



DIGITAL SCENOGRAPHY OF TOMORROW

Postgraduate Programme for
Professionals in Live Entertainment



LAB OF TOMORROW
ENTERTAINMENT INNOVATION HUB

RITCS[®]
Royal Institute for
Theatre, Cinema
& Sound

Postgraduate Programme for Professionals in Live Entertainment

Live entertainment is evolving at an unprecedented pace. Concerts, festivals, immersive experiences, theatre productions and audiovisual shows are becoming increasingly technological, interactive and visually ambitious. Behind this new generation of live experiences, the demand is growing for creatives who can seamlessly combine technology, storytelling and scenography.

With the English-language postgraduate programme **Digital Scenography of Tomorrow**, **RITCS School of Arts**, **Erasmushogeschool Brussels**, and **Lab of Tomorrow**, the European Entertainment Innovation Hub by Tomorrowland, respond to this international evolution.

This unique programme is designed for professionals who want to deepen their expertise in real-time technologies, live visuals, virtual production and digital scenography.

You will learn to work with the same tools and workflows currently used in international live productions and immersive entertainment: **Unreal Engine**, **Resolume**, **Notch**, **MA3**, **Depence**, **TouchDesigner** and **AI-driven content creation**. Not as isolated software courses, but as integrated building blocks within contemporary audiovisual productions.

The programme combines asynchronous online preparation with intensive hands-on practice weeks at the **Lab of Tomorrow in Boom** — **Tomorrowland's innovative ecosystem** for the live entertainment technology sector, where creatives, technologists and entertainment professionals collaborate on the future of live entertainment.

Who is this programme for?

This postgraduate programme was developed for ambitious professionals who want to help shape the future of digital scenography within live entertainment.

The programme is particularly aimed at:

- **Professionals active in live entertainment, festivals, events and performing arts.**
- **Creators working in audiovisual production, multimedia, motion design and gaming.**
- **Creatives seeking to deepen their expertise in real-time workflows and immersive experiences.**
- **Freelancers and professionals who want to specialise in entertainment technology.**

Applicants should have a passion for creating and operating live entertainment shows, combined with at least basic experience in lighting control, real-time content creation or video operation.



Core Modules: Building Your Foundation

FOUR SPECIALISED TECHNICAL MODULES

The core modules form the technical and creative foundation of the programme. Each module combines online preparation with intensive hands-on sessions at the Lab of Tomorrow.

The focus is always on **practical workflows, real-time creation and direct applicability** within professional live productions.



CORE MODULE 1: VIDEO PLAYOUT & CONTROL

In this module, you will learn how professional visual performances are built and controlled within live entertainment environments.

Resolume serves as the central playout system, enabling you to work like professional VJs and visual operators during festivals, concerts and immersive shows. You will also explore real-time effects processing in **Notch** and network-based video distribution through **NDI**.

Topics Covered
▪ Building compositions in Resolume
▪ Sequencing, layering and effects
▪ Projection mapping
▪ Advanced output workflows
▪ MIDI and OSC control
▪ Timecode and synchronisation
▪ Live video inputs
▪ NDI workflows
▪ Real-time effects in Notch
▪ Integration of visuals within live DJ performances

Throughout the workshops, you will gradually develop your own live visual workflow based on a music tracklist. The module concludes with a live performance session where participants perform visuals in real time to music.

Required Equipment

- Personal laptop capable of running Resolume and Notch
- Trial licences for Resolume and Notch are provided

Study Load

- 40 hours online preparation
- 24 hours hands-on workshops at the Lab of Tomorrow

Learn the Tools Behind Tomorrow’s Live Experiences

Work with Unreal Engine, Resolume, MA3, TouchDesigner and AI-driven workflows used throughout the international entertainment industry.

CORE MODULE 2: REAL-TIME 3D

Real-time 3D and virtual production have become essential components of live entertainment, immersive storytelling and audiovisual experiences.

In this module, you will work extensively with **Unreal Engine** and learn how real-time virtual environments are created for live applications.

Topics Covered
▪ Unreal Engine project setup
▪ World building and environment creation
▪ Materials and lighting
▪ Quixel Megascans and Marketplace assets
▪ Animation workflows and Sequencer
▪ Motion design
▪ Blueprint scripting
▪ Interactive real-time applications
▪ Metahumans
▪ Fundamentals of Niagara VFX and procedural workflows
▪ Camera workflows within virtual production

Throughout the module, you will build your own interactive real-time world, ready for live applications and audiovisual integration.

Required Equipment

- High-performance laptop with dedicated GPU
- Unreal Engine software (free of charge)

Study Load

- 40 hours online preparation
- 24 hours hands-on workshops at the Lab of Tomorrow

Where Technology,
Storytelling and Scenography
Merge

Develop immersive experiences that combine real-time visuals, lighting, interaction and performance.

CORE MODULE 3: LIGHTING DESIGN & PREVISUALISATION

Lighting Control, Previs and Entertainment Networks

This module focuses on professional lighting control and real-time visualisation within live entertainment.

You will learn to work with **GrandMA3** and **Depence**, internationally recognised industry standards for festivals, concerts and large-scale audiovisual productions.

You will also gain insight into the network protocols that power modern entertainment technology.

Topics Covered
▪ DMX, Art-Net and sACN
▪ Fixture configuration in MA3
▪ Lighting programming
▪ Show control and macros
▪ Previsualisation workflows in Depence
▪ Integration of Resolume and media servers
▪ Rendering and real-time visualisation
▪ Entertainment networking, including TCP/IP, SMPTE 2110, NDI and SRT

During the workshops, you will analyse existing productions and develop your own integrated previsualisation workflow.

Required Equipment

- Personal laptop capable of running Depence
- Network adapter/dongle
- Access to MA3 software and consoles is provided

Study Load

- 40 hours online preparation
- 24 hours hands-on workshops at the Lab of Tomorrow

Train Inside the Ecosystem of Tomorrowland

Experience intensive hands-on practice weeks at the Lab of Tomorrow, where creatives and technologists are building the future of live entertainment.

CORE MODULE 4: AI CONTENT & TOUCHDESIGNER

Generative AI and Interactive Real-Time Visuals

Artificial intelligence is rapidly transforming the way visuals and content are developed within live entertainment.

In this module, you will explore how AI tools can be used for image generation, storytelling and real-time visual workflows. At the same time, you will be introduced to **TouchDesigner**, a powerful node-based environment for interactive visuals and live graphics.

Topics Covered
▪ Generative AI for image and video creation
▪ AI-assisted storyboarding
▪ Interactive AI workflows
▪ Gaussian Splats
▪ Integration of AI-generated content within Unreal workflows
▪ Ethical, legal and environmental aspects of AI
▪ TouchDesigner interface and node-based programming
▪ Real-time interaction
▪ Performance modes
▪ NDI and Spout workflows
▪ Real-time manipulation of visuals

The module combines experimentation, technology and artistic exploration, culminating in a live visual performance featuring self-generated content.

Required Equipment

- High-performance laptop, preferably with NVIDIA GPU
- TouchDesigner software
- Access to online AI tools

Study Load

- 32 hours hands-on workshops at the Lab of Tomorrow

From Software Skills to Professional Live Workflows

Learn integrated production workflows rather than isolated software tools—the same workflows used at festivals, concerts and audiovisual productions worldwide.

PRODUCTION & MANAGEMENT MODULE

Insights from the Top

In addition to technical expertise, understanding production processes, creative workflows and project management is essential in international live entertainment productions.

As part of this module, you will receive a full year of **Lab of Tomorrow Community Membership**. This includes access to curated community events and talks, as well as one complimentary full studio day at the Lab of Tomorrow.

Through talks, case studies and interactions with industry professionals, you will gain insight into:

- Production and management workflows
- Creative pipelines
- Branding and style guides
- Collaboration within large-scale audiovisual productions
- Workflows behind international festivals and entertainment projects

You will also attend the **Love Tomorrow Event**, where leading experts in technology, entertainment and innovation share their expertise.

The module further includes **exclusive backstage access to the production environments behind the Tomorrowland stages**, as well as a visit to Tomorrowland's headquarters in Antwerp.

Beyond knowledge and inspiration, this module offers direct access to the network and ecosystem behind international live entertainment productions.



Integration and Live Performance

The programme culminates in an intensive, practice-based experience where all tools, workflows and techniques come together.

During a full week, participants work in teams to develop a complete live audiovisual show. Visuals, lighting design, real-time 3D environments, AI-generated content and show control are integrated into one coherent live concept.

Throughout the experience, you will work:

- Under production deadlines
- Within a realistic production environment
- In multidisciplinary teams
- Using professional workflows from the live entertainment industry

The experience simulates the complete production process of an international live show, from concept development and technical integration to real-time execution.

The highlight of the week is a live virtual performance on a digital twin of a real stage, fully synchronised with a set by a professional DJ.

This final module offers a unique opportunity to demonstrate your technical skills, creative vision and collaborative abilities in a realistic production setting.

Learning at the Lab of Tomorrow

The programme takes place at the **Lab of Tomorrow, the European Entertainment Innovation Hub by Tomorrowland**, located in Boom.

You will work in a professional environment equipped with cutting-edge infrastructure for real-time graphics, virtual production, lighting control and audiovisual performance.

The Lab of Tomorrow brings together startups, creatives, technologists and entertainment companies within one ecosystem. As a result, you will not only learn from expert lecturers but also become part of an international network within the live entertainment technology sector.

Career opportunities

The international live entertainment technology sector is actively seeking specialised digital scenographers and real-time creatives.

Upon completion of this postgraduate programme, you will be prepared to work as a:

- Digital Scenographer
- VJ or Live Visual Creator
- Real-Time 3D Artist
- Lighting Designer
- Audiovisual Creative Technologist
- Visual Operator
- Production Creative
- Content Creator for artists, festivals and live productions

Graduates find opportunities with production companies, festivals, theatre organisations, immersive studios, rental companies and international entertainment businesses, or strengthen their own freelance practice with new expertise and workflows.



Practical information

- **Duration:** One semester (October–December or January–June)
- **Language:** English (basic proficiency required)
- **Location:** Lab of Tomorrow, Hoek 76, Unit 200, 2850 Boom, Belgium
- **Maximum participants:** 10
- **Admission requirements:** A graduate degree is required to obtain the official postgraduate diploma. Participants without a graduate degree may still enrol and will receive a certificate of participation instead of the postgraduate diploma.
- **Tuition fee:** €9,875

Studio access and software licences during classes are included.

What Will You Receive?

- Official postgraduate certificate
- Recognised postgraduate diploma
- Certificate of completion
(for participants without a qualifying graduate degree)
- ECTS credits