

**graphic design
& 3D graphics**

COURSES

for individuals and duos

NEW ROUTES, NEW ROUTINES.



Consistently offering the most up-to-date courses is something **25/7** prides itself on. For us it's a real priority. With this in mind, here are some important changes (and benefits) regarding the way projects work within the General Studies modules of the Graphics Design Masterclass.

From now on students will be able to choose a print or digital-focused route starting with module 2: Vector Graphics. If you want to become print-based graphic designer, you now have the option to pick print-related challenges such as packaging, or magazine design. If you want to become a digital designer, your projects could involve designing social media content, or storyboarding challenges. Each module will continue to provide the fundamentals along with your print or digital-focused route. It's this kind of flexibility we know our students value and it's what makes **25/7** unique within its field. The Digital Designer specialisation is a new addition to our curriculum, and open to all students once the General Studies modules are completed.

With regards to our 3D Graphics Masterclass, the 3D modelling course now has a dedicated section for environment modelling. We've also included most of the new features Pixologic added to ZBrush in the past year. Lastly, we've refreshed our Texturing module. This module will no longer include Photoshop, instead welcoming the popular Marmoset Toolbag, and keeping Substance Painter as our main texturing software.

In response to the pandemic we have lowered the price for every module significantly and made space for more students. We will continue to offer our entire curriculum for **DUOs**, where two students study and work cooperatively for the price of one. Seeing the challenges of recent times as an opportunity to innovate and grow, **25/7** encourages its students to make the most of these changes and the good times that are to come!

I wish you all a joyful, productive, and memorable year!
Now, **#BackToSchool**, everyone!


Feri Zsolnai

25/7 Design Studio guides aspiring designers and 3D artists through online, personalised courses that are highly effective, flexible, and up-to-date. Using our own tried-and-true methodology, the project-based courses provide students with opportunities to gain relevant skills, practical knowledge, and to create a professional portfolio that can secure an entrance into the computer graphics industry.

We are starting a paradigm shift in creative career training. Utilising the groundbreaking **25/7 METHOD™** all our courses are built upon, we are changing the way designers and 3D artists study to become professionals.

GUIDED LEARNING

Our tailor-made, modular online courses cover graphic design and 3D graphics from the basics to high-level specialisations.

Undivided attention, valuable support, motivation, and continuous, constructive feedback are the fundamentals in our way of teaching every student.

TRUE MENTORSHIP

Your dedicated mentor focuses on your talent, and helps you find your strengths and unique style.

With your needs targeted and your skills recognised, you will learn how to face challenges with confidence, and how to complete complex tasks on time.

Your mentor will follow and continue to support your career long after you finished your studies.

RELEVANT OUTCOME

Kickstart your career studies with a flexible schedule tailored to your pace.

Learn the latest skills and industry-standard techniques through projects simulating real-life workflows, designed to showcase your knowledge and style in your professional portfolio.

OUR MODULAR MASTERCLASSES

“Feri wants revolution, not evolution.” These were the words a production manager once used to describe my undying urge to improve and optimise everything around me. I still don’t know whether she was right or not, but one thing is certain: I am not the type of person who waits until things start slowly and unnoticeably changing by themselves.

The new, modular structure we introduced in 2020 for both masterclasses as part of our **25/7 METHOD™** has proven to be very efficient, and quite popular.

The modules are organised into **GENERAL STUDIES** and **ADVANCED STUDIES**. Most of these depend on one another, as seen in our diagram on the right. →

The General Studies modules are numbered. This is because they must be taken in order, while the Advanced Studies modules can be taken in the order you choose (with the exception of Character Animation, which is built upon Character Rigging, and Digital Design II, which is similarly built upon Digital Design I).

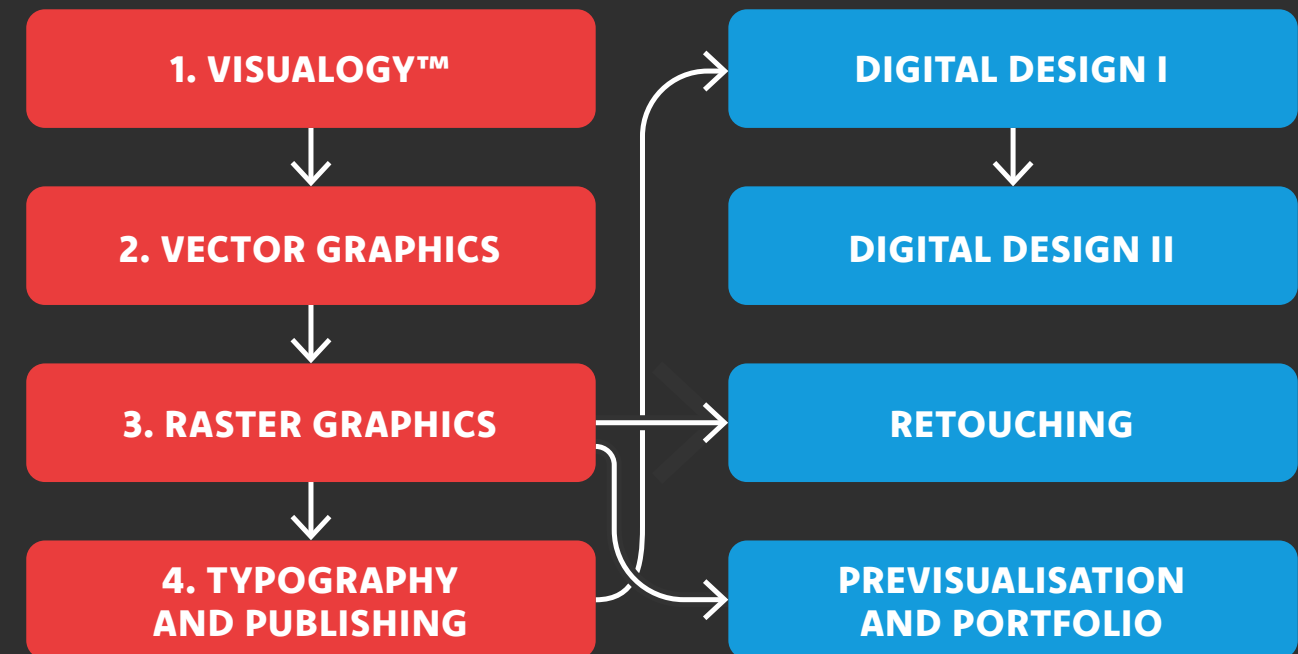
In order to take the Advanced Studies modules, one must first complete the required General Studies, or prove their equivalent knowledge.

Completing all 8 modules concludes a masterclass, and earns you a special certificate from 25/7 Design Studio, along with a lot of praise and celebration!

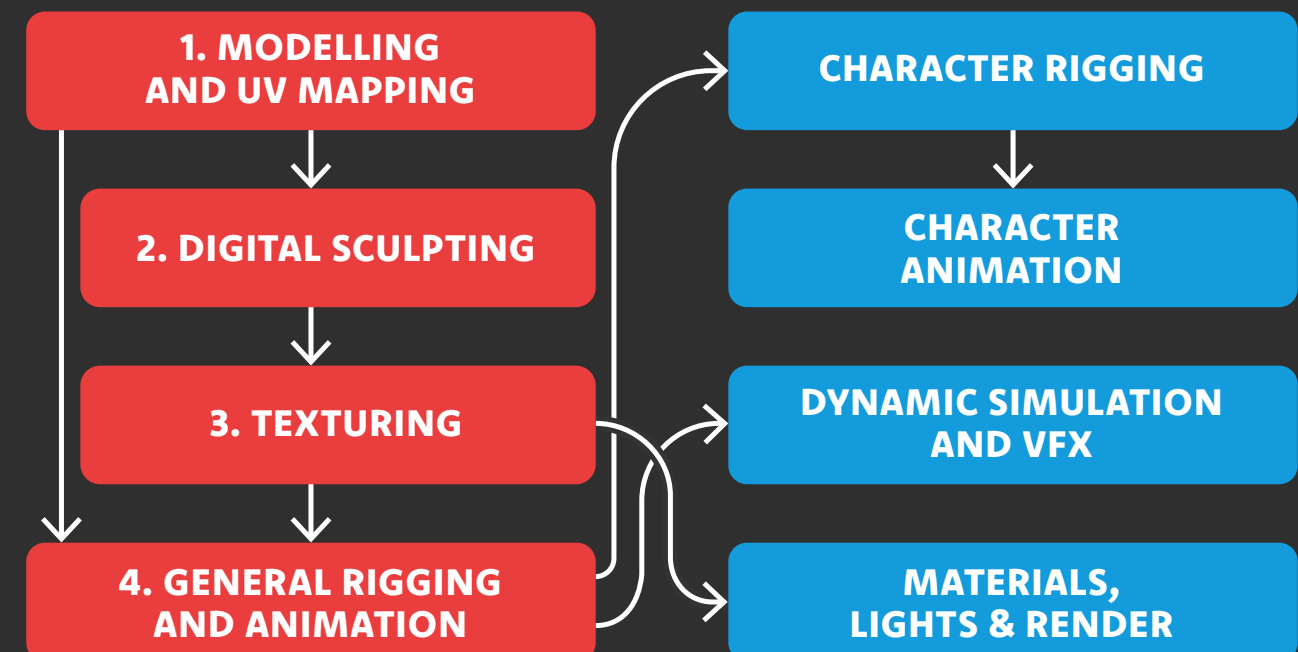
On the following pages you will find detailed information on each module. If you have any questions, don’t be shy. Contact us! We’re always happy to answer.

info@257designstudio.com

THE GRAPHIC DESIGN MASTERCLASS — Σ 116 WEEKS



THE 3D GRAPHICS MASTERCLASS — Σ 180 WEEKS



graphic design

noun : the art or profession of using design elements (such as typography and images)
to convey information or create an effect

THE GRAPHIC DESIGN MASTERCLASS

GENERAL STUDIES

1. Visualogy™
2. Vector Graphics
3. Raster Graphics
4. Typography and Publishing

ADVANCED STUDIES

- Digital Design I
- Digital Design II
- Retouching
- Previsualisation and Portfolio

CLASS RECORDINGS ARE AVAILABLE!

You can get all your personal lessons as video files, complete with screen recordings and camera views, in full HD resolution, for just £9 per lesson.

1. VISUALOGY™

12 WEEKS

What is this module about?

Originally, the Visualogy™ course was developed for professional photographers, designers and visual artists who started out in their professions without previously studying design theory. It proved to be one of our most popular courses, so we decided to make it the starting point of the Graphic Design Masterclass.

What are the requirements for this module?

A stable broadband connection, AnyMeeting with video and audio capabilities, a phone that can take pictures or a camera, and anything capable of running the Microsoft OneDrive app. Otherwise, the whole module is based on conversation, analyses, a constant exchange of opinions and examples, with no software studies or computer techniques involved. Think of it as a personalised theoretical workshop.

Whom is it recommended for?

As the first of the General Studies modules in the Graphic Design Masterclass, it is a prerequisite if you want to study to become a professional digital or print designer, DTP operator, webdesigner, UI & UX designer, or retoucher.

As a standalone module, it is recommended for anyone interested in design theory; and the designers, visual artists, and photographers who want to tidy up what's in their heads about composition, colour, style, and interpretation.

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

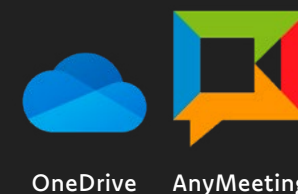
DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



OneDrive

AnyMeeting

THEMATICS

INTRODUCTION¹

Setup, warm-up, masterclass thematics, and career-related questions.

ANALYSES OF DESIGN²

The three approaches of design. Analysis of examples. From like/dislike to good/bad. The importance of context.

SYMBOLS AND ASSOCIATIONS

Symbols of the Christian culture. Colour as a symbol. Modern symbols. One and multiple step associations. Reverse engineering symbols in examples.

VISION AND MESSAGE I-II.

Analysis of posters and examples of fine art. The similarities of literal, audiovisual and commercial visions. The relationship of vision and message. Some anxiety marketing.

COLOUR AND LIGHT

Basic colour theory. The emotional impact of colour. Black and white: colour vs. contrast. Shadow and occlusion. Specularity and reflection. Transparency and translucency. Refractive distortion. Chromatic aberration. Subsurface scattering.

PROJECTION AND PERSPECTIVE

Orthographic projections. Axonometry. One, two and three point perspective. 2.5D. Foreshortening. The relationship of distortion and size.

COMPOSITION I-II.

The golden ratio and the Fibonacci spiral in nature and in art. The rule of thirds. The balance of light and shadow. Geometry and shape. Whitespace and negative space. Analysis of student materials.

THE ETHICS OF MANIPULATION

Cause and effect of intentional visual manipulation techniques.

PERCEPTION, BELIEF, REALITY

The psychological background of visual perception.

STYLE³

Age and style. Elegance versus business elegance. The good and the bad kind of trash. Mediocrity, or the absence of style. Fashion, extravaganza and art. Analysis of student materials.

THE WRITTEN WORLD⁴

The different kinds of typefaces. The basics of typography. Ligatures and decorations. Text as a visual element.

¹ This is the first lesson for students of the complete General Studies.

² This is the first lesson for students who only take the Visualogy™ module.

³ This is the last lesson of this module for students of the complete General Studies, as the next subject is discussed in detail in **General Studies 4. Typography and Publishing**.

⁴ This lesson is only for students who only take the Visualogy™ module.

2. VECTOR GRAPHICS

16 WEEKS

What is this module about?

In this module, you'll be introduced to visual identity design through the use of vector graphics. You will create a brand, design a logo, and learn the practical application of it by designing the packaging and a display for a certain product. Concluding this project, you will either build a paper maquette of your packaging and display, or design contents for a Facebook product page and layout for a landing page.

What are the requirements for this module?

At this point in the masterclass you will need access to Adobe Creative Cloud¹, and a computer that can run Illustrator. Since you will be building a maquette, you will also need basic tools, like scissors, glue, and a ruler. We also recommend having a dotted notebook and some good quality pencils and an eraser.

Whom is it recommended for?

As the second of the General Studies modules in the Graphic Design Masterclass, it is a must for every student who wants to study vector graphics, basic visual identity design, logo design and branding, basic packaging design, and maquette showcasing. This module is also a prerequisite for the **Raster Graphics** module.

¹ For Creative Cloud subscription options, visit the [Adobe website](#).

Length and Price

The module ideally takes 16 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×4 (£1104)

DUOS: (paid in 3 installments)

£138 ×4 (£552) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Bridge



Illustrator

THEMATICS

FILE MANAGEMENT AND USER INTERFACE

Preferences of Bridge and Illustrator. Synchronizing colour space. Setting up our workspace in Illustrator.

BASIC VECTOR GRAPHICS

Path and shape. Stroke and fill. Bézier curves. Compound paths.

ADVANCED VECTOR GRAPHICS

The Shapebuilder. The Width Tool. Gradients. Recolour artwork. Using layers.

ISOMETRIC DRAWING

Using actions. Drawing in isometric 3D.

LOGO AND IDENTITY

Rules of logo design. Preliminary research. Sketching a logo.

PROJECT “HIMALAYA”—GENERAL CHALLENGE

Research 3 different target groups. Create 3 concepts.
Design the identity for the concept you picked.

MESH TOOL & SYMBOLS

Using the Mesh Tool and the Symbol Spray to create sophisticated vectorgraphics.

PATTERNS, STYLES AND BRUSHES

Creating and applying patterns, brush styles and object styles.

MASKING AND TRANSPARENCY

Different uses of masks and basic transparency effects.

WORKING WITH TYPE

Understanding fonts. Artistic and Area Type. Type on a path. Roman hanging punctuation. Snap and align to glyph.

DISTORTIONS

Warps and distortion effects.



PROJECT “HIMALAYA”—PRINT CHALLENGE

Design a display and the packaging for your product.
Build a maquette.



PROJECT “HIMALAYA”—DIGITAL CHALLENGE

Design a Facebook post and create social media mutations for your product. Create a layout for a landing page.

3. RASTER GRAPHICS

12 WEEKS

What is this module about?

In this module, you're making friends with the industry's most misunderstood tool: Adobe Photoshop. You will learn how to fix, manipulate, and retouch photographs, and will design a billboard from start to finish that will be added to your portfolio once completed. You will also learn how to handle colour conversions, and how to deal with image resolution.

What are the requirements for this module?

You will need access to Adobe Creative Cloud¹, and a computer that can run Photoshop. A pen tablet (like the Wacom Intuos series) is required for masking and retouching work. Please note that an iPad Pro + Apple Pencil will only be sufficient if Photoshop is running natively on your iPad Pro and you are able to share your iPad Pro screen via AnyMeeting.

Whom is it recommended for?

As the third of the General Studies modules in the Graphic Design Masterclass, it is a must for every student who wants to study image manipulation, retouching, and the process of designing for print. This module is a prerequisite for the **Typography and Publishing** module, which concludes the General Studies section in this masterclass.

Completion of this module also grants access to **Retouching** and **Previsualisation and Portfolio**.

¹ For Creative Cloud subscription options, visit the [Adobe website](#).

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

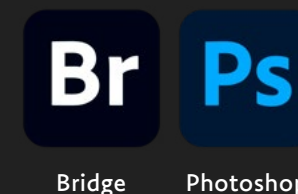
DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Bridge

Photoshop

THEMATICS

WORKING WITH BITMAPS

RGB, Index and CMYK. Colour conversions. Understanding resolution.

INTRODUCING PHOTOSHOP

Layers and channels. Transformations. Artboards in Photoshop.

BRUSHES

Working with brushes. Finetuning brush settings. Opacity vs Flow.

BASIC HEALING AND CLONING

The basics of cloning and Frankensteining. Understanding content-aware tools.

SELECTIONS AND MASKS

The Lasso and the Quick Selection Tool. Select and Mask. Colour-based selections. Select subject. The Paths palette. Creating and modifying vector masks. Sky replacement.

PROJECT “ADVERT”—GENERAL CHALLENGE

Pitch the advert in 3 directions. Create a moodboard.
Prepare the visual elements.

ADJUSTMENT LAYERS

Advanced layer management and non-destructive image editing.

BLENDING MODES

The everyday usage of blending modes.

AUTOMATION AND LINKING

Recording and using actions in Photoshop and Bridge. All about smart objects.

LAYER EFFECTS

An overview of the layer effects and their usage. Creating complex effects.

PERSPECTIVITY IN PHOTOSHOP

Perspective Warp and Vanishing Point.

FILTERS

Different kinds of Blur, Noise and Sharpen. Neutral filters.



PROJECT “ADVERT”—PRINT CHALLENGE

Design a billboard. Make a magazine ad mutation.
Do preflight and prepress.



PROJECT “ADVERT”—DIGITAL CHALLENGE

Design a social media advert. Make a newsletter mutation.
Create a storyboard for a Youtube ad spot.

4. TYPOGRAPHY AND PUBLISHING

16 WEEKS

What is this module about?

Concluding the General Studies of the Graphic Design Masterclass, you will learn typography, layout design, and prepress. You will have two projects to complete: a technical challenge, and a design challenge. In the latter, you will use the knowledge and experience you gained during your General Studies, and will design a magazine for your portfolio from scratch, complete with branding, original content, and advertisements.

What are the requirements for this module?

You will need access to Adobe Creative Cloud¹ and a computer that can run Bridge, Illustrator, Photoshop, InDesign, and Acrobat simultaneously. Make sure your computer will be able to handle the job. The final project is fairly time-intensive, so please keep this in mind.

Whom is it recommended for?

By completing this module (along with the previous three) you will have the tools and understanding required to start your graphic designer career. You will also have three original projects in your portfolio, showcasing your various skills, along with your style.

This module grants access to [Digital Design I](#).

¹ For Creative Cloud subscription options, visit the [Adobe website](#).

Length and Price

The module ideally takes 16 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×4 (£1104)

DUOS: (paid in 3 installments)

£138 ×4 (£552) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Bridge



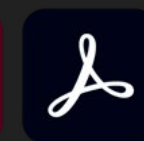
Illustrator



Photoshop



InDesign



Acrobat DC

THEMATICS

INDESIGN

The New Document dialogue. Trim, margin, bleed, and slug. Facing pages. Output black and other mysteries.

THE GRAPHIC DESIGNER'S ALPHABET

An autopsy of typefaces. Font types and styles. The Adobe Typekit.

THE CHARACTER PALETTE

Leading, tracking and kerning. Ligatures and other opentype features. Limitations on the usage of tracking and horizontal scale.

THE PARAGRAPH PALETTE

Alignments and indents. The single-line and the paragraph composer. Document grid usage. Optical margin alignment.

PARAGRAPH AND CHARACTER STYLES

Character formatting. Indents and spacing. Tabs. Rules, borders and shading. Hyphenation. Bullets and numbering. Drop caps and nested styles.

SUB-EDITING AND AUTOMATION WITH GREP

Find/Change Text vs Find/Change GREP. The usage of GREP in paragraph styles. Workflow: sub-editing, editing and proofreading.

USING COLOUR IN INDESIGN

Colour and Tint. Swatches and CC Libraries. The Adobe Colour Exchange.

MASTERS AND SECTIONS

The Pages palette. Master pages, sections and numbering.

PROJECT “ELAN”—GENERAL CHALLENGE

A thorough analysis and preparation of a 24-page brochure.
Recreation of and improvement on the 24-page brochure.

WORKING WITH TABLES AND OBJECTS

Creating, styling and designing tables and objects. Text wrap. Subject detection.

PROJECT “MAGAZINE”—GENERAL CHALLENGE

Create the contents. Gather and create imagery. Prepare all elements.

PREPRESS

Historical tales of past struggles, and how modern prepress works.

INTERACTIVE FEATURES

Interactive features in InDesign and Acrobat.

DIGITAL PUBLISHING

Ebook-specific layout and features. Publish online.



PROJECT “MAGAZINE”—PRINT CHALLENGE

Edit the contents for purpose. Design cover, navigation and structure.
Flow text. Preflight & prepress for printing. Export to PDF.



PROJECT “MAGAZINE”—DIGITAL CHALLENGE

Edit the contents for purpose. Create a liquid layout.
Design interactive navigation. Flow text and inline images.
Preflight and preview on devices. Publish digitally.

DIGITAL DESIGN I

24 WEEKS

What is this module about?

Digital design collects the most sought-after professions in the graphic design business today. Rooted in (the now old-fashioned term) webdesign or digital layouting, it has grown into a rich career path that among others includes user interface and experience, content, product, and application design. This module introduces the theoretical and practical aspects of the above-mentioned areas, using industry-standard software and methods that are easily adaptable to other applications in this highly competitive and exciting industry.

Important: this is not a webdeveloper course.

What are the requirements for this module?

Completion of the **Typography and Publishing** module (or demonstrable knowledge) is required for this one. No coding knowledge is required. You will need access to Adobe Creative Cloud¹, and a computer that can run it. A smartphone is also required to test the prototype created in Adobe XD on mobile devices, using the Adobe XD mobile app.

Whom is it recommended for?

Graphic designers who wish to become digital designers, and established print designers who want to broaden their expertise with professional output to digital platforms.

¹ For Creative Cloud subscription options, visit the [Adobe website](#).

Length and Price

The module ideally takes 24 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 6 installments)

£276 ×6 (£1656)

DUOS: (paid in 3 installments)

£138 ×6 (£828) /**student**

Extra lesson (90 MINUTES):

£69

Software We Use



Bridge

Illustrator

Photoshop

Adobe XD

THEMATICS

This part is being updated. Please check back later.

DIGITAL DESIGN II

12 WEEKS

What is this module about?

Building upon the subjects studied in Digital Design I, this module is as close to a workshop as possible. We will design a website using Adobe XD for the very popular Wordpress platform.

Important: this is not a webdeveloper course.

What are the requirements for this module?

Completion of the [Digital Design I](#) module (or demonstrable knowledge) is required for this one. No coding knowledge is required.

You will need access to Adobe Creative Cloud¹, and a computer that can run it. A smartphone is also required to test the prototype created in Adobe XD on mobile devices, using the Adobe XD mobile app.

Whom is it recommended for?

This module is a very practical, project-focused exercise for digital designers who wish to be able to create complete websites that are built using a website builder (in our case, Wordpress).

¹ For Creative Cloud subscription options, visit the [Adobe website](#).

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Bridge



Adobe XD



Wordpress

THEMATICS

This part is being updated. Please check back later.

RETOUCHING

12 WEEKS

What is this module about?

In this module, you will learn how to use Camera Raw to quickly and efficiently retouch images, and will see the streamlining possibilities of Lightroom as well as learn how to work with large amounts of pictures, take a peak into HDR territory, and learn professional retouching techniques that are usually used for high-end beauty photography.

What are the requirements for this module?

The **Raster Graphics** module (or its equivalent in Photoshop usage and image manipulation techniques) is a prerequisite for this module, because we'll skip the basics.

Photographers can use their own images to practice throughout this course.

You'll need access to Adobe Creative Cloud¹, and a computer that can run Lightroom and Photoshop. This module also requires a pen tablet (e.g. the Wacom Intuos series).

Whom is it recommended for?

The techniques and methods included in this module will benefit DTP operators and graphic or visual designers, and of course, any portrait, documentary, and wedding photographer (just to name a few directions) who wants to keep their retouching workflow in-house.

This is also a must for those seeking a career in professional retouching.

¹ For Creative Cloud subscription options, visit the [Adobe website](#).

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

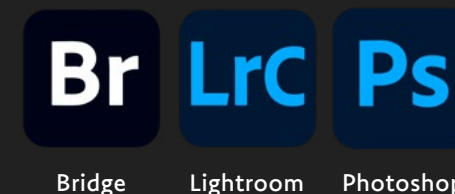
DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Bridge

Lightroom

Photoshop

THEMATICS

CAMERA RAW FEATURES

Preview modes in Camera Raw. The White Balance Tool. The Targeted Adjustment Tool. The healing tools in Camera Raw. The Adjustment Brush and the masking tools.

RETOUCHING WITH CAMERA RAW

Dealing with moire and noise. Creating faux duotones with split toning. Complex masking using the Adjustment Brush in combination with the Radial and the Gradient Filter. Vignetting and lens corrections.

HEALING IN PHOTOSHOP

Recap of the healing toolset. The Dodge and the Burn tool. Fixing dust and scratches with Dust And Scratches.

FRANKENSTEINING

Replacing parts of an image with parts taken from another, and matching the pieces together.

RETOUCHING IN LIGHTROOM

Basic, quick, repeatable retouching techniques in Lightroom.

STREAMLINING IN BRIDGE AND IN LIGHTROOM

How to manage hundreds of images efficiently.

HIGH DYNAMIC RANGE IMAGERY

Understanding HDR images, and processing them in Lightroom and Photoshop.

FAKING DEPTH OF FIELD IN PHOTOSHOP

Using software generated depth maps, and creating them manually in order to achieve a post production depth of field effect.

PORTRAIT RETOUCHING IN PHOTOSHOP

Beauty retouch workflows involving frequency separation, dodge&burn technique, and the inverted high-pass trick.

PROJECT “GRANDMOTHER”

Cleaning and fixing the scan of an old, damaged photograph in Photoshop.

PROJECT “CHIPPENDALE”

Clean up and retouch an image. Frankenstein parts from another.

PROJECT “BEAUTIFUL”

High-end retouching of a professional portrait.

PREVISUALISATION AND PORTFOLIO

12 WEEKS

What is this module about?

It's all about previsualisation and portfolio production. You will learn how to create professional mock-ups in Photoshop, how to use 3D graphics to previsualise branding and product design, how to utilise Dimension's features, and how to organise and present your work with [Bēhance](#) and [Adobe Portfolio](#).

What are the requirements for this module?

Completion of the first three **General Studies** modules, ending with **Raster Graphics** is a must as you will need good Photoshop skills, and a good understanding of vector graphics, light and colour theory, and composition. You will need access to Adobe Creative Cloud¹, and a computer that can run Photoshop and Dimension.

Whom is it recommended for?

This is a niche module for graphic designers, especially those who do not want to learn serious 3D skills, but still want to be able to create their own mock-ups and previsualisations (usually warmly welcomed from the client side). On top of that, the module has very useful and practical methods of portfolio production, and the theoretical background on what and how to showcase, especially when hunting for a job, or new clients.

¹ For Creative Cloud subscription options, visit the [Adobe website](#).

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Bēhance

Portfolio

Photoshop

Dimension

THEMATICS

3D GRAPHICS 101

An introduction to 3D graphics, with the necessary terms and theory we're going to use. Components of 3D objects. A definition of material, texture and UV map.

MODELLING IN PHOTOSHOP

Navigating 3D space. Extrusions. Understanding material attributes. Adding textures. Creating a solid of revolution.

SCENE AND LIGHTING SETUP IN PHOTOSHOP

Adding a background to the scene. Creating matching 3D drop shadow on a 2D image. Understanding Image Based Lighting.

USING 3RD PARTY MODELS

Importing OBJ's and textures. Incorporating 3D objects into 2D images. Matching perspective, light and shadow.

DIMENSION

Understanding navigation and the scene structure in Dimension. Adding a model and applying materials. Importing textures as decals. Matching perspective and lighting. Rendering.

PROJECT SHOWCASE

Choosing and preparing images about the evolution of project "Magazine". Understanding and using professional mock-ups.

ANALYSES OF PORTFOLIOS

Looking at trend and content in various online portfolios.

USING BĒHANCE AND ADOBE PORTFOLIO TOGETHER

Designing the Adobe Portfolio. Understanding navigation and dynamic content.

PROJECT "CAOL ILA"

Creating a Caol Ila box and bottle in Photoshop. Setting up materials and adding textures. Creating 3D type. Adding a background and harmonising IBL. Rendering.

PROJECT "MAGAZINE SHOWCASE"

Creating the final images to be showcased. Creating a mock-up template from scratch and using it for the magazine. Publishing the project on Bēhance.

PROJECT "PORTFOLIO"—STEP ONE

Planning the portfolio content by choosing a trend, and making an educated guess to meet the interests of the target company/clientele.

PROJECT "PORTFOLIO"—FINAL STEP

Uploading projects to Bēhance. Comforming the online content to the Adobe Portfolio design. Finalising, testing, and publishing the portfolio.

3D graphics

noun : the creation, display and manipulation of objects
in the computer in three dimensions

THE 3D GRAPHICS MASTERCLASS

GENERAL STUDIES

1. Modelling and UV Mapping
2. Digital Sculpting
3. Texturing
4. General Rigging and Animation

ADVANCED STUDIES

Character Rigging
Character Animation
Dynamic Simulation and VFX
Materials, Lights & Render

CLASS RECORDINGS ARE AVAILABLE!

You can get all your personal lessons as video files, complete with screen recordings and camera views, in full HD resolution, for just £9 per lesson.

1. MODELLING AND UV MAPPING

48 WEEKS

What is this module about?

In this lengthy module you will learn low- and high-poly modelling, basic NURBS modelling, and hard surface modelling. We will also venture into organic modelling territory, covering silhouette- and box-based character modelling in low- and high-poly counts, anatomically accurate and animation-friendly topology, sculpting in Maya, retopo, and UV mapping.

What are the requirements for this module?

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, a HD or UHD monitor, and a pen tablet (e.g. the Wacom Intuos series). You will also need a Maya¹ license, and some kind of anatomical atlas or app wouldn't hurt as well.

Whom is it recommended for?

Every single 3D specialisation is built upon a thorough understanding of how 3D objects are structured. The texture artist needs to understand the UV map, the rigger and the animator need appropriate topology; the list goes on.

This module serves as an entryway into 3D graphics—one of the most prolific industries of our time. Whether you want to work in feature production, video game development, or just want to level up your skillset as a graphic designer, this is the right way to start.

¹ For Maya subscription options, visit the [Autodesk website](#).
To check if you're eligible for a much more affordable Maya Indie license, [click here](#).

Length and Price

The module ideally takes 48 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 12 installments)

£276 ×12 (£3312)

DUOS: (paid in 12 installments)

£138 ×12 (£1656) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Maya

THEMATICS

THE INTERFACE

The menus and the Hotbox. Hotkeys and Marking Menus. Navigation.

FUNDAMENTALS

Working with primitives. The Channel Box & the Attribute Editor. Translate, Move, Scale. The Pivot. Snapping. The polygonal components. Nodes. The Dependency Graph. Non-linear history.

TOOLS OF MODIFICATION

Extrude. Multi-Cut. Append to polygon. Edge loops & Edge rings. The Modelling Toolkit. Symmetry. The Crease tool. Soft & Hard edges. Smooth Mesh Preview. The Smooth tool. Lattice and the Non-linear deformers.

UV MAPPING

The UV editor and the UV Toolkit. Artist-friendly UV mapping.

NURBS BASICS

EP & CV curves. Surface generation. The NURBS components. Editing curves and surfaces. Trimming. Output to polygon. Modelling a NURBS ashtray.

KITBASHING

Create environmental assets that can be used to build a scene. Plan the project, calculate the time, set milestones and execute.

ROCKS, RUINS, AND FOLIAGE

Model rocky assets and ruined building parts. Create low-poly plants, trees and foliage, utilising alpha maps.

PAINT FX

The Content Browser. Seed. Brush attributes. Convert to polygons.

ORGANIC MODELLING

Create polygon tool. Make Live. Quad Draw. Basic retopology. Blocking a humanoid character.

TOPOLOGY I

Creating topology that supports the anatomical shapes of a character.

DETAILING IN STEPS

When and how to smooth the model? Creating details that affect the silhouette. Using the Sculpting toolset to create surface detail and enhance shape.

TOPOLOGY II: RETOPO

Creating animation-friendly, low-poly topology using Quad Draw.

PROJECT “VESSEL”

Choose the concept art for a hard-surface vehicle. Start blocking. Creating details. Cleaning up unnecessary topology. Finishing the model.

PROJECT “TROPHY”

Pick an animal, gather reference, and build its head, starting with a silhouette. Then create the UV map for it.

PROJECT “SCENERY”

Create all the objects that you will use to build an environment to host your vessel and the character you’ll create in part II of this module. Create UV maps for every object that you have in this project, and build the final scene with regards to your vessel and future character model.

PROJECT “ROLE MODEL”

Choose the concept art for your character. Build and sculpt a high-poly model. Create a low-poly model by retopologising the high-poly model. Do the UV mapping on the retopologised mesh.

2. DIGITAL SCULPTING

24 WEEKS

What is this module about?

From detailing models imported from other applications, to creating sculptures from scratch, here you will be introduced to a plethora of tools ZBrush offers. You will learn how to use this incredible technique to create high quality artwork, and how to use ZBrush together with Maya.

What are the requirements for this module?

Completion of the **Modelling and UV Mapping** module or a presentation of appropriate modelling and UV mapping skills is required for this module.

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, a HD or UHD monitor, and a pen tablet (e.g. the Wacom Intuos series). You will also need a ZBrush¹ and a Maya² license.

Whom is it recommended for?

Digital sculpting is the next best thing after 3D modelling. It allows you to add incredible detail to your models, and create 3D concepts with tools that are not as technical as the traditional 3D toolset. It is perfect to create models for 3D printing, and is now becoming a standard part of every 3D modeller's skillset.

¹ For ZBrush subscription options, visit the [Pixologic website](#).

² For Maya subscription options, visit the [Autodesk website](#).
To check if you're eligible for a much more affordable Maya Indie license, [click here](#).

Length and Price

The module ideally takes 24 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×6 (£1656)

DUOS: (paid in 3 installments)

£138 ×6 (£828) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



ZBrush

Maya

THEMATICS

THE ZBRUSH INTERFACE

Navigation. Custom UI. Pen tablet setup. Projects, documents, and tools.

OBJECT MANIPULATION

Edit mode. The Gizmo. Hiding parts of the model. Applying and modifying deformers.

BASIC BRUSHES

Brush palette. Standard. DamStandard. Clay brushes. Dynamic draw size. Move and Move Topological. Flatten. Inflate. SnakeHook. Backface masking. LazyMouse. Smooth brushes. Using alphas.

MULTIRES MODELLING

Subdivision levels and geometry resolution. Dynamic subdivision. Creasing.

INSERT MULTIMESH AND CURVE BRUSHES

IMM brushes and Z intensity. Creating IMM brushes. Curve mode. Curve brushes.

MASKS AND POLYGROUPS

Manual masking. Generating masks. Creating and managing polygroups. Masking by topology. Splitting. The MaskMesh tools.

SUBTOOLS

Append and delete. SubTool Master. MultiAppend. Split, merge, and mergedown. Extract. Live Booleans. DS Div Boolean mesh. T Pose Mesh & T Pose|SubT.

BASEMESHERS & ARMATURES

Primitives and Mannequins. Zspheres. ZSketch. Adaptive Skin & Polymesh 3D.

DYNAMESH AND SCULPTRIS PRO

Dynamesh resolution and model size. DM booleans. Sculptri Pro: Move vs Snakehook. Adaptive size / Combined mode. More brushes.

MODELLING IN ZBRUSH

ZModeler. Initialize. Deformers in the Gizmo. Project Primitive.

ADVANCED BRUSHES

XTractor. MeshBalloon. MeshProject. MeshExtrude. MeshInsert Dot. The Cloth brushes. CurveAlpha. CurveFlatSnap. ExtrudeProfile.

RETOPO AND UV MAPPING

Topology brush. ZRemesher. Projecting detail. UV Master. Morph UV. Polygroup-based UV layout. Control Painting. ZBrush/Maya workflow.

MATERIALS, TEXTURES, COLOUR, AND LIGHTING

Applying and locking materials. The Paint brush. Polypainting. Spotlight. Noisemaker. Fibermesh. The Multi-Map Exporter. MatCap and LightCap.

PRESENTATION

Posing with masks. Transpose Master. BPR and NPR. The Turntabler. Baking textures, normal maps and exporting for 3rd party renderers.

PROJECT “PLUSHIE”

Sculpt a plushie with multiple subdivision levels.

PROJECT “DRONE”

Create a flying drone using all of (and only) the following techniques:

ProjectPrimitive, Meshballoon, Meshextrude, ZModeler, Thick Skin, EdgeLoop.

PROJECT “REPTILIAN”

Sculpt a hyper-realistic reptilian in high detail.

Assign materials and create textures for the reptilian. Optimise it for posing.

3. TEXTURING

24 WEEKS

What is this module about?

Texturing is a crucial part of 3D graphics. In this module, you will dig into the physically based shading (PBS) workflow, using industry-standard tools: the Adobe Substance 3D Painter, the Substance 3D Sampler, and the Marmoset Toolbag.

What are the requirements for this module?

Completion of the **Modelling and UV Mapping** module, the **Digital Sculpting** module, or a presentation of appropriate modelling, UV mapping skills and proficiency in ZBrush are required for this module.

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, a HD or UHD monitor, and a pen tablet (e.g. the Wacom Intuos series). You will also need a Substance 3D Texturing¹, a Maya², and a Marmoset Toolbag license³.

Whom is it recommended for?

Anyone who wants to know more than just modelling, and who wants to work for smaller studios, where it is more common to have one artist create the whole model, complete with maps and textures. This module grants access to the **Materials, Lights & Render** course.

- ¹ For a Substance 3D Texturing subscription, visit the [Adobe website](#).
- ² For Maya subscription options, visit the [Autodesk website](#).
To check if you're eligible for a much more affordable Maya Indie license, [click here](#).
- ³ For a Marmoset Toolbag subscription, visit the [Marmoset website](#).

Length and Price

The module ideally takes 24 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 6 installments)

£276 ×6 (£1656)

DUOS: (paid in 6 installments)

£138 ×6 (£828) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



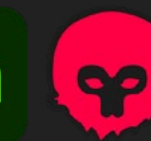
Maya



Substance
3D Painter



Substance
3D Sampler



Marmoset
Toolbag

THEMATICS

PREPARING A MAYA PROJECT FOR TEXTURING

ID map creation. Transfer maps. Dismantling objects for mesh baking. Single vs multiple UDIM workflow.

PHYSICALLY BASED SHADING

Albedo, Roughness, Height, Metallic, Normal.

MESH MAPS

Baking mesh maps. Replacing dismantled object with original.

LAYERS, SELECTIONS, AND MASKS

Layers and fill layers. Masks. Paint. Different modes of selection. Layer instancing.

FILTERS AND GENERATORS

Mask editor. Anchors. MatFX.

PROCEDURAL TEXTURING

Smart materials and smart masks. UV vs Tri-planar projection. Utilising trimsheets.

PROCEDURAL MATERIAL GENERATION

Introducing the main features of Substance 3D Sampler.

PAINTING AND ADDING MANUAL DETAIL

Brushes, grunges and particles. Stencils and alphas.

CREATURE TEXTURING

Reference: RBX imaging. Understanding blood, skin, and subsurface scattering.

EXPORTING TEXTURES

Exporting to different engines. Separating ambient occlusion from colour maps. Export by UDIM for Marmoset Toolbag.

LOOKDEV AND PORTFOLIO-READY MARMOSET WORKFLOW

Lookdev in Iray. Importing the project into Marmoset. Rendering and output for Marmoset Viewer, and exporting to ArtStation.

PROJECT “STOVEAWAY”

Prepare a stove model to be textured in Substance Painter.

Texture it so it looks realistic.

Turn the stove model into a rusty, dirty piece of junk.

Render it in iRay.

PROJECT “DRONE”

Texture a vehicle of your own, or the flying drone you created in the Digital Sculpting module.

PROJECT “REPTILIAN”

Texture a complex character of your own, or the reptilian you created in the Digital Sculpting module.

4. GENERAL RIGGING AND ANIMATION

12 WEEKS

What is this module about?

Rigging is a process used to turn a static model into one that can be animated, ideally without actually having to touch the model. In this module, we learn how to rig hard surface models, from very simple rigs, like a wall clock, to more sophisticated, complex rigs like machinery.

We will then animate our objects, learning about the fundamentals of animation, movement, weight, and visual storytelling.

What are the requirements for this module?

Completion of the **Modelling and UV Mapping** module or a presentation of appropriate modelling and UV mapping skills is required for this module.

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, and a HD or UHD monitor. You will also need a Maya¹ license.

Whom is it recommended for?

If you want to be able to animate your scene, create visual effects, or if you are interested in character animation, this module is a good place to start. It grants access to the **Character Rigging** and the **Dynamic Simulation and VFX** modules.

¹ For Maya subscription options, visit the [Autodesk website](#).
To check if you're eligible for a much more affordable Maya Indie license, [click here](#).

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Maya

THEMATICS

THE TIMELINE AND THE KEYFRAMES

The Timeline and the Range Slider. Setting, copying and deleting keyframes. Animating deformers.

THE NODE EDITOR

Introducing utility nodes and the basics of the Node Editor.

PARENTS AND CONSTRAINTS

All about hierarchy: parents, children, and null objects. Locators. The constraints.

DRIVER AND DRIVEN

Add and edit attributes. Set driven key.

THE GRAPH EDITOR

Adjusting keyframes. Understanding tangent handles.

INTRODUCING JOINTS

Creating and editing joint hierarchies. Inserting, removing and rerooting joints. Combining joints with constraints.

THE 12 PRINCIPLES OF ANIMATION

Timing, ease-in & ease-out, and arcs. Inertia, momentum, and resistance. Follow-through and overlapping action. Squash and stretch. Principles of performance: anticipation, pose to pose, and straight ahead action. Secondary action and exaggeration. Staging, solid drawing, and appeal.

INTRODUCTION TO KINEMATICS

Forward and Inverse kinematics basics. Setting up an IK chain.

VISUALISATION

The Motion trail and the Ghost tool. Animation snapshot. The Grease pencil.

CACHING AND EXPORTING

Alembic cache. The Game exporter. ATOM.

PROCEDURAL ANIMATION

MASH basics. Motion graphics.

VIDEO OUTPUT

Viewport 2.0 settings. Camera DOF setup. Create turntable. Playblast.

PROJECT “ROBOTIC ARM”

Based on the supplied video, create a rig for the robotic arm and its controls.

Rig the cables of the arm and the tubes between the arm and the controls.
Animate the scene.

PROJECT “MECHASPIDER”

Rig a mechanical spider and create a walk cycle.

Create a swarm of mechaspiders. Combine manual and procedural animation techniques. Animate the camera.

CHARACTER RIGGING

12 WEEKS

What is this module about?

In this module, we are building a medium complexity rig and a set of controls for a human character model. We delve into the territory of sophisticated hierarchies, and terms which may sound somewhat strange (but make sense in the end), such as forward and inverse kinematics, facial and corrective blendshapes, skinning, and muscle simulation.

What are the requirements for this module?

It is largely built upon **General Rigging and Animation**, so you must complete that module first in order to take this one. It is also advantageous to have a basic understanding of kinesiology.

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, and a HD or UHD monitor. You will also need a Maya¹ license.

Whom is it recommended for?

Character rigging is a specialisation, and although not all character riggers do character animation, all character animators need to understand how a character rig works in order to be able to use it efficiently.

It is why only this module opens the door to **Character Animation**.

¹ For Maya subscription options, visit the [Autodesk website](#).
To check if you're eligible for a much more affordable Maya Indie license, [click here](#).

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Maya

THEMATICS

JOINTS

Creating and editing joints. Joint chains. The local rotation axis. Gimbal lock. Mirroring joints. Proxy hierarchy. Rig hierarchy.

THE FEET

Understanding forward and inverse kinematics. Creating a reverse foot rig. Setting up the knees.

THE SPINE

Spline IK. Utilising clusters. Making the spine flexible. Setting up the spine twist and the hip controls.

THE ARMS

Three separate arm chains. The IK/FK switch. Creating the wrist, the shoulder, and the arm twist controls.

THE HANDS

Setting up the individual finger curls, and the hand presets.

THE HEAD

Creating the neck and the head controls. Adding a jaw and the eye controls.

SKINNING

Bind skin setup. The classic linear and the dual quaternion methods. Weight normalisation. The Paint Skin Weights tool. The Weight Hammer. Mirror weights.

FACIAL BLENDSHAPES

The Shape Editor. The Wrap deformer. Creating facial blendshapes for basic expressions. In-between target shapes. Connecting the blendshapes to the rig.

CORRECTIVE BLENDSHAPES

Creating corrective blendshapes for problematic deformations. Automating these blendshapes with driven keys.

MUSCLE SIMULATION

The Maya Muscle deformer. The Muscle Builder. The parameters. Connecting the muscle system to the rig. Paint Muscle Weights.

PROJECT “WARRIOR”

Create the rig hierarchy and the joint structure for the character. Attach proxy geometry to the joints. Create and test the rig and control rig.

Key poses for every joint motion so you can check the model’s deformations. Create and optimise the skin bind. Create facial and corrective blendshapes.

Create and attach all blendshapes to the rig, and set up muscle simulation where it is needed.

CHARACTER ANIMATION

12 WEEKS

What is this module about?

Character animation is one of the most rewarding specialisations in the 3D industry. In this module, we go through the fundamentals in manual character animation, facial and body expressions, basic interactions with the environment, props, and other characters. We also learn to use the non-linear animation workflow. Although we'll take a quick glimpse into motion capture and procedural animation, this module focuses on manual animation only.

What are the requirements for this module?

The completion of **Character Rigging** is a prerequisite. This module also builds upon **General Rigging and Animation**. Demonstrable experience in general animation is expected.

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, and a HD or UHD monitor. You will also need a Maya¹ license and a copy of Storyboarder².

Whom is it recommended for?

Animators, but also riggers and generalists. There is no further study in our masterclass in this direction, but it is far from being the end of the line in the industry. The knowledge acquired here will be a decent foundation for your character animation career.

- ¹ For Maya subscription options, visit the [Autodesk website](#). To check if you're eligible for a much more affordable Maya Indie license, [click here](#).
- ² Download a free copy of Storyboarder [here](#).

Length and Price

The module ideally takes 12 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×3 (£828)

DUOS: (paid in 3 installments)

£138 ×3 (£414) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Maya

Storyboarder

THEMATICS

STORYBOARDING

Creating a storyboard based on the script to be followed using Storyboarder.

THE WALK CYCLE

Creating Warrior's walk cycle. Introducing the Time Editor.

THE RUN CYCLE

Creating Warrior's run cycle. Understanding how speed and weight are related.

THE IDLE STATE

Posing and animating the idle animations for Warrior and Mechaspider.

TIMING AND PACING

Positioning the camera and the characters for each take, following the storyboard. Creating primary animations for both characters.

INTERACTION

A word (or two) about procedural animation techniques.

With the primary animations in place, creating the secondary animations is the next step. Animating the interactions between the characters, emotional expressions through body language, and focus by subtle camera movement and composition.

EXPRESSION

Animating the faces and the eyes. Creating an emotional connection between the characters. Using props. Refine the storytelling. Finalise camera motion. Animate depth of field and set up motion blur.

OPTIMISATION

Deleting unnecessary keys, and tidying up the scene and the outliner. Understanding motion capture data preparation.

PRESENTATION

Present the animation in Viewport 2.0 and create a video with Playblast.

PROJECT "ODD COUPLE"

Create the basic animations for Warrior and Mechaspider.

Block out the primary and secondary animations in the sequence, pace the scene, and animate the camera movement.

Create detailed animations for facial expressions, subtle hand (and foot) movements, add props wherever needed, and optimise the scene.

DYNAMIC SIMULATION AND VFX

24 WEEKS

What is this module about?

Dynamic simulations—when created in Maya—are used mainly for cutscenes and special effects. Real-time dynamics are usually set up in video game engines (such as Unity or Unreal).

In this module, we learn how to simulate physical forces interacting with our assets. We create fluid and smoke effects, simulate cloth and use particle systems to drive the animation of models and—surprise—particles.

What are the requirements for this module?

This is an advanced specialisation. Completion of **General Rigging and Animation** is a must, and demonstrable experience in general animation is highly recommended.

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, and a HD or UHD monitor. You will also need a Maya¹ license.

Whom is it recommended for?

Character and environment artists, animators and character animators, previsualisers, and of course, visual effect artists. Understanding these techniques can also help those who aim to work primarily with game engines, as the principles are very similar in every tool.

¹ For Maya subscription options, visit the [Autodesk website](#).
To check if you're eligible for a much more affordable Maya Indie license, [click here](#).

Length and Price

The module ideally takes 24 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×6 (£1656)

DUOS: (paid in 3 installments)

£138 ×6 (£828) **/student**

Extra lesson (90 MINUTES):

£69

Software We Use



Maya

THEMATICS

THE PHYSICS OF VIRTUAL SPACE

Gravity, rigid bodies and collisions.

NUCLEUS

Introducing nDynamics and nParticles. Different kinds of emitters. Particle attributes. The Collision layer.

FORCES

Understanding different types of Fields.

THICKENING THE PLOT

Using expressions to enhance particle functionality. Per-particle attributes.

COMPLEX PARTICLE EFFECTS

Smoke and dust. Sprite particles. Destruction effects. The nParticle Instancer. Using nParticles with nConstraints.

CLOTH SIMULATION

Using nCloth. The nCloth dynamics. Springs. Cloth collisions. The role of topology. Designing clothing. Using constraints. Freezing and caching.

HAIR SIMULATION

Creating hair using nHair. Initial hair, clump settings and dynamics. Base curves and follicles. Collisions and constraints. Hair styling. Using nCloth to simulate hair.

MAYA FLUIDS

Fluid dynamics 101. The Maya fluid solver. Working with voxels. Fluid emitters. Density, velocity, and turbulence. Understanding Fuel. Rendering fluids.

BIFRÖST FLUIDS

Understanding Bifröst. Emitting liquid. Motion fields. Killplane. Timing. Friction and drag. Alembic cache. Generating foam. Collisions. Rendering Bifröst fluids.

PROJECT “STORM IN A TEACUP”

Create a miniature stormy sea in a teacup using Bifröst.

PROJECT “TORNADO”

Create a tornado simulation.

PROJECT “SHATTERED MEMORIES”

Create a complex particle simulation by shattering a glass jar of rice.

PROJECT “REPTILIAN: CLOTHES & FUR”

Create clothes and fur for the “Reptilian” character.

PROJECT “UNTITLED MICHAEL BAY MOVIE”

Create a realistic atomic blast using Maya Fluids. Create a preview render.

MATERIALS, LIGHTS & RENDER

24 WEEKS

What is this module about?

Material and light interactions, the realistic and artistic usage of shadow and colour, and rendering techniques that help artists create photorealistic imagery. We will be also learning basic compositing and post production in Photoshop.

What are the requirements for this module?

This module develops on what we learned in **Texturing**. It isn't required, but it helps to understand what's included in **Dynamic Simulation and VFX**, as we will render visual effects and hair, not only solid objects. A basic understanding of the physics of light, colour theory and composition could come in very handy. These subjects (and more) are included in our highly popular **Visualogy™** course.

A decent Windows 10 Pro-based PC with a strong video card, or a Mac with a strong AMD card, at least 16 Mb RAM, a HD or UHD monitor, a Maya¹, and Photoshop² license.

Whom is it recommended for?

Visualisers, texture artists, lighting specialists, and render artists. And anyone who wishes to showcase their work at the next level. This is also the last module in the masterclass, so it is highly recommended for completionists.

- ¹ For Maya subscription options, visit the [Autodesk website](#). To check if you're eligible for a much more affordable Maya Indie license, [click here](#).
- ² For Photoshop subscription options, visit the [Adobe website](#). We recommend the Photography option.

Length and Price

The module ideally takes 24 lessons to finish.
A lesson is 90 minutes long.
It is recommended to take 1 lesson a week.

INDIVIDUALS: (paid in 3 installments)

£276 ×6 (£1656)

DUOS: (paid in 3 installments)

£138 ×6 (£828) /**student**

Extra lesson (90 MINUTES):

£69

Software We Use



Maya

Arnold

Photoshop

THEMATICS

LIGHTING BASICS

Light types in Maya. Intensity and decay. Raytrace and depth map shadows. Arnold-specific light features. Light linking.

INTERACTIVE PRODUCTION RENDERING (IPR)

Running and stopping IPR in the viewport. Update full scene. IPR in the RenderView. Refresh render and Hold scene update. Shape picking.

ENVIRONMENTAL LIGHTING

Ray depth and global illumination. Skydome light and image-based lighting. Physical sky. Colour temperature and white balance with aiBlackBody. Saving rendertime using Light portals. Self-illumination.

ARNOLD MATERIALS

The aiStandardSurface shader. Base colour and Specular Roughness. Using file textures. Metallic surfaces. Transparency and refraction. aiAmbientOcclusion, aiStandardHair, aiCarPaint, aiFlat, and aiTwoSided. Switches and utilities.

VOLUMETRICS AND EFFECTS

Arnold Volume. The aiStandardVolume shader. Shading fluids. Voxels. Rendering nParticles and BiFrost. Rendering displacement.

CAMERA STUFF

Camera setup. Depth of field. Motion blur.

ARBITRARY OUTPUT VARIABLES (AOV) & LIGHT GROUPS

Render passes. Data, driver, and filter. Light group contribution.

LOOKDEV

Analysing metadata. Camera match. Sphere diffuse. The light rig. Rendering AOV's. Compositing in Photoshop.

PROJECT “STILL LIFE”

Setup, light and render a still life scene in Arnold.

PROJECT “ODD COUPLE: STILL IMAGES”

Setup, light and render a few stills from the animation “Odd Couple”.

PROJECT “REPTILIAN: LOOKDEV”

Setup, light and render “Reptilian”, and match the character perfectly to a photo background in scale, perspective, colour, and lighting.



Tamás Bányai

3D ARTIST

Canada

“I got answers to questions I have never even asked. Feri is surprisingly patient and has an enormous amount of knowledge. These two combined results in a very enjoyable series of lessons.”



Márton Kocsis

DIGITAL PRODUCT DESIGNER

The Netherlands

“Feri was one the biggest milestones in my design career. The knowledge what he shared and what his courses gave me helps me solve real design problems each and every day.”



Andrea Tátrai

WEBDESIGNER

Hungary

“Professional, thorough, patient, consistent, and very helpful. I’ve learned a lot from him. And after having finished the course, I can still ask for his help. I can only recommend him.”



Atsushi Yukutake

PHOTOGRAPHER

The Netherlands

“The skills to analyse ideas and thoughts behind a piece of work and to implement yours to your own design can only be acquired from true professionals. You can find one of them at 25/7.”



Eszter Molnár

PHOTOGRAPHER

Greece

“Rarely can you find the kind of teacher who will guide you to find the right way for yourself, instead of telling you what to do; and who will always respond to your questions and doubts.”



Toshi Muromoto

GRAPHIC DESIGNER

Japan

“The most important lesson I learned from him was how to think by myself—about solutions, structure, workflow. He gave me strength and confidence to talk about my ideas.”

**graphic design
& 3D graphics**

2021/22

COURSES

25|7
DESIGN
STUDIO

info@257designstudio.com | www.257designstudio.com