REPUBLIC OF UZBEKISTAN

MINISTRY OF HIGHER EDUCATION, SCIENCE AND INNOVATIONS

FERGANA STATE TECHNICAL UNIVERSITY

Modern construction materials

MODULE HANDBOOK

Field of knowledge :	700000	- Engineering, machining and construction industries
Educational field:	730,000	- Architecture and construction
Education program :	60730300	- Civil Engineering

Fergana 2025

Module title	***Modern construction materials***
Code (if available)	*MBMT43*
Semester(s) of module teaching	*4*
Responsible for the module	*Mamatov Khamidulla Abdullayevich , Construction materials and items Department , PhD, Associate Professor*
Language of instruction	*Uzbek*
Connection to the curriculum	*Elective*
Teaching methods	*lecture , practical training , independent education .*
Study load (including classroom and independent study hours)	*Total hours : 90 hour* *Auditorium hours : 3 4 hour* *Lecture – 14 hours , practical training – 20 clock ,* *independent education – 56 hour .*
Credit units	***3***
Required and recommended prior knowledge for studying the module	*Construction structures , construction mechanics , groundwork mechanics*
Module objectives/intended learning outcomes	***The purpose of the module:*** *– In students modern construction materials application technologies according to main law and rules, basic modern decoration construction processes and fulfillment sequence, their theoretical the basics, the work organization to reach advanced choice methods according to direction to the profile suitable knowledge, skill and qualification is to form .* *To achieve the above goal, science students will acquire theoretical knowledge, practical skills, and a thorough mastery of the necessary basic formulas; teamwork, independent and critical thinking related to the profession, a culture of communication and drawing conclusions, timely completion, compilation, and presentation of science assignments, searching for information on a given topic, and the skills of preparing and conducting presentations.* *The following requirements are imposed on the knowledge, skills, and qualifications of students in the subject.* ***The student:*** • *to have an idea of the goals and objectives of the science of modern building materials application technologies, and its importance in the production activities of specialists;* • *Raw materials for KNAUF products and products, materials produced by the enterprise, their properties, production technology, and areas of application;* • *the composition of the construction work project and the basic rules for its development;* • *drawing up calendar plans for the implementation of construction processes;* • *development of technological maps for various finishing construction processes;* • *rules for quality control and occupational safety during construction processes;* • *development of documents that are part of the finishing work project;* • *Must have the skills to use KNAUF company materials: drywall, dry construction mixtures (plaster, putty, glue),*

	metal profiles, self-tapping screws, in accordance with construction standards and regulations; • *Know how to compare and choose options when performing makeup work;* *Must have the skills to calculate, design, and implement suspended ceilings, curtains, curved and volumetric elements, and wall surfaces covered with plasterboard using KNAUF materials, and to calculate material consumption.*
Content	***Module 1. The essence of science , its purpose and tasks*** *Modern construction materials application technology essence. Uzbekistan In the Republic modern construction mixtures caught The role of science. The purpose of science and tasks, development stages. Gypsum -based construction materials, Plasterboard coatings and panel, gypsum fiber coatings, Drywall and profiles of gypsum fiber systems,* ***Module 2. KNAUF dry construction sum systems*** *KNAUF dry construction sum systems thoroughness Curtains, General requirements. KNAUF curtains careful of coatings constructive Curtains to the end , GKQ and GTQ fastening, KNAUF coatings sum systems, KNAUF suspension ceilings sum systems, Attic KNAUF aggregate in construction systems use, Communication mines obstacles and engineering communications KNAUF roofing aggregate systems, KNAUF aggregate floor coverings of systems under collection basics,* ***Module 3. KNAUF dry construction sum systems based on of constructions montage .*** *Construction of constructions from the fire protector Coatings, General situations. Buildings are subject to load -bearing meticulous elements drywall or plasterboard coatings with from the fire protector coatings, KNAUF dry construction sum systems based on of constructions assembly and structure, KNAUF aggregate in systems voluminous elements and curve linear surfaces harvest to do, KNAUF dry construction sum systems based on of constructions assembly and structure, KNAUF aggregate in systems voluminous elements and curve linear surfaces harvest to do, From GKQ and GTQ built constructions technician exploitation to do main rules, them in construction technique safety and acceptance to do rules*
Forms of assessment	*oral, presentation, written work, practical assignments, and final exams.*
Requirements for study and assessment	*To successfully complete the module, the student must attend classes and achieve the minimum scores set in the current, midterm, and final assessments.*
Bibliography	1. *Materials for Civil and Construction Engineers FOURTH Edition In si units Michael S. Mamlouk John P. Zaniewski © Pearson Education Limited 2018* 2. *Qasimov IM Modern construction materials and constructions . Textbook . Tashkent. 2020.* 3. *NASamigov , SRMajidov , FDJurayeva Construction materials and items from science laboratory their work transfer for . Style Guide Tashkent-2018* 4. *Dry construction sum systems : education manual /I.*

	Sipranovich [etc .]– T.: Cholpon NMIU named after , 2015, – 464 p. 5. *Saidrasulov SS and others . Dry in a way construction and decoration works . Tashkent, Chulpon publishing house , 2013.* 6. *Gamm H. "Sovremennaya otdelka pomeshcheniy s ispolzovaniem komplektnyx sistem KNAUF" M., Stroymaterialy, 2002 - 89p.* 7. *Tsiprianovich I.V., Starchenko A.Yu. "Comprehensive system of suhogo stroitelstva" M, 2011.*
Reviewers	*B. K. Rakhmanov - Fergana State Technical University, Department of " Construction Materials and Products " Associate Professor (DSc);* *Kh.Murodov – EXPOFAR MCJ leader ;*