MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATION OF THE REPUBLIC OF UZBEKISTAN

KARSHI STATE TECHNICAL UNIVERSITY

"APPROVED"

Rector of Karshi State Technical University

Sh.K.Nematov

"____" _____ 2025

INTRODUCTION TO ECONOMETRICS

MODULE GUIDE

Field of Knowledge:	400000 –	Business, Management and Law
Field of education:	410000 –	Business and Management
Field of study:	60310100 –	Economics

Module Links

Module title:	Introduction to Econometrics
Code (if applicable)	EKMET1305
Courses (if applicable)	2
Module teaching semesters	3
Language	Uzbek language
Curriculum relevance	compulsory
Type of Instruction, Contact Hours	Lecture, practical, laboratory
Workload	Total workload: 150 hours. Auditory hours: hours; lecture: 30 hours, practical lessons: 14 hours, laboratory: 16 hours; Self-study: 90 hours.
Credit points	5
Recommended previous subjects	Economic theory, Information communication technologies and systems in economics, Statistics

Module objectives / expected learning outcomes	To teach students the theoretical and methodological foundations of modeling, analysis, and evaluation of economic processes based on empirical data. Forming skills in building econometric models, evaluating their parameters and applying the results in practical decision-making. The objectives allow students to learn the following:<line-break/>• thorough knowledge of basic concepts, terms, theories and statistical approaches used in econometric research;<line-break/>• ability to analyze types of economic data and their characteristics;<line-break/>• constructing pair and multi-factor regression models, parameter estimation and interpretation;<line-break/>• analysis of real economic problems using econometric models;<line-break/>• checking the accuracy and reliability of models through statistical criteria;<line-break/>• interpreting the obtained results in economic context, expressing them clearly and scientifically in written and oral form. Expected results from teaching the module 1. Theoretical knowledge and concepts. Students will learn the subject and tasks of econometrics, deterministic and stochastic models, basic principles of probability theory and mathematical statistics. Understands regression analysis, correlation relationships and mathematical expression of economic processes. 2. Analytical skills. Students will conduct analysis based on statistical data, determine dependencies and cause-and-effect relationships between variables, and draw scientifically based conclusions on results. 3. Use of research and calculation tools. Students will gain practical skills in building regression models in Excel, EViews, Stata and other programs, working with graphs and tables, and economic interpretation of model parameters. 4. Skills in communication and scientific expression. Students will be able to state economic and statistics-based thoughts in written and oral form in a clear, logical and consistent manner according to scientific language norms. Prepares reports, presentations and scientific commentaries. 5. Implementation in practice and decision making. Students will develop economic forecasts, political recommendations and proposals based on constructed econometric models. Evaluates problems in real sector fields (industry, service, agriculture etc.) based on model results and proposes practical solutions.
Content	Being one of the important pillar subjects of economics, it studies the scientific bases of modeling and analyzing economic processes using real statistical data. This subject strengthens the connection between economic theory and practice and allows for the empirical verification of the manifestation of economic patterns in practice.

Study and exam requirements	**a) To get 90-100 points, the student's knowledge level must meet the following:** - can fully highlight the essence and content of the subject; - if scientificness and logicality are preserved in stating the topics in the subject, without allowing scientific errors and confusion; - if they have a clear idea about the theoretical or practical significance of topic materials on the subject; - if they can demonstrate the ability for independent free thinking within the scope of the subject; - if they can give clear and concise answers to given questions; - if they are thoroughly prepared for the synopsis; - if they have fully and accurately performed independent tasks; - if they have fully mastered the laws and other regulatory-legal documents related to the subject; - if they have published a scientific article on one of the topics related to the subject; - if they can interpret historical processes; **b) To get 70-89.9 points, the student's knowledge level must meet the following:** - understands the essence and content of the subject, without allowing scientific and logical confusion in stating the topics in the subject; - if they understood the practical significance of the content of the subject; - if they perform the tasks and assignments given for the subject within the curriculum; - if they can correctly answer questions given for the subject; - if they have thoroughly formed their synopsis for the subject; - if they have fully performed independent tasks for the subject; - if they have mastered the laws and other regulatory documents related to the subject. **c) To get 60-69.9 points, the student's knowledge level must meet the following:** - if they have a general understanding of the subject; - if they highlight the topics in the subject in a narrow scope, with some confusion in the presentation; - if the presentation is not fluent; - if vague and confused answers are received to questions on the subject; - if the text for the subject is not thoroughly formed.

	d) The student's knowledge level may be evaluated as unsatisfactory in the following cases with 0-59.9 points: - if preparation was not made for the training sessions on the subject; - if they have no idea regarding the training sessions on the subject; - if it is noticeable that they copied the texts on the subject from others; - if serious errors and confusion are allowed in the text on the subject; - if no answer is received to the questions given regarding the subject; - if they do not know the subject. -
Exam formats	Oral, written, test
Assessment Tools / Methods	**Completing assignments for the subject and successfully passing current, intermediate and final types of control.**
List of References	1. M.M. Ravshanova. Introduction to Econometrics. Study guide. Karshi. "Intellekt" publishing house. 2022 – 191 pages 2. X.S. Muxitdinov, O.Q. Xatamov, A.N. Raximov. Fundamentals of Econometrics. Study guide. Karshi: "Intellekt" publishing house. 2021 – 287 pages 3. G. Shadmanova, B.O. Raxmankulova, X.X. Karimova. Econometrics. Textbook.-T.: TIQXMMI. 2020 - 321 pages. 4. Nasritdinov G. Econometrics. Study guide. IQTISOD-MOLIYA. 2008 5. N. Djuraev, B.E. Eshmatov. Probability Theory and Mathematical Statistics. Study guide.-T.: "Voris-nashriyot", 2020, - 318 pages. 6. A.N. Raximov. Introduction to Econometrics. Textbook. Karshi. "Iqtisodiyot" publishing house. 2023 – 387-p. 7. T.Sh. Shodiyev, T.X. Xakimov, L.R. Boltayeva, A.I. Ishnazarov. Econometrics. Study guide. Literary Fund of the Union of Writers of Uzbekistan. 2005
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Place and Date of Approval	Developed and approved by Karshi State Technical University (Report No. 1, 26.08.2025)