MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATION
OF THE REPUBLIC OF UZBEKISTAN
KARSHI STATE TECHNICAL UNIVERSITY

"APPROVED"
Rector of Karshi State Technical University
Rector _____ Sh.Q.Nematov
_____ 2025

Econometrics 2

Module Guide
for Master's Degree Specialization

Field of Knowledge:	400000 –	Business, Management and Law
Field of Education:	410000 –	Business and Management
Field of Study:	70410102 –	Economics (by sectors and industries)

Module links

Module Title:	Econometrics-2
Code (if applicable)	EKMET-21-105
Courses (if applicable)	1
Module teaching semesters	1
Language	Uzbek
Curriculum relevance	Selective
Type of Instruction, Contact Hours	Lecture, Practical
Workload	Total workload: 150 hours. Auditory hours: 60 hours; lecture: 30 hours, practical lessons: 30 hours; Self-study: 90 hours
Credit Points	5
Recommended previous subjects	Theory of Economics, Microeconomics, Macroeconomics

Module Objectives / Expected Learning Outcomes	The module aims to teach students the fundamentals of econometric modeling of complex economic systems, such as the national economy and its sectors, under market conditions, and to develop their skills in applying these models in practice. The objectives allow students to: • Study the properties of regression models with variable structure and stochastic variables, stationary and non-stationary series, and systems of simultaneous equations; • Understand various principles of economic indicator systems, their structure and interrelationships, and master econometric modeling of economic indicators; • Gain an understanding of endogenous and exogenous variables and systems of econometric equations; • Identify methods for testing the stability of econometric models and develop an understanding of production functions, economic growth models, and production cost functions in economic analysis; • Test statistical hypotheses and gain familiarity with the main econometric models and the scope of their application and evaluation methods. 1. Theoretical Knowledge and Concepts. Students will comprehend the key concepts and categories of Econometrics 2, as well as the economic laws and principles of various sectors (transport, energy, communications, utilities, etc.). 2. Analytical Skills. Students will analyze economic indicators and statistical data related to econometrics, evaluate model efficiency, costs, profitability, and demand levels, and draw reasoned conclusions about economic processes. 3. Use of Research and Analytical Tools. Students will develop skills in economic analysis using methods, graphs, and tables, and learn to apply economic models and theories in practical situations. 4. Communication and Expression Skills. Students will be able to clearly and logically present econometric economic ideas in scientific and methodological language, both in writing and orally, supporting their arguments with economic analysis. 5. Practical Application. Students will learn to perform analysis and forecasting using various economic and mathematical models in econometrics, draw conclusions from practical research and experimental results, and develop proposals to improve forecasting efficiency.

Content	It is one of the important disciplines in economics, providing skills to analyze economic data and apply econometric methods for analyzing real statistical information using statistical software packages. This subject is considered a fundamental course for students, enabling them to analyze the material, technical, and institutional foundations of the economic system.
Study and exam requirements	a) To score 90–100 points, a student must: - Fully explain the essence and content of the subject; - Present topics scientifically and logically, without errors or confusion; - Have a clear understanding of the theoretical or practical significance of the subject material; - Demonstrate independent and critical thinking within the subject; - Answer given questions accurately and concisely; - Prepare a well-organized set of lecture notes; - Complete independent assignments fully and accurately; - Fully master relevant laws and other regulatory documents related to the subject; - Publish a scientific article on one of the relevant topics; - Be able to explain historical processes. b) To score 70–89.9 points, a student must: - Understand the essence and content of the subject and present topics scientifically and logically without confusion; - Comprehend the practical significance of the subject content; - Complete assigned tasks and exercises within the curriculum; - Answer questions correctly; - Prepare well-structured lecture notes; - Complete independent assignments fully; - Master relevant laws and regulatory documents related to the subject. c) To score 60–69.9 points, a student must: - Have a general understanding of the subject; - Present topics in a limited scope, with some inaccuracies or confusion; - Exhibit less fluent presentation; - Give incomplete or unclear answers to questions;

	- Have lecture notes that are not well-structured. d) To score 0–59.9 points, a student's knowledge may be considered unsatisfactory if: - They are unprepared for classes; - They have no understanding of class materials; - Their work shows evidence of plagiarism; - There are serious errors or confusion in their work; - They fail to answer questions related to the subject; - They lack knowledge of the subject entirely.
Exam formats	Oral, Written, Test
Assessment Tools / Methods	Completing subject-related assignments and successfully passing ongoing, mid-term, and final assessments.
List of References	1. Greene, W. H. (2012). Econometric Analysis, 7th Edition (Int. Edition), Essex: Pearson. 2. X.S. Muxitdinov, O.Q. Xatamov, A.N. Raximov. Fundamentals of Econometrics. Study Guide. Qarshi: "Intellekt" Publishing, 2021 – 287 pages. 3. Elhorst, J.P. Spatial Econometrics: From Cross-Sectional Data to Spatial Panels. Heidelberg, New York, Dordrecht, London: Springer, 2014. 4. N. Djuraev, B.E. Eshmatov. Probability Theory and Mathematical Statistics. Study Guide. Tashkent: "Voris Publishing", 2020 – 318 pages. 5. Gujarati, D.N. Basic Econometrics. McGraw-Hill, 5th Edition, 2009 – 922 pages.
Editors	1. A.S.Eshev –Acting Professor at the Department of Business and Management, Qarshi State Technical University
Place and Date of Approval	Developed and approved by Qarshi State Technical University №1, 26.08.2025)