

Undergraduate Courses

Fall Semester 2022

1. Economics courses

No.	Course Code	Course name	Credits	Course Description
1.	EE200	Data Science for Economic Analysis	3	Prerequisites: 2nd year student or above. Learning to work with data. Topics include (1) data sampling and cleaning (2) data storage and management (3) exploratory data analysis (4) prediction based on statistical tools such as regression, classification and clustering (5) communication of results through visualization and summary statistics. Students learn through real-world examples using programs such as advanced MS Excel, Python or R.
2.	EE301	History of Thai Economy	3	The evolution of Thailand's economic system. The structure of economy and society. The role of government in the Thai economy, starting with the signing of the Bowring Treaty in 1855.
3.	EE403	Law and Economics	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Thailand's Legal System. The relationship between law, economy, and politics. Applying economic theory to analyze reasons for the existence of property rights, civil, and commercial law. The effects of law on economic behavior and on economic outcomes.
4.	EE404	History of Economic Thought	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Studying philosophical foundations, main ideas of different schools of economic thoughts, and debates among economists from past to present. Studying socio-economic and important events in history that influence economic ideas.
5.	EE406	Contemporary Economic Issues	3	Prerequisites: EE211 and EE212 This course is a general introduction to the subject matter and methods of economics, through the investigation of specific contemporary economic issues such as economic growth, inequality, poverty, and environmental deterioration. The focus also is on how economists address these issues.
6.	EE211	Principles of Microeconomics	3	Principles of microeconomics such as value, price, resource allocation, introduction to theories of consumption and production with an emphasis on factors determining supply and demand of goods and services, determination of price and efficiency of resource allocation in perfect and monopoly markets; competitive factor market and introductory concepts of market failures.
7.	EE212	Principles of Macroeconomics	3	Indicators, goals, and problems in Macroeconomics. Determination of national income, theories of aggregate consumption and aggregate investment, the accelerator principle, money markets, the theory of supply and demand for money, the joint equilibrium model of product and money markets (IS-LM model), the balance of payments, and fiscal and monetary policies as means to stabilize an economy. Collecting and managing Thai macroeconomic for analyzing economic conditions are introduced.

No.	Course Code	Course name	Credits	Course Description
8.	EE311	Microeconomic Theory	4	<p>Prerequisites: EE211 (or EE213) and MA216 (or MA211)</p> <p>Consumer behavior focusing on indifference curve analysis, intertemporal consumption, consumption and risks. Theory of production and cost, the birth of the firm using information cost, structure and behavior of imperfect competitive markets which are monopoly, monopolistic competition and duopoly markets. Introduction to game theory. Price setting in practice. Price determination in factor markets, general equilibrium analysis, welfare Economics, market failures and measures to correct.</p>
9.	EE312	Macroeconomic Theory	3	<p>Prerequisites: a) EE211 and EE212 or b) EE213 and EE214</p> <p>The model of joint equilibrium in product markets, money markets, and foreign exchange markets (the IS-LM-BP model); changes in equilibrium; product markets and labor markets; the model of aggregate supply and demand in closed and open economies; inflation, unemployment, and the Phillips curve; economic stabilization policies; growth theory, microfoundation of macroeconomics focusing on real business cycle model, new classical model, and new Keynesian model; applications of Macroeconomic theory to analyze economic situations.</p>
10.	EE320	Introductory Mathematical Economics	3	<p>Prerequisites: a) EE211, EE212 and MA216 (or MA211) or b) EE213, EE214 and MA 216 (or MA 211) (Credits will not be awarded to students who are taking or have completed EE421)</p> <p>Applying mathematical concepts and tools such as functions, equations, matrices, univariate and multivariate differential calculus, constrained and unconstrained optimization, and basic integral to understand the relationship between different economic variables and explain concepts of Microeconomic theory and Macroeconomic theory. An emphasis will be placed on relationships between total, average, and marginal functions, the analyses of elasticity, market equilibrium, impacts of taxation, and the basic input-output model.</p>
11.	EE325	Introductory Econometrics	3	<p>Prerequisites: EE211 (or EE213), EE212 (or EE214), MA216 (or MA211) and ST216 (or ST211) (Credit will not be awarded to students who are taking or have completed EE425)</p> <p>Applying statistical methods and economic theories to analyze economic data using the simple and multiple regression. Topics also include dummy variable, multicollinearity, heteroscedasticity, autocorrelation, and specification error. This course focuses on how to choose the appropriate tool for an empirical study, with the emphasis placed on using some econometric softwares.</p>

No.	Course Code	Course name	Credits	Course Description
12.	EE411	Microeconomic Analysis	3	Prerequisites: EE311 and EE320 (or EE421) Microeconomic theory with an emphasis on utilizing mathematical tools to analyze economic issues such as consumer behavior, revealed preferences, intertemporal consumption, consumption under risk, theories of production and cost, market structures and behavior of markets, and other topics that the lecturer finds suitable.
13.	EE425	Econometrics 1	3	Prerequisites: EE211 (or EE213), EE212 (or EE214), MA216 (or MA211) and ST216 (or ST211) Applying statistical methods and economic theories to analyze economic data, including simple and multiple regressions; estimation using the ordinary least squares (OLS) hypothesis testing; and dummy variable. This course also examines various problems in regression models, including Multicollinearity, Heteroscedasticity, Autocorrelation, Specification Error, Stochastic Regressors; and some advanced topics in regression method such as Generalized Least Squares (GLS) estimation, System of regressions and Seemingly Unrelated Regression (SUR), Simultaneous Equation System and solving Endogeneity problem with instrumental variables. Trainings in econometrics softwares.
14.	EE521	Selected topics in Quantitative Economics 1 (Real analysis)	3	Prerequisites: with the consent of the lecturer. Study of topics in Quantitative Economics to be announced later.
15.	EE522	Selected topics in Quantitative Economics 2 (Topic: Data analytic with Python)	3	Prerequisites: with the consent of the lecturer. Study of topics in Quantitative Economics to be announced later.
16.	EE431	Economics of Financial Markets and Financial Institutions	3	Prerequisites: EE311 Money and capital markets at a micro-level; Financial assets, risks, and risk-bearing; The theory of equilibrium pricing of financial assets; Interest rate determination and structure of interest rates; Asymmetric information in financial markets; The study of financial institutions; Risk management of financial institutions; Behavior of financial institutions; Regulating financial institutions.
17.	EE432	Monetary Theory and Policy	3	Prerequisites: EE312 The role of money in the economy; studying monetary policy's goals, tools, policy implementations, Transmission mechanisms of Monetary policy; Monetary policy and business cycles; monetary policy framework, exchange rate targeting and inflation targeting; The role of the Central Bank; The interaction between monetary and fiscal policies; The role of monetary policy in the open economy.

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18.	EE434	Behavioral Finance	3	Prerequisites: EE311 Study concepts and frameworks of behavioral economics that are used to explain observations in the financial sector. Topics of the subject include the Prospect Theory and its implications for investment behaviors, empirical evidences in the financial sector that support the idea of behavioral economics, models that incorporate psychological and sociological factors in explaining asset returns, or other related topics that the lecturer finds suitable.
19.	EE435	Introductory Financial Econometrics	3	Prerequisites: EE325 (or EE425) and EE431 (or EE432) The application of econometrics method to financial and macroeconomics data, emphasizing at time-series models; Characteristics and properties of financial data; Univariate Time-Series Model; Regression with the long-run relationship and short-run dynamics; Volatility Model; Trainings in statistical software.
20.	EE441	Economics of Public Expenditure	3	Prerequisites: EE212 (or EE214) and EE311 The course covers the role of the government in the allocation of resources for the public sector of the economy. Topics covered will include government (national and local) outlays and budgets, the provisions of public goods and the regulation of market failures. The role of the government's budget processes in providing macroeconomic stability, growth and income redistribution. This analysis also includes fiscal decentralization (the budget allocation of local governments). The application of these tools to selected contemporary topics such as social security, cost-benefit analysis, healthcare and education financing will also be covered.
21.	EE451	International Trade Theory and Policy	3	Prerequisites: EE311 International trade theories. Outcomes from trade, such as production outcome, commodities prices, resource allocation, and prices of the factors of production. Analysis of the policies and regulations in international trade. Economic integration. Foreign investment.
22.	EE452	International Monetary and Financial Economics	3	Prerequisites: EE312 The balance of payments adjustment mechanism. Foreign exchange markets. International capital flows. The evolution of an international monetary system. International monetary problems encountered by developing countries, including Thailand. Financial crises as experienced by Thailand and the rest of the world.

No.	Course Code	Course name	Credits	Course Description
23.	EE459	Seminar in International Trade Theory and Policy	3	Prerequisites: EE451 and EE452 Seminar and research on topics in International Economics under the supervision of the lecturer.
24.	EE361	Economics of CLMV Countries	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Economic development in the cluster of Cambodia, Laos, Myanmar, and Vietnam (CLMV) countries. The transformation of their economic structure. The roles of public and private institutions along with other economic, social, and political factors that contribute to their economic changes. The relationship between these economies and the world and Thai economies.
25.	EE363	Economics of Selected Asian countries	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Economic development in the selected countries according to the lecturer's announcement, possibly in Asia, Europe, Latin America, etc. The transformation of their economic structure. The roles of public and private institutions along with other economic, social, and political factors that contribute to their economic changes. The relationship between these economies and the world and Thai economies.
26.	EE364	Gender Economics	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Evolution of male and female roles in the economic system. Theories of family formation. Differences in gender-related time allocation for market and non-market activities. Supply and demand factors determining gender-related differences in occupation and income, and gender roles switching in occupation. Roles of female in socio-economy and politics. Different effects of policies or welfare programs on gender. Gender in the aging economy. Effects of economic crisis on family and gender in the labor market. Roles of the LGBT in the economy. Gender equality in international criteria, and other interesting issues.
27.	EE462	Development Macroeconomics	3	Prerequisites: EE312 Analyzing economic issues in the macroeconomics of developing countries. These include theories and thoughts explaining economic growth; relationship between economic growth and poverty; income distribution; development policies of different countries in the past; and the impact of short-term macroeconomic policies such as stabilization policies, monetary and fiscal policies, exchange rate management, and various factors affecting economic growth e.g. international trade and investment, capital flow, financial crises, social welfare, and structural change.

No.	Course Code	Course name	Credits	Course Description
28.	EE463	Globalization and International Development	3	<p>Prerequisites: a) EE211 and EE212; or b) EE213 and EE214</p> <p>Concept and development of globalization in the context of after the World War II. Formation of the New International Economic Order (NIEO). Global organizations. Multinational corporations. International cooperation. Political economy of dependency. Debates on contribution and impacts of globalization on the local economy. Contemporary transnational development issues. Roles of international development organizations e.g. the United Nations, World Bank, International Monetary Fund (IMF), etc., in bridging the global north and the global south or within the south countries through the official development assistance (ODA), development loan, or development projects. Analysis of patterns, factors of success and failures of past international development projects. Basic techniques for development project evaluation.</p>
29.	EE375	Applied Economics for Natural Resources and Environment	3	<p>Prerequisites: EE210 or EE211 or EE213 (credits will not be awarded to students who are taking or have completed any 400-level courses in this subfield.)</p> <p>The relationship between economic growth, natural resources allocation and environmental problems. Basic economic theories used for analysis and application in natural resources management and environmental problems. The roles of government, community, and business sectors to control and solve problems in natural resource and environmental exploitation at local, national, and global levels. Concept of sustainable development. Concept of environmental justice. Basic concepts and methodologies in economic valuation of natural resources and environment.</p>
30.	EE376	Economics of Climate Changes	3	<p>Prerequisites: EE210 or EE211 or EE213</p> <p>Basic scientific knowledge on climate change. Greenhouse gas emissions and climate change mitigation. Concept of market failure and economic measures to support climate mitigation and technological development. Impacts of these measures on the economy, international trade and investment. Economics of climate change adaptation. International climate negotiation and cooperation.</p>
31.	EE476	Environmental Economics	3	<p>Prerequisites: EE311</p> <p>The concepts of sustainable development, efficient production, efficient consumption and market failure. The concepts of efficiency and effectiveness of policies, measures, and tools to control and solve environmental problems. Environmental risk assessment. Economic valuation and environmental impact assessment of development projects. Concept of environmental justice. Issues related to international environmental cooperation and agreements, including the effects on trade and investment.</p>

No.	Course Code	Course name	Credits	Course Description
32.	EE382	Economics of Services Sector	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Organization and components of service sector in an economy. Importance of service sectors. Applying economic and management aspects to selected service sectors, for example telecommunication and broadcasting, tourism, transportation, health and wellness, wholesale and retail trades. Case studies in the service sector relating to development and inclusive growth.
33.	EE481	Industrial Economics	3	Prerequisites: EE311 This course studies behaviors of firms under imperfectly competitive markets. It covers the structure–conduct–performance (SCP) paradigm, which examines the relationship among market structure, firms' conducts and their performance. It also covers firms' decision on operation, resource allocation, as well as firm's strategic actions. Price theory and game theory will be used to analyze issues such as pricing, research and development, advertising, and firms' decision under imperfect information.
34.	EE482	Industrialization Role of Public and Private Sectors	3	Prerequisites: EE312 Study of Economic theories relating to Industrial development. The importance of the industrial sector and industrial development for Thailand's economic system. Evolution of industrial policy in Thailand. The role of public and private sectors in the industrial development as well as in developing new economy such as knowledge-based economy, digital economy, service economy and so on.
35.	EE489	Seminar in Industrial Economics	3	Prerequisites: Having completed at least two 400-level (or the above level) courses in field of Industrial Economics Seminar and research on topics in Industrial Economics under the supervision of the lecturer.

2. Non-Economics courses

No.	Course Code	Course name	Credits	Course Description
1.	MA216	Calculus for Social Science 1	3	<p>Limits and continuity of one variable functions, derivatives of algebraic functions and transcendental functions, implicit differentiation, higher order derivatives, Roll's theorem, the mean value theorem, applications of derivative for determining limits and maximum and minimum of functions, differentials and its applications, antiderivatives, indefinite integrals and integration, definite integrals and application of area solving, functions of several variables, limits and continuity of functions of several variables, partial derivatives, the chain rule, total differential and its applications.</p> <p>Note : There is no credit for students who are currently taking or have earned credits of MA111 or MA211 or MA218 or AM101</p>
2.	ST216	Statistics for Social Science 1	3	<p>No credits for students who passed or studying TU 155</p> <p>Introduction to descriptive statistics; index numbers; unconditional and conditional probability; random variables and probability distribution; unconditional and conditional expectations; elementary sampling and sampling distribution; estimation and hypotheses testing for one population; statistical package results interpretation.</p>
3.	AC201	Fundamental Accounting	3	<p>The basic principles, concepts, and procedures for collecting and recording accounting information; preparation and analysis of financial reports; accounting cycle; accounting and disclosure for assets, liabilities, and owners' equity.</p>
4.	BA291	Introduction to Business	3	<p>Understand and able to apply business organization, structure, and its existence in general, including types of ownership, business administration process and activities, especially in crucial business function i.e. marketing, finance, accounting to give general ideas of various business functions. This course allows participants to gain comprehension in different activities of each business type through real business experience.</p>
5.	FN201	Business Finance	3	<p>Prerequisites: AC201 or AC291</p> <p>The basic principles of financial management for business; the responsibilities of financial managers; maximization of enterprise value; financial analysis, cash flow analysis, financial planning, fundamental analysis on risk, return, and asset pricing models, time value of money, working capital policies, capital budgeting, financing mix, short-term and long-term financing, and the costs of capital.</p>

No.	Course Code	Course name	Credits	Course Description
6.	FN211	Financial Mathematics and Statistics	3	Essentials of statistics and mathematics for financial applications; basic statistics, the concept of risk and return, probability, regression analyses, basic calculus (e.g. introduction to derivatives, integration, and integral), optimization, and basic matrices.
7.	FN311	Financial Management	3	Prerequisites: FN201 and BA204 or (ST211 and ST212) or (ST216 and ST217) or (ST218 and ST319) Theoretical concepts of corporate financial management applied to resolve financial problems and issues encountered by management in the real world of business; the management of asset structure and financial mix; the application of financial models and instruments on managing the assets, liabilities and equities, valuation, the costs of capital, capital structure, capital budgeting under risk, leasing, the concepts of agency problems and corporate governance.
8.	FN312	Investments	3	Prerequisites: FN201 and FN211 Valuation methods for fixed income instruments, equity instruments, options, and futures contracts; risk and return measurement of individual securities and portfolios, the determinants of risk and return.
9.	FN313	International Finance	3	Prerequisites: FN201, FN211 and EC214 The financial management for international business and its international economic environment: international monetary system, the balance of current account, the balance of payment, the foreign exchange market; the application of financial instruments and derivatives in the international financial risk management, the roles of international financial institutions, such as the International Monetary Fund (IMF), the World Bank, and international financial corporations.
10.	FN411	Derivatives Analysis	3	Prerequisites: FN312 Fundamental principles of derivatives, including futures, forward contracts, options, warrants, swaps, and real options, derivatives pricing models, strategies for speculating or hedging.
11.	MK201	Principles of Marketing	3	A study of marketing as one of the core business functions. This course provides an overview of modern marketing with an emphasis on concept of marketing and its economic and social impact, consumer behavior, and process of fundamental marketing mix management. This course concludes with discussion on responsibility and ethics of marketers.
12.	MK312	Brand Management	3	Prerequisites: MK311 The course will introduce students overall responsibility and tasks of a brand manager. Topics include new product development and launching, brand design and architecture, brand positioning, brand strategy and marketing programs, growing and sustaining brand equity, brand audit, and brand health check.

No.	Course Code	Course name	Credits	Course Description
13.	MK314	Product & Service Management	3	<p>Prerequisites: MK311</p> <p>A central theme of the course is that studying theoretical foundations and practical application of product & service management. The course starts by understanding unique differences between product & service that require distinctive marketing strategies. Business's relevant environment (e.g., customer behavior, government policy, and advanced technology) is also examined to gain an in-depth understanding of opportunities and challenges for creating business model, developing product & service, establishing creative marketing strategies and activities, as well as sustaining product & service excellence. The course provides broad issues in product & service value creation in businesses. Also essential is the course to study key tools and elements (e.g., business canvas and service blueprint) for product & service quality improvement that leads to customer's satisfied experience, loyalty, and value. Topics focus on product & service theory, strategy, practical implementation, control, and ethics.</p>
14.	MK317	Integrated Marketing Communication	3	<p>Prerequisites: MK312</p> <p>With an increasingly diverse consumer lifestyle and advanced communication technology, this course is designed to develop concepts, principles, and approach of integrated marketing communications in order to answer the marketing challenge. The content covers integrated marketing communications plan in terms of message and contact point (digital and physical) integration, and evaluation, based on the understanding of consumer and brand, especially brand positioning.</p>
15.	MK395	Special Topics in Marketing 1	3	<p>Prerequisites: Marketing major, third-year student status or approved by the instructor</p> <p>Philosophy, concepts, principles, tools, innovations, recent trends, and recent developments in Marketing that benefit students' thinking and future careers.</p>
16.	ER211	Introduction to Entrepreneurship	3	<p>The course introduces students to basic concepts and topics in entrepreneurship through classroom discussion and real-life case studies. It focuses on key elements and processes in the creation and growth of new ventures, providing a whirlwind tour of issues related to conceptualizing, developing and managing successful new ventures as well as an in-depth, hands-on look into the processes of real-world ventures.</p>
17.	IS01	Digital Technology for Business	3	<p>The key forces for change in business, how digital technology disrupts traditional business, digital business transformation, rethinking and redesigning of digital business, the new technology, applications, data and information platforms of digital business, managing digital business IT/IS infrastructure, Cyber security awareness and technology, and understanding how to use software for planning and decision making support of digital business operations in the agile environment.</p>

No.	Course Code	Course name	Credits	Course Description
18.	OM201	Operations Management	3	Study of concepts, techniques and tools to design, analyze, and improve core operational capabilities, and their application to a broad range of industries. Topics include operations strategy, productivity, product/service design, process design, quality management, inventory management, project management, supply chain management, operational performance measurement and operations for sustainability
19.	TU100	Civic Engagement	3	This class aims learners to instill the social conscience and awareness of one's role and duties as a good global citizen. Students will understand the basic role and properties of a civic citizen in a democratic society. The teaching approach is expected to be via a variety of methods such as lecturing, group discussion, analyzing case studies, field work, and project implementation. However, with the COVID-19 situation, they are adjusted to have minimal human contact and in-person interactions, but yet remain in similar learning outcome. This is to follow the measure and protocol of University and Faculty. Online learning may not be the most effective way, but learners are encouraged to be self-motivated and assisting themselves to find knowledge. The learning outcomes are expected to have learners understanding roles of civic properties and social contribution. Students are still required to organize a campaign/project to raise awareness, solving social problems or bring about positive changes in an area of their interest.
20.	TU101	Thailand ASEAN and the World	3	Study of significant phenomena around the world, in the ASEAN region and in Thailand in terms of their political, economic and sociocultural dimensions. This is done through approaches, theories and principles of social science research via discussion and raising examples of situations or people of interest. The purpose of this is to create a perspective of diversity, to understand the complexity of global interrelationships, to build a global mindset and to be able to challenge old paradigms and open up a new, broader worldview
21.	TU102	Social Life Skills	3	Important skills for success in leading a happy life in society and throughout the student's academic years. Students learn to develop their ability to understand themselves and adapt to psychological, emotional and social problems. Students also learn to understand the meaning of aesthetics, experiencing and appreciating the relationship between art and humanity in different fields, namely visual arts, music, performing arts and architecture.
22.	TU105	Communication Skills in English	3	Development of English listening, speaking, reading, and writing skills, focusing on the ability to hold a conversation in exchanging opinions, as well as reading comprehension of academic texts from various disciplines related to students' interest and field(s) of study
23.	TU116	Man and Arts, Visual Art, Music and Performing Arts	3	Development of English listening, speaking, reading and writing skills, focusing on the ability to hold a conversation in exchanging opinions, as well as reading comprehension of academic texts from various disciplines related to students' field of study.

No.	Course Code	Course name	Credits	Course Description
24.	TU122	Law in Everyday Life	3	To study general aspects of law as correct patterns of human conduct in society. To equip learners with basic principle of public law (rules of law), and its values which are associates with citizens' moral core. To provide basic knowledge in public law and private law, involving the issues of rights and duties, dispute settlement, Thai Justice procedures, the usage and interpretation of law principles, with an emphasis on case studies in our daily lives.