ISTINYE UNIVERSITY VOCATIONAL SCHOOL
COMPUTER AIDED DESIGN AND ANIMATION
COURSE DESCRIPTION

1 th Semester Cartoon Animation Applications| ECTS (2+2) 4

This course aims to introduce students to different cartoon and animation techniques. Throughout the semester, students will gain basic knowledge about different techniques such as cartoon techniques, 2d animation, stop motion and cell animation. Theoretical knowledge learned in the course will be supported by application lessons and assignments.The students are expected to have a general idea about all cartoon techniques and to be able to practice at a basic level. It is aimed that the students taking the course will discover the technique that interests them in the field of animation.

1 th Semester 3D Modeling and Texture Coating 1| ECTS (1+3) 4

This course provides a focused exploration of 3D character rigging and animation setup techniques in Maya. Building on the previous CG work in modeling or foundation classes, students learn how to rig a model as an appealing, animatable character with intuitive controls.In 3D modeling and texture coating course, Autodesk Maya program will start from scratch and complete control of the interface of the program 3-D modeling, working with reference visuals, physical design of modeled objects, coating coating, Arnold motor lighting and rendering will be processed. Our Marvelous designer collection will specialize in fabrics and collectibles. The aim of this course is to teach 3D modeling, coating, lighting and rendering.

1 th Semester Organic Modeling and Design 1| ECTS (1+3) 4

This course teaches ZBrush software and CG modeling concepts. The class will be a direct resource for producing material that the studios are looking for, such as video game characters, prop design, and styles that cannot be created by traditional material. Also, the inventiveness of our students will influence how digital characters are designed.

1 th Semester Computer Aided Graphic Design 1| ECTS (1+3) 4

In Computer Aided Graphic Design course, our students will specialize in working with visuals and editing photos in photoshop, vector drawing and illusion works with illustrator, making multi-page designs with indesign and improving themselves in desktop publishing. It is aimed to specialize in graphic design and to teach the necessary programs.

1 th Semester Artistic Anatomy| ECTS (1+3) 4

students will learn the human anatomy in this course. In this course, they will draw the human muscular system and draw anatomy from the model.

2 th Semester Computerized 3D Character Animation | ECTS (2+4) 4

This class, a lab , fosters a critical and research environment where students investigate emerging forms and media technologies to discover new relationships with animation and digital timed footage. Working with cinematic tropes and various animation techniques students explore how to successfully integrate animation into a new kind of poetic relationship. Seeming opposite worlds reach a unique form for a new composite imaging. The act of re-looking allows for a reconsideration with visions that tap into our subconscious storehouse of symbolic thinking. The workshops in this class are designed to give students a place to develop ideas in their beginning stages. Pieces presented in class are encouraged to be short and exercises in understanding the beginning motivations of ideas and where they come from. Areas of exploration include: rephotography, painted film, art and science, media appropriation, multiplane and performance. All forms of animation are accepted.

2 th Semester Computer Aided Animation Drawing | ECTS (1+3) 4

Introduction to hand-drawn Character Animation techniques. To have theoretical and practical knowledge in the field of cartoon. To be able to use the knowledge and skills of cartoons in art and industry. To develop research, observation-experience and evaluation skills in the field of cartoon. To design and apply the cartoon production process. Being a team member and taking responsibility for the cartoon production process. To be able to manage employees under the responsibility of cartoons in production, to be able to lead them. To be able to evaluate the studies related to cartoon film within the framework of the knowledge and skills acquired. To be able to define learning needs in the field of cartoon and manage learning. To be able to communicate with relevant institutions by participating in scientific and artistic studies in the field of cartoon.

2 th Semester 3D Modeling and Texture Coating 2 | ECTS (1+3) 4
In 3D modeling and texture coating course, Autodesk Maya program will start from scratch and complete control of the interface of the program 3-D modeling, working with reference visuals, physical design of modeled objects, coating coating, Arnold motor lighting and rendering will be processed. Our Marvelous designer collection will specialize in fabrics and collectibles. The aim of this course is to teach 3D modeling, coating, lighting and rendering.

2 th Semester Organic Modeling and Design 2| ECTS (1+3) 4
Studets will learn ZBrush, a digital sculpture shaving software that has become the industry standard in 3D character design. Students will be able to make organic modeling and detailing using digital tablet by using graphic tablet. Texture painting, shading and baking will be covered with Substance Painter. For rendering, they will get the 3D model's rendering with Keyshot program. The aim of this course is to teach organic modeling and digital sculpting with ZBrush.

2 th Semester Computer Aided Graphic Design 2 | ECTS (1+3) 4
In Computer Aided Graphic Design course, our students will specialize in working with visuals and editing photos in photoshop, vector drawing and illusion works with illustrator, making multi-page designs with indesign and improving themselves in desktop publishing. It is aimed to specialize in graphic design and to teach the necessary programs.

2 th Semester Internship | ECTS (1+3) 4
Make professional applications. Students put into practice the theoretical knowledge related to their profession of study they have received, in addition to theoretical knowledge applications in the workplace and gain experience to enable you to ensure you get confronted with.

2 th Semester Basic design| ECTS (1+3) 4
Fundamental concepts of figure drawing, with emphasis on application to character animation.
Analysis of the physical structures of the human body, focusing on anatomy, mechanics,
three dimensional conception of form, and observational description.

2 th Semester Advanced Animation 1 Basic design| ECTS (1+3) 4
Beginning advanced character animation with Maya. The goal of the 3D animation production course is to take character animation techniques to an advanced level. Skeleton construction (rigging) is learned.

2 th Semester Character Modeling for the Game | ECTS (1+3) 4
In the character modeling course for the game, our students will learn all stages of the production process of the models used in the games. In ZBrush, Maya and Substance painter program, they will be able to produce 3D models for lowpoly character and environmental design for the game.

3 th Semester Advanced Animation 2 | ECTS (1+3) 4
This course is a continuation of advanced animation techniques. Students who are advanced in rigging and animation develop their animation techniques with application studies. In this course, complex character animation exercises, working with more than one character, appropriate animation in the script and storyboar, working with scenes and sequences are learned. Learn to take part in the team.
The aim of the course is to make students understand the character animation completely, to work with their own reference videos and to make complex animation.

3 th Semester 2D Computerized Cartoon Techniques | ECTS (1+3) 4
The aim of this course is to teach 2b cartoon techniques. Beginning with hand drawing, students will be introduced to the production of cartoons.

3 th Semester Graduation project | ECTS (1+3) 4
Experimental Animation. In this section, students complete production of the short project involving animation that reflects the student's personal aesthetic.

1. th Semester Depertmant Elective
Digital Production and Editing | ECTS (1+3) 4
This course aims to introduce students to digital production and editing techniques. Students will learn editing techniques and computer programs used in digital production. They will produce projects with the theoretical and technical knowledge learned.

Basic Programming (Phyton) | ECTS (1+3) 4
This course has little or no experience in computer programming using the Python programming language aims to prepare non-students for computational thinking as well as software development
is a course. In addition to the elements that make up the Python language, programming logic and software basics of development will also be taught. Lessons are interactive, supported by classroom exercises and will be processed with the active support of the instructor.

Animation Cinema | ECTS (1+3) 4
This course aims to introduce students to animation cinema. Students of the history of animation cinema throughout the semester, will learn from the example of Turkey abroad and animation cinema. In this course, masterpieces of animation cinema will be examined in terms of methods, cinematography, dramaturgy, script and animation techniques.

2. th Semester Depertmant Elective

Motion Graphics
2d motion graphics are produced according to animation rules. Graphic design, typography, illustration and simple character animation is done. Animation exercises for physics are studied.

Art History and Computer Aided Mythological Design
learn art history and make mythological designs. The definition, birth, development, field of Art History as a branch of science and
The relations of branches that help Art History with Art History, architectural works and
the concept of architectural work, understanding the physical environment concepts with visual materials

3. th Semester Depertmant Elective

Visual Effect Design 1
This course is a continuation of digital production and editing. 3b compositing is learned. With the Premier program, it is learned to edit images and sounds, to combine ready-made shots and animations. Green screen, rotoscope, color correction, such as advanced post production techniques are applied.

Character Development
In the character modeling course for the game, our students will learn all stages of the production process of the models used in the games. In ZBrush, Maya and Substance painter program, they will be able to produce 3D models for lowpoly character and environmental design for the game.

Industrial and Architectural Modeling
With the 3D Studio Max program, which is very popular in 3D modeling, they will specialize in architectural and industrial products modeling, rendering, lighting and rendering.

4. th Semester Depertmant Elective

3D Medical Modeling
In the Medical Modeling course, our students will be trained in the modeling of medical devices such as prosthetic modeling and organ modeling and will specialize in the field of medical modeling in the sector.

Visual Effect Design 2
Our students will develop visual effects design (Visual FX) which is one of the most important parts of today's film production with particle simulation, fluid, dynamic etc. They will learn. Houdini FX is a capable procedural, node-based animation program. Visual Effects is the world's most powerful software. The visual effects designer will be one of the most prestigious professions of the future and our students will specialize in visual effects.

3D Computerized Medical Animation
3b motion graphics and animation applications are made for the medical field using particles. Rigging and muscular system, medical animation deformers are learned

Computer Aided Game Design Depertmant Elective
Students learn animation production for the game industry. Character animation and particle animation are learned for the game. Maya learns to transfer animation and rigging to game engines. Particle animation is learned in the game engine.