mdh
University of Applied Sciences

BACHELOR OF ARTS
7 SEMESTERS
FULL-TIME

DIGITAL FILM DESIGN B.A.

DIGITAL FILM DESIGN (B.A.)

1 OVERVIEW

START DATE	1. OCTOBER
LENGTH	7 SEMESTERS
DEGREE	BACHELOR OF ARTS (B.A.)

1.1 PROFESSIONAL PERSPECTIVES

The Digital Film Design course is a practice-oriented Bachelor course that provides students with well-founded, highly specialized production-oriented knowledge and theoretical background knowledge in the areas of 2D and 3D animation, digital compositing, visual effects, dramaturgy, film design and film production management. In this bachelor's degree, basic knowledge is acquired for later work in audiovisual production and specialized through a comprehensive examination of specific methods and techniques used in the audiovisual media sector with a focus on film. In addition, the necessary conception and decision-making skills are imparted through the various project work that accompanies the course.

This course addresses young people interested in film who want to be actively involved in the visual design of companies and digital film effects. Independent creative work techniques and the ways of successful teamwork are taught. The necessary theoretical knowledge is held in lectures and seminars. All practical work is accompanied by exercises and projects, preferably by lecturers who bring experience from their own practical work areas.

The digital film designer in the animation field can design and implement sophisticated 2D and 3D animations. He / she can implement his / her own conceptions with the software or hardware suitable for the requirements, is familiar with the conditions of virtual space and can combine real and virtual image elements in filmic requirements. The extensive knowledge of cinematic possibilities enables the digital film designer to create his / her own animated films and to develop artistically.

In the VFX area, digital film designers participate in the conception of visual effects in pre-production, they oversee the implementation of the conception of visual effects on the film set and edit visual effects in post-production. His / her security in visual design in connection with profound film knowledge, the practical experience in dealing with state-of-the-art technologies and his / her sensitivity for the concerns of the filmmakers characterize the digital film designers. Very familiar with the theory and practice of analog and digital film processing, they analyze the problems of visual effects and edit

this with suitable technology.

The design strengths of the graduates lie in their ability to perceive, evaluate, develop and develop new visual trends and styles.

The fields of activity can be found in video and film studios, in production and post-production companies, in VFX service companies, but also in multimedia and advertising agencies as well as game producers. Your professional goals can be: digital composer, 3D models, texturing shading artist, 3D animator, lighting artist, rigging artist, previs-artist, VFX coordinator, VFX producer, set supervisor, postproduction coordinator.

1.2 ADMISSION REQUIREMENTS

Admission is the general higher education entrance qualification, the technical college entrance qualification or a qualification recognized as equivalent. Studying without a high school diploma is possible according to § 11 BerlHG due to the subject-related university entrance qualification. You should also have a high level of creativity, ingenuity in implementation, the willingness to invest a lot of time and face new personal challenges. You have a great interest in film and audiovisual media.

1.3 APPLICATION PROCEDURE

To register for a bachelor's degree program with an artistic character, you must submit a detailed application (including diplomas and a tabular curriculum vitae with photo) and a folder (possibly digital) with your own creative work samples (10-20).

1.4 STUDY STRUCTURE

The course comprises 7 semesters (standard period of study). The course is divided into the core area and the practical semester (internship).
The 6th semester is a practical semester.The 7th semester ends with the final examination (final thesis) as part of the Bachelor phase..

1.5 TUITION FEES

BERLIN	GERMAN CITIZENS	EU-CITIZENS	NON-EU CITIZENS
Tuition fee*	785,00 EUR/month	4.710 EUR/semester	6.300 EUR/semester
One-time Registration Fee	490 EUR	490 EUR	490 EUR
One-time Examination Fee	1.050 EUR	1.050 EUR	inclusive

*Choose a prepayment option (per year, or in full) and you will receive up to 5% discount on your tuition fees.

2 STUDY GOAL

The subject areas of the course were put together in such a way that the students acquire solid design, software engineering, technological and management-oriented competencies, on the basis of which they can master the diverse professional requirements that are placed on animation, visualization and VFX specialists.

The course includes the following subject areas:

- 1 General Studies (interdisciplinary aspects, industry skills)
- 2 design (design principles, drawing)
- 3 film design and staging (camera and light composition, compositing, film analysis)
- 4 computer graphics (VFX history, modeling, shading, rendering)
- 5 animation (character animation)
- 6 immersive media
- 7 projects (at least 4 large projects)
- 8 Internship semester
- 9 Bachelor degree

2.1 SEMESTER 1

BASICS OF DESIGN, INTRODUCTION TO DIGITAL IMAGE PROCESSING AND COMPUTER GRAPHICS

The students learn and develop important design principles from the areas of visualization, typography, digital image processing, layer-based compositing and photography. They deal particularly intensively with the theory of signs, color and form theory and with perspective drawing. In addition to the practice-oriented content, they deal with the general theoretical basics of scientific work, computer graphics and video and lighting technology. In the required individual and group submissions, students learn the basics of self and team management. You will also gain your first practical experience in the 3D program on the subjects of modeling, shading, texturing, animation, lighting and rendering.

2.2 SEMESTER 2

EXTENDED BASICS OF THREE-DIMENSIONAL DESIGN AND BASICS OF DRAMATURGY

In this semester the students learn other important methods and work steps in the 3D program. As an alternative to layer-based compositing, the students receive an introduction to node-based compositing. The students take the first step towards dramaturgy and staging in the drawing I module (storyboarding and storytelling), in which the basic patterns of various narrative structures for short films and techniques for creating a meaningful storyboard are conveyed. At the end of the semester, the students work exclusively on their solo film project.

2.3 SEMESTER 3

IN-DEPTH FUNDAMENTALS

The students deepen the basics they have already learned and expand their skills in the areas of 3D sculpting based on a 2D template, matchmoving and look development. In the modules Look Development / 3D Tracking and Character Animation 1 a special focus is placed on the development of different looks (from cartoon to photo-realism) and character animation.
In the group project at the end of the semester, the students practice applying their skills to the group and further developing their team skills. The basics for this are laid in the project management lecture. The group size is usually 2-3 people per project group.

2.4 SEMESTER 4

IN-DEPTH FUNDAMENTALS

In addition to further specializations in 3D animation and simulation, the students get to know Houdini, a second 3D software. With Augmented Reality (AR) and Virtual Reality (VR) new technologies are coming to the students in order to expand their specialist knowledge accordingly.

In the film analysis lecture, the students discuss the specifics of the different film genres and analyze films according to their narrative patterns, the montage and their characteristics. The requirements for technical animations, such as B. Machines and an introduction to the Python scripting language in relation to rigging is also part of the 4th semester.

In the group project at the end of the semester, the students can further strengthen their conceptual and practical skills. The group size is usually 3-4 people per project group.

2.5 SEMESTER 5 (ODER 6)

IN-DEPTH FUNDAMENTALS, IMMERSIVE MEDIA

The focus this semester is on immersive media (360 °, virtual reality, and games) and advanced character animation. The basics and in-depth knowledge learned are applied to the immersive media and deepened accordingly. In the VFX in Practice III module, the focus is on the interactions between Real and CGI. In addition, there is a specialization in procedural work techniques in Houdini.

This semester is also concluded with group projects, in which care is taken that the projects meet the current requirements of professional animation and VFX or AR / VR production.

2.6 SEMESTER 6 (OR 5)

PRACTICAL SEMESTER

In the practical semester, students work full-time for at least 20 weeks in a company in the animation or VFX industry. When looking for, selecting and applying to potential employers, students receive active support from the career service of the Mediadesign Hochschule. Learned basics can be used in real projects. During the internship, the students can get to know their preferences and think about possible topics for their bachelor thesis. In a written thesis and a presentation (colloquium), the students document and report on their main activities during the practical semester.

2.7 SEMESTER 7

BACHELOR THESIS (BACHELOR OF ARTS)

The focus in the final semester is on the preparation of the bachelor thesis, which consists of two components. In a written, theoretical part, a self-selected problem is analyzed, the problem focus is narrowed down and possible solutions are well-prepared. This part is more scientifically investigative and shows the ability of the students as future animation and VFX specialists to work problem-oriented and innovatively. The practical part shows the most suitable proposed solution for the problem focus and documents the creative path and its variations.

As an alternative, the students can also create a final film. The type of production and the workflows used in production must be documented and described in a written part. In the colloquium, the students present and defend their bachelor thesis.

Complementary topics of this semester are business formation and research in computer graphics. In the case studies, the students deal with possible Bachelor topics and prepare them scientifically as an exercise for the actual Bachelor thesisis.

3 CURRICULUM

SEMESTER 1	
GENERAL STUDY	- SCIENTIFIC WORK
LAYOUT	- VISUALISATION - TYPOGRAPHY
FILM LAYOUT AND STAGING	- VIDEO AND LIGHT TECHNIQUE, LAYER BASED COMPOSITING
COMPUTER GRAPHICS	- BASICS OF COMPUTER GRAPHICS, VFX HISTORY I - MODELING, SHADING, RENDERING

SEMESTER 2	
LAYOUT	- DRAWING I (STORYBOARDING)
FILM LAYOUT AND STAGING	- CAMERA, LIGHT COMPOSITION, ASSEMBLY TECHNOLOGY - NODE BASED COMPOSITING
COMPUTER GRAPHICS	- CHARACTER (MODELING, RIGGING, ANIMATION)
PROJECTS	- PROJECT I

SEMESTER 3	
GENERAL STUDY	- PROJECT MANAGEMENT
LAYOUT	- DRAWING II (CHARACTER DESIGN, SCULPTING)
FILM LAYOUTAND STAGING	- LOOK DEVELOPMENT - 2D/3D TRACKING
ANIMATION	- CHARACTER ANIMATION I
PROJECTS	- PROJECT II

SEMESTER 4	
FILM LAYOUT AND STAGING	- FILM ANALYSIS
COMPUTER GRAPHICS	- INTRODUCTION TO SIMULATION UND PROCEDURAL WORK TECHNIQUES
ANIMATION	- TECHNICAL ANIMATION
IMMERSIVE MEDIA	- INTRODUCTION VR/AR
PROJECTS	- PROJECT III

SEMESTER 5 OR 6	
FILM LAYOUT AND STAGING	- 360 GRAD FILM UND VIRTUAL REALITY
COMPUTER GRAPHICS	- FX AND DEEPENING PROCEDURAL WORK TECHNIQUES
ANIMATION	- CHARACTER ANIMATION II
IMMERSIVE MEDIA	- CG FOR GAMES, GAME ENGINES
PROJECTS	- PROJECT IV

SEMESTER 6 OR 5	
PRACTICAL SEMESTER	- PRACTICAL SEMESTER AND PRESENTATION

SEMESTER 7	
GENERAL STUDY	- BUSINESS START-UP
COMPUTER GRAPHICS	- RESEARCH IN COMPUTER GRAPHICS
PROJECTS	- CASE STUDIES
BACHELOR DEGREE	- FINAL THESIS AND COLLOQUIUM