**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 Computer Aided Design** 

Course unit code: INF 2030
Type of course unit: compulsory
Level of course unit: Master

5. Year of study: first6. Semester: first

7. Number of ECTS credits allocated: 3

8. Name of lecturer: Prof. Rossen Radoev

- 9. Learning outcomes of the course unit: The course aims to provide students with the relevant knowledge and skills which will enable them to fully realize their creative potential. They need to have thorough knowledge of contemporary 3D graphic software and be able to use it professionally when creating their works of art. When students are well trained to recognize its potential, its requirements and its standards, they will be able to shorten the design process, and will enjoy greater variety of optimal solutions available. The overall objective of the course is for students to be able to carry out the complete cycle of design and visualization from the initial idea to the finalized project solely by computer.
  - 10. Mode of delivery: face-to-face
  - 11. Prerequisites and co-requisites: Students need to have fundamental knowledge obtained at secondary schools and Bachelor degree programmes.
  - 12. Course contents: Introduction. Basic principles and terminology. Acquainting students with the interface Workspace, Navigation, Tools, Menus, Components. Creating user environment. Working with files. Transformations and coordinate systems. Moving, rotating and scaling of objects. Aligning, cloning and mirror rotating of objects. Creating array data structures. Selecting and grouping of objects. Using named sets. Working with groups. Creating, positioning and editing of Spline objects. Creating, positioning and editing of Mesh objects. Object modifiers. Cameras, lights, materials. Visualization. Visualization effects. Atmospheric effects.
  - 13. Recommended or required reading
  - 3D Studio Max / M. Матосиян / Инфо Дар 2000г.
  - 3D Studio Max 4 Том 1 / К.Удс, А. Бикало, К. Мъри / Софт Прес 2002г.
  - 3D Studio Max 4 Том 2 / К. Удс, А. Бикало, К. Мъри / Софт Прес 2002г.
  - 14. Planned learning activities and teaching methods: Lectures, lab work course assignments, online contact hours
  - 15. Assessment methods and criteria: Examination students present their finalized course assignments in several versions. They are presented both on paper and on a digital carrier. Assessment criteria include artistic value of the project (composition, colour, form), originality of ideas, the quality of the technical performance, the number of task variants, as well as the design of the presentation.
  - 16. Language of instruction: Bulgarian
  - 17. Work placement: none