Faculty of International Economics and Administration
Department: Informatics
Professional area: Informatics and Computer Studies
Major: WEB Design
Educational – and - qualification Degree: Master

COURSE DESCRIPTION

1. Course unit title: **3D Modeling – Practice**
2. Course unit code: INF 3050
3. Type of course unit: optional
4. Level of course unit: Master
5. Year of study: second
6. Semester: third
7. Number of ECTS credits allocated:
8. Name of lecturer: Asst. Plamen Geraskov
9. Learning outcomes of the course unit: The course aims to provide students with knowledge of 3D design, applicable in the field of WEB-design.
10. Mode of delivery: face-to-face
11. Prerequisites and co-requisites: Students need to have completed successfully the courses in Informatics Parts 1 and 2
12. Course contents**:**

The main objective of the course is to provide students with practical, applicable skills as follows: Interface; menu-commands; procedures; windows; standard 3D objects; creating, importing and exporting of figures from and to files; creating of 3D objects with a central axis using the „LATHE" technique; creating splines for central axis of rotation; editing the format of splines; transformation of peaks from one type to another and choice of type depending on the strategy of building and upcoming combining; bending of splines and editing of complete shapes; positioning of axes of rotation; changes in the number of segments; editing the "smoothing out" of 3D objects; changing the type of existing 3D objects for the purpose of further modification via editing of the spline; changing the shape of objects through deformation, linear deformation, arch deformation, breaking, Boolean operations between two or more 3D objects; „PATCH" 3D objects; creating of objects by covering with a "patch' their cross-sections along their length; flexible surfaces; reinforced structures as a tool for building arbitrary, including central and axial asymmetric figures; cross-sections of 3D objects; direct positioning; positioning by using listed object names; transformation of plain primitives – 2D sections into splines; logical attachment of sections to other sections; creating a spatial framework of meridians on objects; creating surfaces of the "patch" type; pivot centre; editing the shape of 3D objects via their peaks; editing the shape of 3D objects via their segments; editing the shape of 3D objects via their sections.

13. Recommended or required reading:

- Джош Бук, Крис Ньюэн, 3ds Max. Профессиональная анимация, Триумф, 2007,
- Келли Л. Мэрдок, 3ds MAX 9. Библия пользователя, Диалектика, 2007,
- Ананьин И.К., Трёхмерное моделирование в 3Ds Max, Физтех-Колледж, 2008

14. Planned learning activities and teaching methods: Practical seminars *(15 hours a week, 2 weeks),* contact hours *(2 hours a week, 4 weeks).*
15. Assessment methods and criteria: defense of individual course assignment; continuous assessment; examination. The final grade represents the examination results.
16. Language of instruction: Bulgarian
17. Work placement: