



Course

Offerings



Undergraduate Courses

Fall Semester 2024

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.	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.
3.	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.
4.	EE301	History of Thai Economy	3	Studying the evolution of Thailand's economic system. The study focuses on examining the development of Thailand's economic and social structure, while also investigating the roles of the state in the economy. The study links the changes in the Thai economy to the related economic, political, and social factors, both at the national and global levels.
5.	EE311	Microeconomic Theory	4	Prerequisite(s): EE211 (or EE213) and MA216 (or MA211) Consumer behavior focuses 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 imperfectly competitive markets which are a 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.

No.	Course Code	Course name	Credits	Course Description
6.	EE312	Macroeconomic Theory	4	<p>Prerequisite(s): a) EE211 and EE212 or b) EE213 and EE214</p> <p>The course discusses the economy's mechanism using a general equilibrium approach, which proposes appropriate government policies to stabilize and boost economic growth. Classics, New Classics, Keynesian, and New Keynesian school of thinking are all used to create appropriate policies. The role of how the labor market perceives and responds to information in determining the character of aggregate supply and the Phillips curve is examined for the closed economy. The static and dynamic elements of aggregate supply and demand interactions are investigated. Furthermore, the microeconomics foundation is utilized to investigate how agents react to one another, to policies, and to the economy's growth. The model of joint equilibrium (IS-LM-BP) in product markets, money markets, and foreign exchange markets for an open economy.</p>
7.	EE320	Introductory Mathematical Economics	3	<p>Prerequisite(s): a) EE211, EE212 and MA216 (or MA211) or b) EE213, EE214 and MA 216 (or MA 211)</p> <p>Course Description: 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>
8.	EE325	Introductory Econometrics	3	<p>Prerequisite(s): EE211 (or EE213), EE212 (or EE214), MA216 (or MA211) and ST216 (or ST211)</p> <p>Apply basic concepts in econometrics, including; linear estimation methods and problems with remedial technique i.e. Multicollinearity, Heteroscedasticity, Autocorrelation, Specification error, Identification, solving endogeneity problem using Instrumental Variable (IV) technique, and Logit model. Practical applications of all topics are mainly emphasized, as well as, how to choose the appropriate tool for an empirical study and interpretation of the estimated results obtained from econometric software.</p>
9.	EE361	Economics of CLMV Countries	3	<p>Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214</p> <p>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.</p>

No.	Course Code	Course name	Credits	Course Description
10.	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.
11.	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.
12.	EE375	Applied Economics for Natural Resources and Environment	3	Prerequisite: 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.) 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.
13.	EE376	Economics of Climate Change	3	Prerequisites: EE 210 or EE 211 or EE 213 (Credits will not be awarded to students who are taking or have completed any 400-level courses in this subfield.) Basic concepts of climate change relating to environmental economics, efficiency, externalities, and policy instruments. The role of economics in the formation of climate policy. Economic problems of climate change, such as intertemporal decisions, impacts of climate change, cost of mitigation, and adaptation. Thailand and international cooperation and debate in climate policy.
14.	EE382	Economics of Service Sectors	3	Prerequisite: 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.

No.	Course Code	Course name	Credits	Course Description
15.	EE403	Law and Economics	3	Prerequisite(s): 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.
16	EE404	History of Economic Thought	3	Development of economic thinking, from the pre-classical period up to the twentieth century. Examples are agricultural doctrine, mercantilism, classical, neoclassical, Keynesian, socialism, post-Keynesian, and Institutional Economics. Emphasis is given to the underlying philosophies, essential concepts, and the influence of economic problems on formulating economic thought in every period.
17.	EE406	Contemporary Economic Issues	3	EE406 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.
18.	EE411	Microeconomics Analysis	3	Prerequisites: EE311 and EE320 (or EE421) Study of microeconomic theory with an emphasis on utilizing mathematical tools to analyze various economic issues, such as consumer behavior, revealed preferences, intertemporal consumption, consumption and risk, and theory of production and cost. Topics covered also include market structures and behavior, game theory, factor markets, general equilibrium and welfare economics, and impacts of externalities, public goods, and asymmetric information on level of welfare.
19.	EE422	Mathematical Economics 2	3	Prerequisites: EE421 and having completed or currently taking EE312 The application of mathematical tools including integral calculus, differential equations, difference equations, phase diagram and dynamic optimization such as optimal control theory and dynamic programming for explaining dynamic economic phenomena as well as for locating time path and stability of variables in the context of both microeconomics and macroeconomics.
20.	EE425	Econometrics 1	3	Prerequisite(s): 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.

No.	Course Code	Course name	Credits	Course Description
21.	EE431	Economics of Financial Markets and Financial Institutions	3	Prerequisite(s): 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, Other contemporary issues and recent developments in financial system.
22.	EE432	Monetary Theory and Policy	3	Prerequisite: EE312 This course aims to provide the student with an introduction to the role of money, financial markets, financial institutions and monetary policy in the economy, thus facilitating a solid foundation for further study and enhancing professional capability in the financial services industry. It will investigate the role of money, theories regarding the supply of and demand for money and the relationship between money, credit and debt will also be emphasized. The course will then study the role of financial markets in the economy with a particular emphasis on bond markets, term structure and their implications. In addition, it will further analyze the evolving roles of central banks and their views regarding execution monetary policy, including recent and historical international policy actions. Both theoretical concept and empirical evidence, especially current economic situations will be used to examine the effects of monetary policies. In terms of theory, this course will adopt macroeconomic model to study the rationale behind monetary policy and provide a thorough understanding of transmission mechanisms and their impacts on macroeconomic variables, specifically economic growth and inflation. Besides, it will also cover the formulation of unconventional monetary policy, so called quantitative easing, when interest rates approach the zero-lower bound. Another area of study in this course is the consideration of modern monetary theories, particularly, in the context of real business cycle model and the New Keynesian model.
23.	EE434	Behavioral Finance	3	Prerequisite(s): EE311 and EE325 (or EE425) 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.
24.	EE435	Introductory Financial Econometrics	3	Prerequisite(s): EE325 (or EE425) and EE431 (or EE432) The application of econometrics method to finance and macroeconomics data. Applications of regression models. Applications of Probit-Logit model to financial risk assessments. Characteristics and properties of time-series based financial data. Univariate Time-Series Model. Regression with the long-run relationship and short-run dynamics. Volatility Model. Training in statistical software, emphasizing the application of tools suitable for research and study in finance-related issues.

No.	Course Code	Course name	Credits	Course Description
25.	EE441	Economics of Public Expenditure	3	Prerequisite(s): 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.
26.	EE446	Economics Analysis of Corruption	3	Prerequisites: EE 311 A study of corruption using economic analytical frameworks employing both theoretical and empirical methodologies. The topics covered include the definition and coverage of corruption, the causes of corruption, the economic consequences of corruption - both at the micro and macro levels, together with the public policies and measures used in combating corruption. In addition, the roles the private sector, civic society, and international organizations play in tackling corruption will also be discussed with reference to relative case studies.
27.	EE451	International Trade Theory and Policy	3	Prerequisite(s): EE311 Both international trade theory and trade policy practices are covered in this subject. Relevant international trade theories will be discussed, together with the hypothesized consequence and its empirical support. Both tariff and non-tariff trade policy measures are examined. In the latter, both traditional (e.g. quota, local content requirements) and new forms (sanitary and phyto sanitary, technical requirement) of non-tariff measures are covered. Discussion in the subject also covers free trade agreements and international production sharing, both of their impacts.
28.	EE452	International Monetary Economics	3	Prerequisite(s): EE312 This course provides fundamental basis for understanding international financial economics and its application to the real-world analysis. Major topics include the balance of payments and its adjustment mechanism; foreign exchange markets; exchange rate determinations, aggregate demand and aggregate supply, price levels and output and exchange rates in the short-run and the long-run; international capital flows; evolution of international monetary system; international monetary problems and financial crises encountered by developing countries, Thailand and the rest of the world. In addition, other special topics such as the roles of the central bank, current financial crises and up-to-date international macroeconomic issues will also be discussed.

No.	Course Code	Course name	Credits	Course Description
29.	EE459	Seminar in International Trade Theory and Policy	3	<p>Prerequisite: (a) EE451 and EE452</p> <p>More globalized world implies more unstable and volatile markets. As a result, the probability of experiencing fluctuation in both global trade and international financial markets gets higher. This course is aimed at broadening students' insight of international economics through various approaches, including lecture, class discussion, term paper, and seminars with guest speakers. Particularly, practices of applying analytical frameworks to the current issues and data of both global trade and international finance would enhance students' in-depth analytical skills towards more understanding of the global volatilities.</p>
30.	EE462	Development Macroeconomics	3	<p>Prerequisite(s): EE312</p> <p>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.</p>
31.	EE463	Globalization and International Development	3	<p>Prerequisites: EE211 and EE212; or EE213 and EE214</p> <p>This course discusses concepts and development of globalization in the context of post-World War II and the formation of the New International Economic Order. As countries move along their development trajectories, activities and linkages intensify, spurring complex interrelationships and interdependencies, thereby leading to a globalized world. These processes create not only new opportunities but challenges as well.</p> <p>The course will be divided in three sections. The first section will provide an overview of economic development theories, how globalization and international economic development are linked together and compare economic development trends across low-, middle- and high-income countries. Thereafter it will look at the role of the state, market and civil society in economic development and how international organizations and cooperation agencies interact with domestic institutions in determining the economic outcome. It will further look at demographic trends and discusses poverty and inequality and their causes. The second section will highlight issues and policy dimensions of various key development sectors such as agriculture; education and health; urban and rural development; and international trade and capital flows; as well as cross-cutting areas such as environment, climate change, and gender. Other topics that will be discussed are foreign direct investments and international capital flows; the roles of international development organizations e. g. the United Nations, World Bank, International Monetary Fund IMF and bilateral development agencies in bridging the divide between the "north", or developed countries, and the "south", or developing countries, through official development assistance; and patterns, factors of success and failures of past international development assistance. In the third and final section, students will form groups to discuss development issues learned in class and discuss these in detail, which will be presented towards the end of the course.</p>

No.	Course Code	Course name	Credits	Course Description
32.	EE471	Labor Economics	3	Prerequisite: a) EE312 and EE211 (or EE213) or b) EE311 and EE212 (or EE214) Studying the supply and demand of labor in the short-term and long-term, as well as improving labor quality. Types of labor markets, wage structures, and the role of labor unions. The role of government in the labor market as employer and regulator. Human capital, labor mobility and discrimination in the labor market, and the effect of globalization and integration on employment. The course pays special attention to how labor market works in developed and developing countries and their implications for public policy.
33.	EE472	Economics of Population and Family	3	Prerequisites: EE311 or EE312 Processes generating change in size and structure of population and family through reproduction, death and migration. Factors causing these changes. The impact of demographics and family variables on the economy at the micro and macro levels Economic of marriage and Economic of household or family will be included.
34.	EE476	Environmental Economics	3	Prerequisite(s): EE311 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.
35.	EE481	Industrial Economics	3	Prerequisite: EE 311 Study the behaviors of firms in imperfectly competitive markets on how to set the pricing and non-pricing strategies under different environments, such as different market structure, different technologies, and different government regulations. The methodology used mainly is based on the applied game theory under asymmetric information.
36.	EE482	Industrialization: Role of Public and Private Sectors	3	Prerequisite(s): EE311 Economic theories related to science, technology, innovation, and industrial development. The importance of innovation and industrial development in the Thai economy. Evolution of Industrial Policy and Innovation Policy in Thailand, including developing new economic forms such as the Knowledge-based Economy, Digital Economy, and Industry 4.0. The role of government and private sector in science, technology, innovation, and industrial development. Concepts and tools for developing science, technology, innovation, and industrial development.
37.	EE483	Economics of Regulation and Competition	3	Prerequisite(s): EE311 Study of regulatory theories, competition policies, together with their economic rationales. Study of approaches, methods, instruments, and impact assessment of regulation and competition policies. Study of regulatory institutions, governance and performance. Study of case studies from the developed and developing countries.

No.	Course Code	Course name	Credits	Course Description
38.	EE489	Seminar in Industrial Economics	3	Prerequisite(s): 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	Limits and continuity of one variable functions, derivatives of algebraic functions and transcendental functions, implicit differentiation, higher order derivatives, Rollers theorem, the mean value theorem, applications of the derivative for determining limits and maximum and minimum of functions, differentials and its applications, antiderivatives, indefinite integrals and integration, definite intergrals and applications 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.
2.	AC201	Fundamental Accounting	3	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.
3.	FN311	Financial Management	3	Prerequisite: FN201 Business Finance (which requires AC201 Financial Accounting or AC291 Essentials of Accounting) and BA204 Business Statistics or (ST211 Statistics 1 and ST212 Statistics 2) or (ST216 Statistics for Social Science 1 and ST217 Statistics for Social Science 2) or (ST218 Statistics for Psychology 1 and ST319 Statistics for Psychology 2) 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.
4.	MK312	Brand Management	3	Prerequisite: MK311 By understanding the concept of brand equity, marketers can gain valuable perspective that will allow them to interpret effectiveness and tradeoffs for various strategies and tactics. The Brand Management course will provide students the tools necessary to segment the market and eventually to well understand the behavioral insights of the target audience. From such target customer perspectives, students will learn how to develop competitive brand positioning and design the brand concept, identity and image. Students also learn how to construct brand associations and brand elements well designed to communicate brand positioning with target customers. This course will combine the most current brand management theory with practical applications, covering such topics as creating brand equity and positioning, measuring brand equity, using brand equity to expand a business, understanding the functions of brand management to deliver sustained consumer and customer value and brand loyalty, as well as practical management of strategic planning, product management, consumer research decision tools and evaluating of marketing mix elements.

No.	Course Code	Course name	Credits	Course Description
5.	MK314	Product & Science Management	3	<p>Prerequisite: 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.</p> <p>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>
6.	MK317	Integrated Marketing Communications	3	<p>Prerequisite: 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>
7.	TU122	Law in Everyday Life	3	<p>To study general aspects of law as correct patterns of human conduct in society. To equip learners with basic principles of public law (rules of law), and its values which are associated 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.</p>
8.	MA217	Calculus for Social Science 2	3	<p>Prerequisite: MA216</p> <p>Matrices, determinants, solutions of system of linear equations, higher order partial derivatives, application of maximum and minimum of several variables functions with unconstraint and constraint, techniques of integration for one variable functions, polar coordinates and area in polar coordinates, multiple integration and its applications.</p>

Undergraduate Courses

Spring Semester 2025

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.	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.
3.	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.
4.	EE302	History of World Economy	3	Analyzing the history and development of world capitalism. The importance of world economy is emphasized by selected topics such as the birth of capitalism, the Industrial Revolution, colonization, the Great Depression of the 1930s, the collapse of the Soviet Union, the development of Chinese and East Asian economies, the Oil Crises, and the World Financial Crises.
5.	EE311	Microeconomic Theory	4	Prerequisite(s): EE211 (or EE213) and MA216 (or MA211) Consumer behavior focuses 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 imperfectly competitive markets which are a 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.

No.	Course Code	Course name	Credits	Course Description
6.	EE312	Macroeconomic Theory	4	<p>Prerequisite(s): a) EE211 and EE212 or b) EE213 and EE214</p> <p>The course discusses the economy's mechanism using a general equilibrium approach, which proposes appropriate government policies to stabilize and boost economic growth. Classics, New Classics, Keynesian, and New Keynesian school of thinking are all used to create appropriate policies. The role of how the labor market perceives and responds to information in determining the character of aggregate supply and the Phillips curve is examined for the closed economy. The static and dynamic elements of aggregate supply and demand interactions are investigated. Furthermore, the microeconomics foundation is utilized to investigate how agents react to one another, to policies, and to the economy's growth. The model of joint equilibrium (IS-LM-BP) in product markets, money markets, and foreign exchange markets for an open economy.</p>
7.	EE320	Introductory Mathematical Economics	3	<p>Prerequisite(s): a) EE211, EE212 and MA216 (or MA211) or b) EE213, EE214 and MA 216 (or MA 211)</p> <p>Course Description: 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>
8.	EE325	Introductory Econometrics	3	<p>Prerequisite(s): EE211 (or EE213), EE212 (or EE214), MA216 (or MA211) and ST216 (or ST211)</p> <p>Apply basic concepts in econometrics, including; linear estimation methods and problems with remedial technique i.e. Multicollinearity, Heteroscedasticity, Autocorrelation, Specification error, Identification, solving endogeneity problem using Instrumental Variable (IV) technique, and Logit model. Practical applications of all topics are mainly emphasized, as well as, how to choose the appropriate tool for an empirical study and interpretation of the estimated results obtained from econometric software.</p>
9.	EE361	Economics of CLMV Countries	3	<p>Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214</p> <p>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.</p>
10.	EE363	Economics of selected Asian countries	3	<p>Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214</p> <p>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.</p>

No.	Course Code	Course name	Credits	Course Description
11.	EE365	Economics of Local Development	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Dynamics of local development in rural and urban areas. Economic and social theories regarding communities and collective action of people in communities. Interactions between livelihoods, natural resource capital, cultural and ethnic factors, and their influences on local farm and non-farm economic activities. Responses and adaptation of local communities to development policies. Roles of actors, such as community leaders, government officers, local administrative organizations, academics, and non-governmental organizations in local development. Analysis of capacities and limitations of local communities for collaboration in the allocation of resources and conducting economic activities. Sustainable development in the context of local development. Alternative approaches for local development.
12.	EE376	Economics of Climate Change	3	Prerequisites: EE 210 or EE 211 or EE 213 (Credits will not be awarded to students who are taking or have completed any 400-level courses in this subfield.) Basic concepts of climate change relating to environmental economics, efficiency, externalities, and policy instruments. The role of economics in the formation of climate policy. Economic problems of climate change, such as intertemporal decisions, impacts of climate change, cost of mitigation, and adaptation. Thailand and international cooperation and debate in climate policy.
13.	EE401	Political of Economics	3	Prerequisites: a) EE210 or b) EE211 and EE212 or c) EE213 and EE214 Analyzing the development of capitalism. Theories and methodology of different schools of Economic thought from classical political economics to Karl Marx's political economics, post-Marxist political economics.
14.	EE405	New Political Economy	3	Prerequisites: EE311 and EE312 Political process as a platform used to formulate and implement economic policies will be extensively discussed. Issues cover political decision making, political institutions, Election, Electoral Rules, redistributive politics, comparative politics, dynamic politics, incentives and behaviors of various agents, i.e., voters, politicians, special interested groups in a political regime. Moreover, Institutional structure of political institutions and its implication on macroeconomic policies will be examined. All issues above have much things to do with institutional design of political structure and incentive mechanism facilitating formation and implementation of good economic policies.
15.	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.

No.	Course Code	Course name	Credits	Course Description
16.	EE409	Seminar in Political Economy and Economic History	3	Prerequisites: Having completed at least two 400-level (above level) courses in the field of Political Economic Economic History, excluding EE400, EE404, EE406 EE500. Seminar and research on specific topics in Pol Economics and Economic History under the supervis the lecturer.
17.	EE412	Macroeconomics Analysis	3	Prerequisites: EE312 and EE320 (or EE421) Macroeconomic theory with an emphasis on utilizing mathematical tools and dynamic framework to analyze economic issues, such as, general equilibrium and welfare analysis in modern Macroeconomics, analysis of long-term growth, analysis of short-term growth and fluctuations both theoretically and empirically, roles of government in the economy, modern concepts for macroeconomic policy analytical frameworks, and the other topics that the lecturer finds suitable.
18.	EE415	Game Theory	3	Prerequisites: EE311 and EE320 (or EE421) The application of game theory with complete and incomplete information including strategic games, Nash Equilibrium, mixed-strategies equilibrium, extensive games, subgame perfect equilibrium, Bayesian games, extensive games of incomplete information, and other topics that the lecturer finds suitable.
19.	EE416	Behavioral Economics	3	Prerequisites: EE311 Concepts and frameworks in behavioral economics including comparative study of models for decision under uncertainty between mainstream economics and behavioral economics, empirical evidences that support behavioral economics, models that incorporate psychological and sociological factors for consumer and social behaviors, and other topics that the lecturer finds suitable.
20.	EE421	Mathematical Economics 1	3	Prerequisites: MA217 (or MA212) and having completed or currently taking EE311 The application of matrices, Jacobian determinants, derivatives, partial derivatives and optimization, with and without constraints, to explain theories in Microeconomics and Macroeconomics, such as the theory of consumer behavior, the theory of production, equilibrium in goods and factor markets, equilibrium of national income in product and money markets, international trade, comparative static equilibrium analysis, the input-output model, determination of maximum-minimum point and duality of linear programming.
21.	EE426	Econometrics 2	3	Prerequisites: EE425 This course covers Maximum Likelihood estimation, panel data model, limited dependent variable model and the introduction to time series data focusing on univariate time series, forecasting, cointegration and error correction model.
22.	EE431	Economics of Financial Markets and 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.

No.	Course Code	Course name	Credits	Course Description
23.	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.
24.	EE433	Asset Pricing	3	Prerequisites: EE320 and EE311 Study concepts and frameworks of asset pricing theory in the intermediate level; the theory of choice under uncertainty; classical asset pricing theory in the discrete time such as the Capital Asset Pricing Model (CAPM), The Arbitrage Pricing Theory (APT), and The Consumption Capital Asset Pricing Model (C-CAPM); Empirical puzzles in asset pricing/returns and proposed resolutions in the literature.
25.	EE439	Seminar in Monetary Economics	3	Prerequisites: Having completed at least two 400-level (or the above level) courses in the field of Monetary and Financial Economics. Seminar and research on topics in Monetary and Financial Economics under the supervision of the lecturer.
26.	EE442	Economics of Public Expenditure	3	Prerequisites: EE212 (or EE214) and EE311 The course analyses the structure and composition of government (national and local) revenue, through analysis of tax burden and incidence, and tax effects upon efficiency and equity. The course looks at the empirical effects of tax policies on the economy as a whole, and various individual behaviors such as decisions about work and leisure, tax avoidance and evasion, investment, savings and consumption. The analysis also includes the effects of deficit finance and fiscal decentralization (local revenue, grants and local debt). The application of these tools to selected contemporary topics (social security, healthcare and education financing). Additionally, the class will explore the politics and economics of tax reforms.
27.	EE449	Seminar in Public Economics	3	Prerequisites: EE441 and EE442 Seminar and research on topics in Public Economics under the supervision of the lecturer.
28.	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.
29.	EE452	International Monetary Economics	3	Prerequisite(s): EE312 This course provides fundamental basis for understanding international financial economics and its application to the real-world analysis. Major topics include the balance of payments and its adjustment mechanism; foreign exchange markets; exchange rate determinations, aggregate demand and aggregate supply, price levels and output and exchange rates in the short-run and the long-run; international capital flows; evolution of international monetary system; international monetary problems and financial crises encountered by developing countries, Thailand and the rest of the world. In addition, other special topics such as the roles of the central bank, current financial crises and up-to-date international macroeconomic issues will also be discussed.

No.	Course Code	Course name	Credits	Course Description
30.	EE459	Seminar in International Trade Theory and Policy	3	Prerequisite: (a) EE451 and EE452 More globalized world implies more unstable and volatile markets. As a result, the probability of experiencing fluctuation in both global trade and international financial markets gets higher. This course is aimed at broadening students' insight of international economics through various approaches, including lecture, class discussion, term paper, and seminars with guest speakers. Particularly, practices of applying analytical frameworks to the current issues and data of both global trade and international finance would enhance students' in-depth analytical skills towards more understanding of the global volatilities.
31.	EE461	Development Microeconomics	3	Prerequisites: EE311 Concepts and measurements of poverty and inequality. The theories of justice for analyzing public policies related to these issues. Microeconomic theories related to household decisions and behaviors, as well as market failures in developing countries. Public policies on development issues such as health; education; population; workforce allocation of households in agriculture and non-agriculture sectors, as well as formal and informal sectors; migration; entrepreneurship of the households; households' financial and risk management tools; microfinance; innovations and other interesting issues related to poverty reduction, etc.
32.	EE463	Globalization and International Development	3	Prerequisites: a) EE211 and EE212; or b) EE213 and EE214 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.
33.	EE465	Sustainable Development	3	Prerequisites: EE212 (or EE214) and EE311 Development of sustainable development approach under context of socio-politico-economic development at different levels. Sustainable development crises at global level and in Thailand. Definitions and fundamental ideas regarding Sustainable Development and contemporary debates. Other approaches related to sustainable development and their critiques, such as Gross National Happiness (GNH), Sufficiency Economy Philosophy, Green Growth, etc. Economic theories related to sustainable development, such as the analysis of externalities, public goods, common-pool resources, ecological economics, Green Economy, and economic measures for sustainable development. Policies and indicators related to sustainable development at global level, particularly the Sustainable Development Goals (SDGs). Challenges and obstacles to achieve sustainable development.

No.	Course Code	Course name	Credits	Course Description
34.	EE469	Seminar in Development Economics	3	Prerequisites: Having completed at least two 400-level (or the above level) courses in Development Economics, excluding EE460 and EE468. Seminar and research on topics in Development Economics under the supervision of the lecturer.
35.	EE470	Seminar in Human Resources Economics	3	Prerequisites: Having completed at least two 400-level (or the above level) courses in Human Resource Economics. Seminar and research on topics in human resource Economics under the supervision of the lecturer.
36.	EE473	Economics of Education	3	Prerequisites: EE311 Principles of investment in education, measuring return on education, theory of human capital and choice theory explaining educational investment will be discussed. Principles of investment in on-the-job training, analyzing educational impact on key economic variables such as wages throughout the entire working period, growth in the wage rate, job switching, and expansion of the economy as a whole will be covered. Evaluating efficiency and equality in governmental budget allocation within the educational system.
37.	EE474	Health Economics	3	Prerequisites: EE311 or EE312 Economic thought about health and health care services. Supply of and demand for health care. Market failure in the health care market and government intervention. Health insurance, fiscal policy on public health, factors of health service production, and efficiency and equality in the health care system. Evaluation of health care projects, asymmetric information in health insurance, health economics at the Macro level. Health service system reform in Thailand and abroad.
38.	EE475	Natural Resources Economics	3	Prerequisites: EE311 Economic theories and tools used for natural resource allocation. Concepts of scarcity and economic rent of natural resources. Allocation of natural resource among current users as well as intertemporal allocation. Market failure due to deficiencies in the property rights system. Government policies and tools for natural resource management and their impacts.
39.	EE479	Seminar in Natural Resources and Environmental Economics	3	Prerequisites: Having completed at least two 400-level (or the above level) courses in Natural Resource Economics, and Environmental Economics Seminar and research on topics in Natural Resources and Environmental Economics under the supervision of the lecturer
40.	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.

No.	Course Code	Course name	Credits	Course Description
41.	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.
42.	EE484	Empirical Industrial Organization	3	Prerequisites: (a) EE311 and EE325 (or EE425) or (b) with the consent of the lecturer. Empirical approach in industrial economics and application of econometric analysis in industrial economics theory i.e., Estimation of demand and production functions, Measurement of market power, Analysis of firm's strategic behavior, Vertical and horizontal competition, Firm's entry decisions, contract and learning. Measurement of firm performance by efficiency and productivity indicators.
43.	EE486	Business Economics	3	Prerequisites: EE311, EE312 and EE325 (or EE425) Theories and tools applicable for analysis of business problems and solutions, such as the application of economic concepts to forecast economic and industrial conditions, determination of business strategy, and decision-making.
44.	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	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. Note: There is no credit for students who are currently taking or have earned credits of MA111 or MA211 or MA218 or AM101
2.	ST216	Statistics for Social Science 1	3	No credits for students who passed or studying TU 155 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.
3.	AC201	Fundamental Accounting	3	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.
4.	BA291	Introduction to Business	3	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.
5.	FN201	Business Finance	3	Prerequisites: AC201 and AC291 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.
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.

No.	Course Code	Course name	Credits	Course Description
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.	FN424	Investment Banking	3	Prerequisites: FN311 Investment banking business; principles of value creations for firms and investors by mergers and acquisitions and business reorganizations; variety of investment banking activities, debt restructuring, initial public offering, and venture capital; applications of financial management and cases both in Thailand and abroad.
12.	MK311	Consumer Behavior	3	Prerequisites: FN311 Investment banking business; principles of value creations for firms and investors by mergers and acquisitions and business reorganizations; variety of investment banking activities, debt restructuring, initial public offering, and venture capital; applications of financial management and cases both in Thailand and abroad.

No.	Course Code	Course name	Credits	Course Description
13.	MK316	Distribution Channel Management	3	<p>Prerequisites: MK 201</p> <p>A study of distribution channel systems for traditional and modern trade, their roles, constraints on their management, and their integration into marketing strategy. Analysis of dynamic market factors, design and distribution of channels for effective and efficient management distribution networks, and strategic deployment of multi-channel marketing decisions to gain competitive advantages. Focus is on the roles, attitudes, and behavior of channel members, dimensions of channel power, management of channel conflict, channel incentive programs, coordination of channel relationships, and management of indirect channels. Particular attention is paid to the development, control, and evaluation of a distribution channel in both consumer and business markets.</p>
14.	MK319	Digital Marketing Strategy	3	<p>Prerequisites: MK312</p> <p>Digital marketing strategy course is to educate students to understand how to applying digital technologies to craft marketing strategies in responding to consumer and business markets in the digital era. The content of this course contains four parts that are issues and challenges of digital technologies in marketing competitive landscape, leveraging digital technologies to gain competitive advantage, digital marketing strategy formulation, and designing metrics to measure the success of digital marketing strategy.</p>
15.	MK321	Entrepreneurial Marketing	3	<p>Prerequisites: MK312</p> <p>A study of key entrepreneurial marketing theories, concepts, and strategies that can be applied to both established and new ventures operating in fast-changing, volatile business environments. The course begins with a discussion of the evolution of the interface between marketing and entrepreneurship and continues with an exploration of the underlying elements of entrepreneurial marketing. The main emphasis of this course is on how to proactively identify, evaluate, and exploit market opportunities in order to acquire and retain profitable customers. The course also puts emphasize on the concept of effectual perspective of entrepreneurship. Through a series of hands-on case studies, students will learn how to formulate entrepreneurial marketing strategies using innovative approaches to risk management, resource leveraging, and value creation.</p>

No.	Course Code	Course name	Credits	Course Description
16.	MK322	Retail Management	3	Prerequisites: Have earned credits of MK201 or MK202 A study of retail business management. Topics include roles and institutions related to retail business, understanding consumer behavior and market competition to determine effective retailing strategy, location selection, organization and human resources management, supply chain and IT for retail management, merchandise planning, purchasing system, retail branding, retail pricing, and promotion program, including store management, store design, store layout for product placement, services, and retail sales techniques. This course also discusses international retailing and electronic retailing.
17.	MK326	International Marketing	3	Prerequisites: MK201 A study of concepts and ways in doing international marketing including exporting, importing, foreign direct investment, globalization and factors affecting international marketing. The course covers how to gain consumer insights across international markets and translate them into appropriate marketing programs. By acting as an international marketing managers, students should be able to understand the linkages of the dynamic international environments, international opportunities, and international marketing strategies through assignments, case studies, and group projects.
18.	IS201	Digital Technology for Business	3	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.
19.	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.
20.	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
21.	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.