DESCRIPTION OF STUDY MODULE*

Study programme	**Applied Informatics and Programming**		
Study module	**3D Design and Animation**	**Credits in total**	**4**

Learning outcomes
- Able to apply the main functions, and possibilities of 3D graphics using 3ds Max program. - Able to create 3D graphic project for concrete task. - Able to select appropriate tools for task realization. - Understand and use the 3ds Max interface, development environment, and tools. - Create modeling objects using 3D modeling concepts, workflows, polygonal meshes and modifiers. - Model a complex object using loth and lathe objects. - Make a basic three-dimensional (3D) animation. - Understand the importance of their professional growth.
Aims of study module
The course objective is to teach students to create and animate virtual environments with 3ds Max, the popular 3D animation application.
Annotation of a study module
3D modeling is used in many business applications to model equipment, develop training models and videos, create architectural visualization studios, movie effects, and other 3D graphic uses in addition to video gaming. So this course is quite important for students, studying informatics. This course introduces students to the 3ds Max interface, tools, functions, concepts, and design environment. Students will learn how to make 3D models using model planning, poly tools, scene, edition, organic poly modeling, and mapping. Also students will learn 3ds Max Workflow and how to make 3D animation.
Topics of the subject
1. Welcome Week. What is 3D? 2. Pre-Production Process 3. Introduction to Autodesk 3DS Max Design 4. Assembling Project Files 5. Design Interface 6. Basic Functions. Manipulating Objects 7. Introduction to Materials. 3D Environments & Materials. 8. Material Types and Parameters. 9. Solar Systems 10. 3D Logos 11. Modeling Skills 12. Mapping Texture 13. Rendering
Procedure for assessment of knowledge and competences
10-point grading scale and cumulative assessment method: portfolio (Po) (4 practical works) is worth 20%, Control tests (CT1) - 15%, Control tests (CT1) - 15%, and examination (E) - 50% of the total grade, which is calculated by the method of weighted mean. Final grade of the course is calculated only when all of the assignments are successfully completed and midterms are passed: G = Po*0.2+CT1*0.15+CT2*0.15+E*0.5
Main literature
1. M. Chandler, Podwojewski, P. Amin, J. Herrera, F. (2014). *3ds Max Projects: A Detailed Guide to Modeling, Texturing, Rigging, Animation and Lighting*. 3DTotal Publishing, 320 p. 2. Pauliukaitis, D. (2013). *Trimatė kompiuterinė vizualizacija.* Laboratoriniai darbai. KTU leidykla „Technologija, 100 p. 3. *3Ds Max įgarsintos video pamokos pradedantiems*. (2012) CD kompaktas. „Ženera“

* Short form