

MA IN MULTIMEDIA AND COMPUTER ANIMATION

(Taught in Bulgarian)

Brief summary of the program:

The program offers specialized practical training in the area of the multimedia, the computer aided design, three-dimensional modeling and computer graphics. The training is performed in three basic lines - development and integration of multimedia applications, three-dimensional modeling and design, computer animation. The content and the structure of the training courses reflect the last tendencies in the development of the corresponding technologies. Greater part of the courses is carried out in computer classes and at that, the practical courses are carried out using leading software products and integrated development environments last versions. The lecturers team includes established lecturers, as well as developers with long term practice in the area of computer technologies application. The training goes through courses on digital video editing and special effects, multimedia environment integration, music synthesis and processing, three-dimensional computer animation, computer systems and technologies in the graphic design. The extracurricular forms of learning include projects, practical tasks, independent works and internship.

The program offers a preparatory module for applicants from other educational areas and upgrading semester for candidates, which are holders of “Professional bachelor” degree.

Major and professional qualification:

Major: Multimedia and Computer Animation

Qualification: Master in Multimedia and Computer Animation

Preparatory module

Classroom training courses (credit courses)

CSTM001 Three-Dimensional Modeling 30 h. 3 cr.

CSTM002 Photorealistic Visualization 30 h. 3 cr.

CSTM004 Introduction To Multimedia Technologies 30 h. 3 cr.

CSTM013 Basic Methods for Three-Dimensional Computer Animation 30 h. 3 cr.

CSTM014 Graphic Design 30 h. 3 cr.

INFM004 Operation Systems and Networks 30 h. 3 cr.

INFM006 Software Environments For Web Design 30 h. 3 cr.

Extracurricular forms of learning (credit courses)

CSTM031 Independent work: Three-Dimensional Modeling 30 h. 3 cr.

CSTM032 Independent work: Photorealistic Visualization 30 h. 3 cr.

CSTM033 Independent work: Three-Dimensional Computer Animation 30 h. 3 cr.

CSTM034 Independent work: Introduction to Multimedia Technologies 30 h. 3 cr.

CSTM035 Independent work: Graphic design 30 h. 3 cr.

INFM034 Project: Operation Systems and Networks 30 h. 3 cr.

INFM036 Project: Web Design 30 h. 3 cr.

Program courses:

First year

First semester

Classroom training courses (credit courses)

- CSTM101 Complex Photorealistic Objects Creation Methods 30 h. 3 cr.
- CSTM102 Exercises in Complex Photorealistic Objects Creation Methods 30 h. 3 cr.
- CSTM106 Artistic Design and Fine Arts 30 h. 3 cr.
- CSTM108 Image Digital Analysis and Processing 30 h. 3 cr.
- CSTM204 Music Synthesizing and Processing Software Tools 30 h. 3 cr.
- CSTM207 Geographic Information Systems 30 h. 3 cr.
- CSTM211 Modern Animation Techniques and Practices 30 h. 3 cr.

Extracurricular forms of learning (credit courses)

- CSTM150 Independent work: Complex Photorealistic Objects Creation 30 h. 3 cr.
- CSTM151 Independent work: Complex Photorealistic Objects Development 30 h. 3 cr.
- CSTM155 Independent work: Artistic Design and Fine Arts 30 h. 3 cr.
- CSTM158 Independent work: Image Digital Analysis and Processing 30 h. 3 cr.
- CSTM159 Independent work: Geographic Information Systems 30 h. 3 cr.
- CSTM162 Independent work: Music Synthesizing and Processing Software Tools 30 h. 3 cr.
- CSTM264 Independent work: Modern Animation Techniques and Practices 30 h. 3 cr.

Second semester

Classroom training courses (credit courses)

- CSTM107 Computer Systems and Technologies in Music 30 h. 3 cr.
- CSTM201 Three-Dimensional Computer Animation Methods 30 h. 3 cr.
- CSTM202 Exercises in Three-Dimensional Computer Animation 30 h. 3 cr.
- CSTM203 Computer Systems and Technologies in the Graphic Design 30 h. 3 cr.
- CSTM206 Video Processing and Post-Production 30 h. 3 cr.
- CSTM209 Computer Game Design and Realization 30 h. 3 cr.
- CSTM210 Raster Photorealistic Images Processing 30 h. 3 cr.

Extracurricular forms of learning (credit courses)

- CSTM250 Independent work: Three-Dimensional Computer Animation Methods 30 h. 3 cr.
- CSTM251 Independent work: Three-Dimensional Computer Animation Development 30 h. 3 cr.
- CSTM252 Independent work: Computer Systems in The Graphic Design 30 h. 3 cr.
- CSTM260 Independent work: Video Processing and Post-Production 30 h. 3 cr.
- CSTM261 Independent work: Computer Technologies in Music 30 h. 3 cr.
- CSTM262 Independent work: Computer Game Design 30 h. 3 cr.

CSTM263 Independent work: Raster Photorealistic Images Processing 30 h. 3 cr.

Third semester

Classroom training courses (credit courses)

CSTM103 Multimedia Environments Integration Methods 30 h. 3 cr.

CSTM104 Exercises in Multimedia Environments Integration Methods 30 h. 3 cr.

CSTM301 Digital Video Editing and Special Effects 30 h. 3 cr.

CSTM305 Computer Color Design and Form-Formation 30 h. 3 cr.

CSTM401 Methods and Means For High Quality Visualization of Three-dimensional Scenes 30 h. 3 cr.

CSTM402 Audio and Video Information Compression Methods 30 h. 3 cr.

Extracurricular forms of learning (credit courses)

CSTM450 Internship: Multimedia, Computer Graphics and Animation 150 h. 15 cr.

Upgrading semester

Classroom training courses (credit courses)

CSTM010 Graphic Design of Printed Publications 30 h. 3 cr.

CSTM011 Geometric Modeling 30 h. 3 cr.

CSTM012 Music Program Software 30 h. 3 cr.

CSTM017 Graphic design 30 h. 3 cr.

CSTM018 Classic Animation Techniques 30 h. 3 cr.

CSTM019 Web Servers Control 30 h. 3 cr.

INFM006 INFM006 Software Environments For Web Design 30 h. 3 cr.

Extracurricular forms of learning (credit courses)

CSTM053 Independent work: Graphic Design of Printed Publications 30 h. 3 cr.

CSTM054 Independent work: Geometric modeling 30 h. 3 cr.

CSTM055 Independent work: Music Program Software 30 h. 3 cr.

CSTM056 Independent work: Graphic design 30 h. 3 cr.

CSTM057 Independent work: Classic Animation Techniques 30 h. 3 cr.

CSTM058 Independent work: Web Servers Control 30 h. 3 cr.

INFM036 Project: Web Design 30 h. 3 cr.