




Academic discipline

Testing of polymer materials and composite structures

Specialities: 131 Applied Mechanics; 133 Industrial Machinery Engineering; 134 Aerospace Engineering; 141 Power Engineering, Electrical Engineering and Mechanics; 142 Power Engineering; 274 Automobile Transport

Рівень вищої освіти	<i>First (bachelor)</i>
Статус дисципліни	<i>Selective</i>
Обсяг дисципліни	150 hours/ 5 credits
Мова викладання	<i>English</i>
Що буде вивчатися (предмет вивчення)	<p>The course is recommended for students who want to understand and reproduce the testing of polymeric materials and composite structures.</p> <p>The main issues studied in this course are:</p> <ul style="list-style-type: none"> – experimental methods of determining mechanical and special characteristics of polymer materials and composite structures; – analysis and evaluation of experimental data; – equipment used in the experiment.
Чому це цікаво/треба вивчати (мета)	<p>The goal is to train students who can independently determine the physico-mechanical and special characteristics of polymer materials and composite structures to check the quality of materials, their manufacturing technologies, or to use the test results in structural calculations.</p> <p>The task is to provide skills in determining the actual physical and mechanical characteristics of polymer materials and composite structures. Study of equipment and tools for experiments, as well as methods of mathematical analysis of the obtained data</p>
Як можна користуватися набутими знаннями і уміннями (компетентності)	<p>As a result of studying the academic discipline, the student should</p> <p>know:</p> <ul style="list-style-type: none"> - methods and equipment for static testing of samples; - methods and equipment for special tests of samples; - methods of the experimental studies results processing. <p>be able:</p> <ul style="list-style-type: none"> - plan an experiment; - determine samples for various tests; - determine load conditions for various tests; - process the results of experiments; - prepare test reports
Пререквізити	Studying the course is based on general knowledge of such disciplines as "Sketch geometry", "Materials science", "Technology of construction materials"
Кореквізити	The course is important for studying courses that require knowledge of the manufacture of composite structures
Організація навчання	<p>Types of classes: lectures, practical classes, individual consultations (if necessary), independent work of students based on materials published by the department (methodical manuals).</p> <p>Forms of obtaining education: daily, distance</p> <p>Forms of control: participation in lectures, remote test assignments, performance of laboratory work. Conducting current control, written modular control, final control in the form of an exam</p>
Кафедра	403
Факультет	<i>Rocket and space engineering</i>

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Посилання на робочу програму (силабус)			