

ANNOTATION OF THE EDUCATIONAL COMPONENT

Scientific and methodological foundations of quality assurance of mechanized agricultural technologies

Status	Basic
Department	Agroengineering
Teacher	Barabash Grigohiy Ivanovich, PhD, Associate Professor.
Contact information	Classroom 216m Consultation time – every Wednesday from 10:00 to 12:00, e-mail: grinya45@ukr.net Web-page: https://itf.snau.edu.ua/kafedri/ai/sklad-kafedri-ai/barabash-grigorij-k-t-n-docent/
Course objective	Formation of conceptual knowledge and scientific and methodological approaches to the assessment, analysis and quality assurance of mechanized technologies in the field of mechanical engineering among higher education students. The discipline is aimed at developing the ability to conduct scientific research, critically evaluate its results, and use modern methods and tools to ensure innovative development in the relevant field.
Main tasks	Providing students with in-depth knowledge of the general principles and methods of mechanical engineering, familiarization with modern scientific approaches to assessing and improving the efficiency of mechanized technologies, developing skills in conducting experimental and theoretical research using mathematical and computer modeling tools, developing the ability to critically analyze scientific data, formulate hypotheses and justify conclusions, and preparing for the application of the knowledge gained in teaching and practical engineering.
As a result of studying the discipline, the student should know	<ul style="list-style-type: none">- conceptual and methodological foundations of mechanical engineering and related industries;- principles of quality assurance of mechanized technologies.- methods of conducting experimental research and mathematical modeling in the field of mechanical engineering.- modern tools and approaches to analyzing, assessing and improving the quality of technologies.
be able to	<ul style="list-style-type: none">- formulate and test hypotheses using the results of theoretical analysis, experimental research and computer modeling.- plan and carry out scientific research in the field of mechanical engineering while maintaining professional and academic ethics.- critically analyze the results of their own and third-party research in the context of modern knowledge in the relevant field.- apply the methodology of scientific research in teaching practice and when solving applied engineering problems.