealistic assumptions. Modern econometric techniques are treated, and at the same time considerable emphasis is placed on fundamental econometric thinking. Theoretical studies are interwoven with practical applications in the form of computer exercises, which are carried out using econometric software.

*Applied Microeconometrics (7.5 ECTS) Year One, autumn semester, period 2*

This course covers modern econometric tools and empirical strategies used by economists and demographers for the analysis of cross-sectional and panel micro-data. The course teaches the econometric theory behind these techniques but also requires reading of high-quality empirical articles and applications of the taught methods using real data sets. Topics covered in the course includes (1) the randomized experiment as a golden standard and the analysis of social experiments, (2) fixed-effects methods, such as difference-in-differences techniques applied to panel data, but also applied to other data structures such as family-level data, (3) instrumental variables estimation, (4) regression discontinuity design, (5) matching estimators, such as propensity scores and kernel-matching and (6) limited dependent variables.

*Advanced Health Economics (7,5 ECTS)*

The course provides an overview of a number of core areas in health economics, with a focus on research issues, methods, results and unresolved issues. These areas usually include individual health related behaviour, the physician-patient relationship, health insurance, competition in the hospital industry, innovation and diffusion of medical technology, equity in theory and practice, health care systems, gender issues, the causes and effects of demographic change and the situation in developing countries.

*Advanced Labour Economics (7,5 ECTS)*

The course covers recent advances in Labour Economics, with an emphasis on empirical applications. The course starts by discussing theories of labour supply and demand, and proceeds covering economic research analyzing human capital accumulation (with a particular focus on education), wage inequality and discrimination. Topics covered include the effect of migration on labour market outcomes, the influence of parental and social background, and the effectiveness of unemployment and labour market programs. The aim of this course is not only to provide a comprehensive discussion of the status of research in the field of Labour Economics, but also to endow students with the analytic tools necessary to both i) independently analyze and evaluate existing research, and ii) produce knowledge in the form of written essays.

*Advanced Development Economics (7,5 ECTS)*

This course aims at deepening the student's theoretical and methodological knowledge of development economics. The point of departure is that economies are low-income because of a lack of economic growth. This in turn depends on low integration in the global economy, low investment and a lack of efficient institutions. Particular interest is placed on issues of growth, inequality and poverty and on strategies to increase growth and reduce poverty. As problems of income distribution and gender inequality are pronounced in developing economies, gender issues will be embedded in the thematic discussions. A particular focus will be on the use of micro-level data in cross-gender comparisons.

*Advanced Public Economics (7,5 ECTS)*

The course provides an advanced discussion of theoretical and empirical research in public economics. It focuses on the relationship between the government and the market and arguments for and against government involvement. The course covers a wide range of critical decisions policy makers face regarding both the expenditure side and the financing of the public sector, as well as the implications of these on individuals' and firms' behaviour and the overall economy. Topics covered include the provision of public goods, externalities, income distribution, social and public choice, fiscal federalism, optimal taxation theory, and tax incidence. Special attention is given to globalisation and demographic issues as well as institutional economics.



### Optional courses at the Department of Statistics

A number of courses of relevance for economic demography are given at the Department of Statistics. Currently they include Multivariate Analysis, Data Mining and Visualization, Functional Data Analysis, and Business Analytics.

### Track 3: Economic Development

Semester 1 (Autumn), year 1		Semester 2 (Spring), year 1	
Period 1 Sept-Oct	Period 2 Nov-Dec	Period 3 Jan-March	Period 4 April-May
Development of Emerging Economies 7.5 ECTS	Research Design 7.5 ECTS	Institutions, economic growth, and equity 7.5 ECTS	Paper and/or degree project 15 ECTS
Econometrics I or Econometrics II 7.5 ECTS	China and Asia Pacific 7.5 ECTS	Elective course 7.5 ECTS	

Semester 1 (Autumn), year 2		Semester 2 (Spring), year 2	
Period 1 Sept-Oct	Period 2 Nov-Dec	Period 3 Jan-March	Period 4 April-May
Elective course 7.5 ECTS	Elective course 7.5 ECTS	Elective course 7.5 ECTS	Degree project 15 ECTS
Tutorial 7.5 ECTS	Tutorial 7.5 ECTS	Tutorial 7.5 ECTS	

*Course information Track 3: Economic Development*

#### Track-specific courses (mandatory)

##### *Development of Emerging Economies (7,5 ECTS)*

This course examines growth dynamics of the developing world during the last decades, explored in a comparative and historical perspective. The question of why some developing economies have been able to set in motion catching-up processes, while others remain stagnant, will be discussed aided by historical-theoretical perspectives with the main focus on countries in Pacific Asia, Africa South of the Sahara and Latin America. It will be theoretically and empirically assessed to what extent the growth of the so-called global South might be sustained.

The course is divided into two parts. The first puts heavy emphasis on readings and lectures on analytical perspectives of development and catching up from the viewpoint of classical, although current, questions such as: the role of agricultural transformation, growth-inequality, market integration, possibilities for and experiences of industrial policy, technology transfer, social capabilities, market-state relationship, governance and domestic resource mobilization, poverty/human development. The second part of the course is more student-driven and is devoted to seminar assignments where highly topical themes are discussed on the basis of available empirical data. Examples of questions to be addressed might be: south-to-south investments flows, the impact of China, the extent to which growth is commodity-driven, issues of improving competitiveness and productivity, forces behind poverty reduction.

*Research design (7.5 ECTS)*

The course presents the student with research methods used within the social sciences in general, and within economic history specifically. The course will carefully deal with the importance of source criticism to any well-planned research. It will then, through a detailed examination of various quantitative and qualitative methods, discuss the validity of these methods to various research questions and data. The overarching goal of the course is to provide students with the tools necessary to prepare a well-structured research assignment.

*China and the Asia Pacific (7.5 ECTS)*

This course explores and explains the processes of rapid industrialisation and socio-economic modernisation in China and the Asia Pacific drawing on a historically -comparative institutional approach. Fundamental factors and forces behind the economic transformation are analysed against the background of leading theories of economic development and social change. The course is divided into two parts. The first part uses institutional theory to analyse the emergence of the so called East Asian model and its relevance for China. The institutional underpinnings of China's transformation to market economy are analysed in comparison with previous and contemporary development experiences in the Asia Pacific, from Japan to the ASEAN countries. Themes dealt with include agricultural modernisation and industrial policy and concepts such as developmental state, export-led growth, and growth with equity are applied and critically analysed. The second part deals with current trends and forces of globalisation in the Asia Pacific region and China's role as a leading regional economy. Trade policies, the impact of foreign investments and patterns of regional integration are explored and analysed.

*Institutions, economic growth and equity (7.5 ECTS)*

This course studies the relations between institutions, modern economic growth, and equality. Problems in the world of today are taken as a point of departure for an historical analysis that covers countries and regions in different parts of the world. Four themes are focussed. One is about the emergence of institutions such as property rights and markets, and their role for economic growth. The second is about the importance of the distribution of resources for institutional development. The third is about the importance of the growth of knowledge and education for the creation of equality of opportunity. The fourth is about the emergence of the modern welfare state as well as current challenges to its future.

*Econometrics I (7.5 ECTS)*

This course provides the student with a fundamental understanding of the theoretical and methodological problems associated with quantitative approaches to economic history. The first part consists of basic theory and methods relating to multivariate linear regression, limited dependent variable regression and time series analysis. It also considers how to apply these methods through examples of how such methods are used in economic history. This part also introduces computer software (e.g. Stata) for quantitative analysis. In the second part of the course, students analyse a quantitative problem using actual data from economic history, and report results in individual papers.

*Econometrics II (7.5 ECTS)*

This course provides the student with more advanced theory and methods relating to causal approaches surpassing the multivariate linear regression, limited dependent variable regression and time series analysis covered by Econometrics I. It also considers how to apply these methods through examples of how such methods are used in economic history. It discusses issues like selection bias, the bad control problem, and unobserved heterogeneity and the pitfalls associated with them as well as the possibilities to deal with these issues. This part advances the knowledge of empirical analysis making use of computer software (e.g. Stata). In the second part of the course, students independently analyse a more advanced quantitative problem using actual data from economic history, and report results in individual papers, showing awareness of the pros and cons of various causal approaches in econometrics.

The course is mandatory year 1 for students who have previously studied econometrics at a level corresponding to Econometrics I.

Tutorials: Advanced topics in economic development

During the second year, the department offer a selection of courses on a tutorial basis or in seminar form. They all discuss research related problems within their respective fields and involve students in the seminar discussions, based on readings from international research. It is mandatory to take two of these courses during the second year. The specific courses offered may vary from year to year, examples are given below:

- Poverty and Inequality Analysis: Data Management and Statistical Techniques*
- Agricultural Transformation in the Development Process*
- Explaining Growth and Inequality – Theory and its Application in Comparative Perspective*
- The Rise of the Rest: Africa and Latin America under Transformation*
- Development Aid in Historical Perspectives: Theory, Practice and Impact*
- The Periphery and Waves of Globalization*
- The State in Development*

### **Elective courses at the Department of Economic History**

Below, examples of elective courses offered by the Department of Economic History are presented. In addition, there may be courses offered by other departments that are possible to include in the track, upon approval from the Department of Economic History

#### *The global economy and long-term economic growth (7.5 ECTS)*

This course studies historical processes of growth, convergence and divergence in the global economy over the past millennium. Two different approaches are applied. One considers theories of economic growth, about how production is generated by capital and labour and the level of technology. The other takes the perspective of the international economy and studies international trade, migration, and movements of capital.

#### *Econometrics II (7.5 ECTS)*

This course provides the student with more advanced theory and methods relating to causal approaches surpassing the multivariate linear regression, limited dependent variable regression and time series analysis covered by Econometrics I. It also considers how to apply these methods through examples of how such methods are used in economic history. It discusses issues like selection bias, the bad control problem, and unobserved heterogeneity and the pitfalls associated with them as well as the possibilities to deal with these issues. This part advances the knowledge of empirical analysis making use of computer software (e.g. Stata). In the second part of the course, students independently analyse a more advanced quantitative problem using actual data from economic history, and report results in individual papers, showing awareness of the pros and cons of various causal approaches in econometrics.

#### *Advanced analysis of economic change (7.5 ECTS)*

This course analyses the major debates in development economics from a long-term perspective. Questions central to the course are: ‘can we determine historical roots of why some countries are rich and others poor, and if so, how do we approach this?’; ‘what is the role of the different factors of production in long run economic development?’; and ‘what role do critical historical junctures play in long run development?’.

During the course, students will learn about the different methods used in modern research through an in depth study of the literature and hands on econometric exercises. Explorative methodologies versus hypothesis testing are discussed. Exercises are performed with the help of econometric software whereby students are trained in the use of statistical tools but also in understanding and interpreting quantitative results in an historical context.

*Growth over time and space (7.5 ECTS)*

Innovation and technical change is central to long-term economic growth but it is treated very differently in economic theories. In a comparative manner this course presents technical change within major theoretical approaches: neoclassical growth models, endogenous growth models and evolutionary structural models. Particular attention is given to an economic historical model combined with a spatial theoretical framework of regional trajectories of growth. The model is based upon complementarities around innovations forming development blocks that are driving processes of structural change. Thus, the interplay between innovations, economic transformation and economic growth is studied with an emphasis on major carrier branches both historically and in contemporary times. Innovations are analysed in relation to variations over time in, e.g., relative prices, entrepreneurial activity, investments, labour demand and employment. It is shown how this, at an aggregate level, shows up in phases of spatial convergence and divergence, respectively.

*Population and living standards (7,5 ECTS)*

This course deals with the interplay between population and living standards in a long-term perspective. It focuses on three broader themes. In the first, different models of the pre-industrial economic demographic system are studied, and the legacy of these models (e.g. Malthusianism) and their relevance today is assessed. Different demographic indicators of living standards, such as life expectancy, infant mortality and demographic responses to economic fluctuations, are discussed and compared with other well-being indicators in an assessment of the long-term global development of standard of living. The second theme deals with the importance of population dynamics, especially fluctuations in fertility, and thus cohort size, on living standards in industrial society. The third theme focuses on the role of families and households in providing welfare and security of its members. Both the development over time and global comparisons are central in this theme.

*Human capital in a historical perspective (7.5 ECTS)*

Human capital is often considered as an important determinant to economic growth and a strategic factor with respect to productivity. It is also assumed to affect peoples' lives in many other ways, from personal well-being to promotion of social equality. In this course, the theoretical foundations as well as empirical evidence are reviewed and critically examined. Human capital is, moreover, discussed in relation to related concepts in economic growth theory such as research and development, social capital and social capability. A vital issue is that of causality: Does human capital cause economic growth or is it an effect of it? This and many other problems are analysed from a historical point of view, considering human capital formation as well as the role of human capital in modernisation, in particular in the first, second, and third industrial revolution.

*Economics of Innovation (7.5 ECTS)*

This course covers several areas of innovation economics, such as their characteristics, their driving forces of innovation and how innovation affects economic growth. It covers several sub-themes, such as:

*Market structures and innovation* - describes how competitive structures and imperfect competition may induce innovation in different industries.

*Institutions and innovation* - drawing on the systems of innovation literature, this theme addresses how the institutional framework affects innovation.

*Innovation, Energy and Sustainability (7.5 ECTS)*

Climate change has, more than anything else, imposed innovative challenges for present human energy systems. This course begins with an overview of global energy systems based on oil, carbon, nuclear and hydro-power as well as supplementary systems. Three areas are given particular emphasis: firstly, energy end use efficiency, its historical development and future prospects; secondly, renewable energy and the on-going change at its technological frontier; thirdly, transports, their different systems, use of energy and impact on the environment as well as on-going technological change. Both positive and normative aspects of the interplay between economic growth and energy are treated. Among the first aspects is the so called decoupling of energy and GDP, for example

whether the third industrial revolution implies a reduction of energy use. Normative aspects consider institutional and political factors, which determine incentives for innovation.

#### *Internship (7,5 ECTS)*

Through an internship in an organization the course aims at giving the students a working experience relevant for his/her master's studies. The course is independent from the university's teaching and the student is expected to independently find and apply for the internship. The length of the internship should correspond to at least two months full-time work. The provider of the internship could be of different kind but could normally be in the categories government agency, intergovernmental or supranational organization, non-governmental organization, or a private firm. The organization and the work assignments for the internship must be approved by the Department of Economic History.

## 5. Degree

Upon completion of the programme a Degree of Master of Science will be awarded in compliance with the National Higher Education Ordinance (SFS 2006:1053).

**The major for students following Track 1:** Economic History will be in Master of Science (120 ECTS) major Economic History (*Filosofie masterexamen: huvudområde ekonomisk historia*). Students can also decide to finish after the first year with a Master of Science (60 credits) major in Economic History (*filosofie magisterexamen, huvudområde: ekonomisk historia*).

**The major for students following Track 2:** Economic Demography will be in Master of Science (120 ECTS) major Economic Demography (*Filosofie masterexamen: huvudområde ekonomisk demografi*).

Students can also decide to finish after the first year with a Master of Science (60 credits) major in Economic Demography (*filosofie magisterexamen, huvudområde: ekonomisk demografi*).

**The major for students following Track 3:** Economic Development will be in Master of Science (120 ECTS) major Economic Development (*Filosofie masterexamen: huvudområde ekonomisk utveckling*).

Students can also decide to finish after the first year with a Master of Science (60 credits) major in Economic Development (*filosofie magisterexamen, huvudområde: ekonomisk utveckling*).

## 6. Admission requirements and selection criteria

An undergraduate degree (BA/BSc) with at least 60 ECTS credits in economics, economic history, history, statistics or the equivalent. English 6.

#### *Selection criteria*

Selection will be based on academic merits from university studies and a Statement of Purpose in which applicants should state their reasons for applying to the programme.

## 7. Other information

Courses at the School of Economics and Management are graded according to the criterion-referenced principal grades A-F:

GRADE		POINTS	CHARACTERISTIC
A	Excellent	100-85	A distinguished result that is excellent with regard to the following aspects – theoretical depth, practical relevance, analytical ability and independent thought.
B	Very good	84-75	A very good result with regard to the above mentioned aspects.
C	Good	74-65	The result is of a good standard with regard to the above mentioned aspects and lives up to expectations.
D	Satisfactory	64-55	The result is of a satisfactory standard with regard to the above mentioned aspects and lives up to expectations.
E	Sufficient	55-50	The result satisfies the minimum requirements with regard to the above mentioned aspects, but not more.
F	Fail	49-0	The result does not meet the minimum requirements with regard to the above mentioned aspects.

It is up to the teaching professor to decide whether the credits of a course should be converted into a total of 100 points for each course, or if the scale above should be used as percentage points of any chosen scale instead.

#### *Academic Integrity*

The University views plagiarism very seriously, and will take disciplinary actions against students for any kind of attempted malpractice in examinations and assessments. The penalty that may be imposed for this, and other unfair practice in examinations or assessments, includes suspension from the University.