Integrated Computer Aided Technologies

Major «*Technology of Aircraft Manufacturing Department*»

Level of Higher Education	*first (Bachelor)*
Course Status	*student's choice*
Scope of discipline	120 hours / 4 ECTS credits
Language	*Ukrainian / English*
What will be studied (subject of study)	As a result of studying the discipline, students will be able to study: Classification of software for automated systems, basic concepts of CALS-technologies. Basic design techniques for complete and lightweight assemblies. Creating and editing parts in the context of an assembly, adding new parts to an assembly. Breaking, blocking and deleting external links. Creation of drawings, formation of specifications, automatic placement of positions on assembly drawings. Organize assemblies and improve performance when working with assemblies. Analysis of the functioning and verification of the dynamics of the movement of additions.
Why is it interesting/should be studied (goal)	Purpose: formation of students' knowledge about the basics of CAD functioning and skills of working with automation systems for engineering activities in the preparation of production. Assignment: training in modern methods of designing prefabricated technological equipment for the production of aviation and rocket-space equipment using automated CAD / CAM / CAE / CALS systems.
How can you use the acquired knowledge and skills (competencies)	Knowledge and understanding of the subject area and understanding of professional activity. Ability for abstract thinking, analysis and synthesis. Ability to evaluate and ensure the quality of work performed. Internal need for purposeful improvement of professional knowledge and skills throughout training and professional activities. The ability to supply and solve problems of designing the parameters of products and processes for their production; Ability to use the appropriate software (programming languages, packages) to perform physical and mathematical calculations in the design and manufacture of aircraft. Develop technical and design documentation for the manufacture of the main elements of aerospace technology
Organization of training	Types of classes: lectures, laboratory, self-study Forms of education: full-time / part-time Forms of control: exam
Department	Technology of Aircraft Manufacturing
Faculty	Aircraft Engineering

Teacher

Name	**Oleksiy Pavlenko**
Position	Senior Lecturer
Academic title	
Scientific degree	PhD
e-mail	alexey.pavlenko@khai.edu

Links to course materials	1. Електронна бібліотека кафедри №104: \\Domik\SHARED\Методичні матеріали \SOLIDWORKS. 2. https://mentor.khai.edu/course/view.php?id=706
Link to work program (syllabus)	