

APPENDIX 2 – Curriculum of the Joint Degree Program

First Year (Taken at IUS)					
Fall			Spring		
ECON111	Introduction to Microeconomics	6	ECON112	Introduction to Macroeconomics	6
MATH101	Calculus I	6	MATH102	Calculus II	6
SPS 150	World History	6	IBF310	Business Ethics	6
ELIT100	Academic English and Effective Communication	6	ELIT200	Critical Reading and Writing	6
xxx	Introduction to Programming I - PYTHON	3	xxx	Introduction to Programming II - MATLAB	3
xxx	University Elective	3	xxx	University Elective	3
		30			30
Second Year (Taken at IUS)					
Fall			Spring		
ECON211	Business Statistics I	6	ECON320	Public Economics	6
ECON201	Intermediate Microeconomics	6	ECON202	Intermediate Macroeconomics	6
IBF102	Managerial Mathematics	6	ECON221	Business Statistics II	6
MAN231	Financial Accounting	6	ECON470	Work Placement/Internship	6
LAW 101	Introduction to Law I	3	xxx	University Elective	3
xxx	Language Elective I	3	xxx	Language Elective II	3
		30			30
Third Year (Taken at IU)					
Fall			Spring		
INGB 3001	International Economics I	6	INGB 3002	International Economics II	6
INGB 3003	Financial Markets and Institutions	6	INGB 3004	Fiscal Policy	6
INGB 3005	Econometrics I	6	INGB 3006	Econometrics II	6
	Elective I	5		Elective III	5
	Elective II	5		Elective IV	5
ODTD0001	Türk Dili I	2	ODTD0002	Türk Dili II	2
Elective Courses			Elective Courses		
INGB 3007	Economic Integration	5	INGB 3008	Industrial Policy from Ottoman Empire to Turkish Republic	5
INGB 3009	Economic History of Ottoman Empire	5	INGB 3010	Financial Investment	5
INGB 3011	Marketing	5	INGB 3012	Environmental Economics	5
INGB 3013	Economic Psychology	5	INGB 3014	Cost Accounting	5

INGB 3015	Commercial Law	5	INGB 3016	Transport Economics	5
INGB 3017	Decision Making Theory	5	INGB 3018	Fourth Industrial Revolution and Technological Progress	5
INGB 3019	Auditing	5	INGB 3020	Money and Banking in Turkey	5
INGB 3021	Dynamic Mecroeconomic Modelling	5	INGB 3022	Turkish Taxation System	5
		30			30
Fourth Year (Taken at IU)					
Fall			Spring		
INGB 1019	Atatürk İlkeleri ve İnkılap Tarihi I	2	INGB 1020	Atatürk İlkeleri ve İnkılap Tarihi II	2
	Elective V	6		Elective X	6
	Elective VI	6		Elective XI	6
	Elective VII	6		Elective XII	6
	Elective VIII	5		Elective XIII	5
	Elective IX	5		Elective XIV	5
		30			30
Elective Courses			Elective Courses		
INGB 4001	Economic Growth	6	INGB 4002	Economic Development	6
INGB 4003	Economic Analysis I	6	INGB 4004	Turkish Economy	6
INGB 4005	History of Economic Thought I	6	INGB 4006	History of Economic Thought II	6
INGB 4007	Applied Economics I	5	INGB 4008	Applied Econometrics II	5
INGB 4009	Selected Topics in Microeconomics	5	INGB 4010	Selected Topics in Macroeconomics	5
INGB 4011	Financial Analysis	5	INGB 4012	Financial Management	5
INGB 4013	Game Theory	5	INGB 4014	Industrial Organization	5
INGB 4017	Economic Policy Issues in Turkey	5	INGB 4020	Economic Analysis	5
INGB 4021	Management of Financial Institutions	5	INGB 4022	Current Economic Issues	5
INGB 4023	Managerial Accounting	5	INGB 4026	Applied Entrepreneurship	5
INGB 4027	International Money and Finance	5	INGB 4028	Seminar on Economic Research	5
			Total: 240		

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COURSE CATALOG DESCRIPTIONS:

SEMESTER I (IUS)

MATH101 Calculus I

ECTS 6 (3+2)

Functions of a Single Variable, Limits and Continuity, Derivatives, Applications of Derivatives, Sketching Graphs of Functions, Asymptotes, Integration, Fundamental Theorem of Calculus, Applications of Integrals, Polar Coordinates, Transcendental Functions, Techniques of Integration, Indeterminate Forms, L'Hopital's Rule.

ECON111 Introduction to Microeconomics

ECTS 6 (3+0)

The course introduces the following economic concepts: scarcity and choice; opportunity costs and trade offs; markets and prices; supply and demand; productivity; efficiency; competition and market structure; market failures; role of government; public goods; externalities.

SPS150 World History

ECTS 6 (3+0)

The aim of this course is to teach the historical significance of global interconnections between the world's civilizations and peoples from 1000 C.E. to the present. It provides a chronological cross-cultural overview of world history from ancient to modern times.

ELIT100 Academic English and Effective Communication

ECTS 6 (2+1)

This course is designed to help students achieve success in their academic and professional lives by developing fundamental skills necessary for effective communication. The course deals with organizing academic presentations, writing essays, incorporating different types of sources into speeches and writings, and utilizing various communication strategies in formal and informal settings. Students will develop their skills and techniques through frequent assignments and class activities.

NEWCODE Introduction to Programming I (PYTHON)

ECTS 6 (3+2)

Introduction to Python Programming, Computing Environment, Variables, Simple I/O, Arithmetic and Logic Operators, Error Analysis and Debugging, Data Types, Arrays, Sorting Arrays, Searching Arrays, Simple Plot, Introduction to Algorithms, Program Flow Control, Logical Expressions, Selective Execution Statements, Recursive Execution Statements, Basic Building Blocks (Modules, Procedures, Functions, Subroutines), Advanced I/O, Files and Records, Handling String/Characters, Matrices and Multidimensional Arrays, Data fitting, Iterations, SciPy/NumPy Libraries, Linear Algebra Applications, Polynomials Examples

SEMESTER II (IUS)

ECON112 Introduction to Macroeconomics

ECTS 6 (3+0)

This course is an introductory course for basic macroeconomic concepts such as the performance of the economy in the long run and the determination of national income, economic growth, inflation, unemployment, monetary and fiscal policies, budget deficits and government debt and main factors behind economic crisis.

MATH102 Calculus II

ECTS 6 (3+2)

Improper Integrals, Infinite sequences and series, Vectors in Space, Vector-Valued Functions, Multivariable Functions and Partial Derivatives, Multiple Integrals, Integration on vector fields

IBF310 Business Ethics**ECTS 6 (3+0)**

The objective of the course is to introduce students to the ethical concepts that are relevant to resolving moral issues in business, to identify the ethical issues involved in the management of specific problem areas in business, to provide an understanding of the social, technological and natural environment within which ethical issues in business arises and to supply case studies of actual ethical dilemmas faced by business.

ELIT200 Critical Reading and Writing**ECTS 6 (2+1)**

This course is designed to teach the organizational and critical thinking skills necessary for logical written expression. The course focuses on writing a research paper of at least 3000 words based on sound scholarly sources on a topic of interest related to a student's field by conforming to the APA standards of writing without committing plagiarism. In this course the whole research process is taught step by step through skills including research, source selection, choice of topic, construction and defense of a thesis statement, citing sources, outlining, organizing a "References" page and note taking. Critical elements of the course are instruction in paraphrasing and summarizing techniques, use of quotations and the incorporation of these research findings in the paper together with the inclusion of personal comments, avoidance of plagiarism and conforming to ethical rules.

NEWCODE Introduction to Programing II (MATLAB)**ECTS 6 (3+2)**

This course is intended to assist undergraduates with learning the basics of programming in general and programming MATLAB® in particular. The idea is that by thinking about mathematical problems, students are prodded into learning MATLAB for the purpose of solving the problem at hand. Variables, arrays, conditional statements, loops, functions, and plots are covered in a project-based style where much of the learning happens away from the classroom. Students are expected to spend about 2 hours per week on homework.

SEMESTER III (IUS)**LAW101 Introduction to Law****ECTS 6 (3+0)**

This course gives a general overview of legal terminology, sources of law and legal system in Turkey. The course covers the general legal concepts such as right, persons, obligation, contract, companies, commercial law, intellectual property rights, competition.

ECON201 Intermediate Microeconomics**ECTS 6 (3+2)**

This course studies the economic behavior of consumers and firms, exploring how they respond to changes in the opportunities and constraints that they face and how they interact in markets. It further analyzes how different market structures can shape economic results and how markets can help society achieve desirable outcomes.

ECON211 Business Statistics I**ECTS 6 (3+2)**

This course will help students gain an understanding of elementary probability theory and how to apply it to analyze statistical problems. It also provides an opportunity for students to see how various mathematical knowledge and techniques which they have learned in different courses unite together to serve a common purpose.

IBF102 Managerial Mathematics**ECTS 6 (3+2)**

This course provides an economics and managerial major with the necessary background to use mathematical analysis in economics. The course starts with constrained optimization and deriving comparative statics from a model outcome. Then, the course proceeds with differential equations and dynamic optimization.

MAN231 Financial Accounting

ECTS 6 (3+2)

Financial Accounting course enables students to acquire new conceptual and applied knowledge of financial accounting, theoretical and practical skills that lead to stronger understanding of purposes of accounting. In-depth, it provides insight into core issues like the recording business activities- the source of accounting information, measuring revenues and expenses, transaction analysis, reporting earnings and financial position, reporting cash flows and the time value of money.

SEMESTER IV (IUS)

ECON202 Intermediate Macroeconomics

ECTS 6 (3+2)

This course is intermediate level course in macroeconomics that develops students' theoretical and practical knowledge of national income accounting, unemployment, inflation, monetary and fiscal policies, central bank and financial system as well as foreign trade and international finance.

ECON221 Business Statistics II

ECTS 6 (3+2)

This course is designed to enhance the student's basic knowledge and understanding of the statistical method as it pertains to hypothesis testing. Several fundamental reoccurring themes are emphasized. At the end of the semester a student should be able to read and intelligently assess the majority of the research literature in his or her own particular field. Also, at the end of the semester a student should be able to apply the statistical techniques presented in the course to his or her own research projects.

ECON320 Public Economics

ECTS 6 (3+0)

The course starts with the introduction of welfare economics, particularly focusing on equity and efficiency with the emphasis of role of the government. Next, market failure, public goods and externalities will be introduced to illustrate why government intervention is necessary. Lastly some public issues such as voting and taxation will be discussed.

ECON470 Work Placement/Internship

ECTS 6 (0+14)

An internship experience provides the student with an opportunity to explore career interests while applying knowledge, skills, and competences gained in the classroom in a work setting. The experience also helps students gain a clearer sense of what they still need to learn and provides an opportunity to build professional networks.

SEMESTER V (IU)

Core Courses

INGB 3001 International Economics I

ECTS 6 (3+0)

The course gives a thorough treatment of international trade theories and international trade policy at the undergraduate level. Different theories explaining the causes and consequences of trade are studied. Topics covered include the Ricardian, Specific Factors, Heckscher-Ohlin and Increasing

Returns Models. The latter part of the course is devoted to the tools of trade policy and their welfare and income distribution implications.

INGB 3003 Financial Markets and Institutions

ECTS 6 (3+0)

This course aims to introduce the theoretical and institutional framework within which monetary policy is conducted. To this end, this course will provide students with a detailed understanding of the key elements of the financial system, namely financial markets and institutions. By focusing on the complex interactions between financial markets and financial institutions, this course will give students the tools and knowledge they need to understand these links and apply their findings to real world applications. This course will also provide the theoretical and practical background information about the sources and consequences of financial crisis.

INGB 3005 Econometrics I

ECTS 6 (3+0)

Estimation and inference in linear regression models using cross-sectional data or time series with GRETL software.

Elective Courses

INGB 3007 Economic Integration

ECTS 5 (3+0)

Its emphasis is on economics both covering the microeconomics and macroeconomics of European Integration. Understanding European Economic Integration however requires more than economics, so the essential aspects of European economic history, institutions and policies are also covered.

INGB 3009 Economic History of Ottoman Empire

ECTS 5 (3+0)

This course studies the economic story of Ottoman Empire from medieval to modern times in a broad geography including Anatolia, Middle East, Balkans and Caucasia. The course helps students learn the very details of the economic legacy of the Turkish Republic. The aim of this course is to provide a critical perspective to economics students to make analysis of the current Turkish economy by using historical data of the near past.

INGB 3011 Marketing

ECTS 5 (3+0)

It approaches planning, application and evolution of stages of whole layers and process of supply of all the needs of consumers from producers to consumers.

INGB 3013 Economic Psychology

ECTS 5 (3+0)

Philosophical, historical background of Behavioral Economics. Contemporary Theories of Behavioral Economics. Interdisciplinary studies of economics and psychology.

INGB 3015 Commercial Law

ECTS 5 (3+0)

"Lesson is comprised of two parts and consecutively called Business Law and Negotiable Instruments Law: Business Law: Business law embraces following topics; Business, commercial provisions, merchant, commercial litigations and ramifications of being Merchant, small- scale merchants, trade registry, trademarks, unfair competition, commercial ledgers, those who works with the merchants as well as current accounts. Negotiable Instruments: Definition and kinds of negotiable instruments, legal remedies in case of cancellation or loss of negotiable instruments, properties of registered to, payable to and payable to bearer negotiable instruments, pleas with respect to these instruments, concept of exchangeable instruments, legal regulations with respect to bill of exchange, promissory note and cheque, formal requirements, transfer, payments and results stemming from in case of unpayment."

INGB 3017 Decision Making Theory**ECTS 5 (3+0)**

It aims the determination of the decision problem, the problem formulation, model agencies, information gathering, solution of the model, examining the validity of the model and sensitivity analysis and results.

INGB 3019 Auditing**ECTS 5 (3+0)**

In this course will be explained importance of the audit, audit planning and audit evidences, audit techniques, audit of various accounts and transactions, preparing of audit reports and made case studies.

INGB 3021 Dynamic Macroeconomic Modelling**ECTS 5 (3+0)**

This course aims to provide students mathematical methods and tools to analyze and solve dynamic economic models.

ODTD0001 Türk Dili I**ECTS 2 (2+0)**

Good use of the historical development of Turkish language, language and cultural relations, the Turkish place among world languages, Turkey Turkish development stages, to be considered in the use of language, spelling, grammar and application of knowledge of the basic information needed for the contents of this course.

SEMESTER VI (IU)**Core Courses****INGB 3002 International Economics II****ECTS 6 (3+0)**

This course is designed to give an understanding of the workings of the open economy. Topics include national income accounting in the open economy, balance of payments statistics, exchange rate determination, exchange rate systems, and monetary and fiscal policy implementation in the open economy.

INGB 3004 Fiscal Policy**ECTS 6 (3+0)**

Compare the effectiveness of fiscal policy with monetary policy.

INGB 3006 Econometrics II**ECTS 6 (3+0)**

Simple regression model, Ordinary Least Squares Estimation, Classical regression model, Statistical inference, t, F and LM tests

Elective Courses**INGB 3008 Industrial Policy from Ottoman Empire to Turkish Republic ECTS 5 (3+0)**

The Ottoman empire inevitably tried to adapt to the important economic transformations that took place in the Western world after the Industrial Revolution. This transformation effort continued during the Republican period. In this course, the last period of the Ottoman Empire and the industrialization policies pursued by The Republic of Turkey will be outlined.

INGB 3010 Financial Investment**ECTS 5 (3+0)**

Investment, return and risk concepts; investment decisions under certainty and uncertainty



conditions; stock and bond valuation; traditional portfolio theory, modern portfolio theory, CAPM and APT models and their extended versions; financial derivatives, option pricing models and their applications.

INGB 3012 Environmental Economics

ECTS 5 (3+0)

The subject of environmental economics is vast, as are the number of specific environmental problems and institutions for dealing with them. This course will emphasize the recurrence of certain economic phenomena (public goods, externalities, market failure, severe limits on information) and the potential usefulness of certain policy tools (property rights, taxes and subsidies, regulation, cost-benefit analysis). The phenomena and tools will be illustrated in a variety of contexts, such as air pollution (including, importantly, global climate change), water pollution, solid waste and hazardous substances management, and natural resource policy.

INGB 3014 Cost Accounting

ECTS 5 (3+0)

In this course will be explained cost concepts, cost allocation methods, the methods used in monitoring and calculation of costs, allocation of joint costs and using variety decisions.

INGB 3016 Transport Economics

ECTS 5 (3+0)

Introduction to transport economics and overview of basic components of transport, demand forecasting methods, factor influencing transport demand, direct and external costs of transport, concept of generalized costs, pricing of transport services, causes of traffic congestion, mechanisms to deal with traffic congestion, command and control type of regulation, fiscal measures such as road pricing and environmental taxation, safety and economic regulations, appraisal and evaluation of transportation projects, funding and financing of them.

INGB 3018 Fourth Industrial Revolution and Technological Progress

ECTS 5 (3+0)

This course overviews critical changes in the world economy due to its rapid digital transformation. Topics include development and global scope of digital economy, contemporary and potential challenges arising from global digital transformation, and future opportunities and implications related to digital economy expansion. In the context of these topics, the course examines key issues of the transformation of real economy into digital economy and the role of technological revolution in global economy, analyzes digital innovation's impact on economic growth, discusses the concept of the "Fourth Industrial Revolution", identifies the components of digital economy's ecosystem, reviews the regression analysis in order to better understand machine learning and artificial intelligence techniques, identifies disruptive potentials of blockchain, studies firms, households and the government through the framework of digital economic transition, develops an appreciation of the digital economy's potential for social impact, gages the digital divides and dividends, and estimates current and potential impacts of digitalization on the world economy on both, macro- and micro levels.

INGB 3020 Money and Banking in Turkey

ECTS 5 (3+0)

This course introduces an overview of the workings of banking and financial system in Turkey.

INGB 3022 Turkish Taxation System

ECTS 5 (3+0)

Subject and sources of the Turkish tax system, implementation of tax laws, occurring of tax claim and taxation process, taxes on income, expenses and wealth

ODTD0002 Türk Dili II

ECTS 2 (2+0)

Continuation of Turkish Language I.

SEMESTER VII (IU)

Core Courses

INGB 1019 Atatürk İlkeleri ve İnkılap Tarihi I

ECTS 2 (2+0)

The collapse process of the Ottoman State and modernization efforts, The First World War process, The emergence of the Armenian Question, the Armistice of Moudros and the developments afterwards, Mustafa Kemal Pasha's going to Anatolia and the process of National Struggle The activities of the Grand National Assembly of Turkey, The Treaty of Lausanne and the proclamation of the Republic of Turkey.

Elective Courses

INGB 4001 Economic Growth

ECTS 6 (3+0)

Economic growth is a course where the major approaches in the theory of economic growth are treated. The basic model, i.e. the solow-Swan model, constitutes the framework of the course. Besides the basic model, Harrod-Domar model, AK model, and various new growth models in which the subjects such as the relationship between technical progress and distribution, and human capital are also examined. In addition, the role of public policy and the new institutional approaches are briefly explained.

INGB 4003 Economic Analysis I

ECTS 6 (3+0)

Modern schools of economic thought along with classical and Keynesian schools and their interest to the analytical and intellectual bases of some significant theoretical issues.

INGB 4005 History Of Economic Thought I

ECTS 6 (3+0)

The topics that constitute the areas of interest of the history of economic thought, pre-classical economic schools and the ideas of important members of these schools, and classical economic school and the ideas of the founders of this school.

INGB 4007 Applied Econometrics I

ECTS 5 (3+0)

It includes a deep investigation of a relation between economics and data analysis. It grounds on advanced analysis of data based on time or cross-section of time.

INGB 4009 Selected Topics in Microeconomics

ECTS 5 (3+0)

Classical and new approaches in microeconomics.

INGB 4011 Financial Analysis

ECTS 5 (3+0)

The Course covers the basic principles of finance and financial analyzing tools; It also identifies the groups (operating, investing, and financing activities) into which business activities are categorized for financial reporting purposes and classify any business activity in the appropriate group. Explain the relationship of financial statement elements and accounts, and classify accounts into the financial statement elements.

INGB 4013 Game Theory

ECTS 5 (3+0)

This course is designed to introduce game theory to those who will later construct game-theoretic models in applied fields within economics. The main purpose of this course is to enable the student

to set up and solve games, especially games that arise in business and economics. Setting up a game requires considerable modelling skills, as well as the ability to implement a certain format, the form of the game. We try to develop both sets of skills with frequent applications and examples of set-ups that have proved their value in the research. It will be discussed four classes of games: static games of complete information, dynamic games of complete information, static games of incomplete information, and dynamic games of incomplete information. (A game has incomplete information if one player does not know another player's payoff, such as in an auction when one bidder does not know how much another bidder is willing to pay for the good being sold.) Corresponding to these four classes of games will be four notions of equilibrium in games: Nash equilibrium, sub-game-perfect Nash equilibrium, Bayesian equilibrium, and perfect Bayesian equilibrium.

INGB 4017 Economic Policy Issues In Turkey **ECTS 5 (3+0)**
Analyze and Compare the outcomes of different economic policies recommended by different economic schools.

INGB 4021 Management Of Financial Institutions **ECTS 5 (3+0)**
Risk management of the financial institutions

INGB 4023 Managerial Accounting **ECTS 5 (3+0)**
In this course will be explained importance of cost information in terms of business management, using this information in various decisions, cost-volume-profit analysis, budgeting and standard costing as a tool of control, performance evaluation and transfer pricing.

INGB 4027 International Money and Finance **ECTS 5 (3+0)**
This Course aims at giving better understanding of the world we live in by studying the institutions and analysis of an integrated world financial community. To aid understanding of the relationships among prices, exchange rates and interest rates both existing theories and current state of research illuminating their validity is considered in the courses.

SEMESTER VIII (IU)

Core Courses

INGB 1020 Atatürk İlkeleri ve İnkılap Tarihi II **ECTS 2 (2+0)**
The course includes the principles of Atatürk and Revolution and the process of establishment of the Republic of Turkey.

Elective Courses

INGB 4002 Economic Development **ECTS 6 (3+0)**
Economic Development is a course that studies economic development in developing countries, and it further explores the process of social development. Theories on underdevelopment and on how development could be started are examined, and the problems of development are distinctly treated. Development policies that have been put into practice are reviewed.

INGB 4004 Turkish Economy **ECTS 6 (3+0)**
The economic structure of the economic policies implemented in Turkey and Turkey, Turkey sectors

of the economy, Turkey's economy problems and solutions.

INGB 4006 History of Economic Thought II

ECTS 6 (3+0)

The emergence of Marxist economic thought, its theories, questions, and critique, marginalist school, forerunners of neoclassical school and history of neoclassical school, its major tenets, contributions and problems, mathematical economics, institutional economics, welfare economics, contemporary economic schools.

INGB 4008 Applied Econometrics II

ECTS 5 (3+0)

It aims to be able to establish a relationship between economy and data analysis and it studies the cause-effect relations by handling the details.

INGB 4010 Selected Topics in Macroeconomics

ECTS 5 (3+0)

"Selected Topics in Macroeconomics" is a course for senior students designed by using various scientific and academic resources such as essays, articles, books and textbooks in economics to discuss and examine the analytical and theoretical issues in modern macroeconomics.

INGB 4012 Financial Management

ECTS 5 (3+0)

In this course, the concept of value in companies, financial analysis, business risks, working capital management, interest rates, time value of money are discussed.

INGB 4014 Industrial Organization

ECTS 5 (3+0)

This course is an introduction to industrial organization integrating theoretical models and empirical studies.

INGB 4020 Economic Analysis II

ECTS 5 (3+0)

This Course Analyzes the Contribution of the Modern Economic Schools after Keynes and Keynesians to Macro Economic Theory and Policy.

INGB 4022 Current Economic Issues

ECTS 5 (3+0)

The trade and capital flows between countries and their impact on the current economic conditions of different countries in time.

INGB 4028 Seminar on Economic Research

ECTS 5 (3+0)

The principles of making basic economic research/The principles of writing essay in English/Presentations about the case countries

INGB 4026 Applied Entrepreneurship

ECTS 5 (3+0)

This class first starts focusing on several essential business and entrepreneurial concepts. Later on, it focuses on building a business plan and pre-launch of a business, and on the actual "how to" of starting, building and running a business. In this course, students act as team and as CEOs of their new business. The primary goal of this class is provide you with as close an experience as possible to actually starting and implementing their business. This class is a very active class and participation is critical. We will focus on several essential business and entrepreneurial concepts.