

Updated on 11/10/2024

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# Maya 2025 training

4 days (28 hours)

## Presentation

[Maya](#) is a 3D software package from Autodesk, renowned for rendering, simulating, modeling and animating computer-generated images. It is widely used by the film and video game industries, mainly under Linux.

Explore the world of Autodesk Maya with this comprehensive introductory course.

Maya is an industry-standard 3D application used to create movies, games and graphics. The software makes extensive use of the MEL language, enabling users to customize and add functionality without needing to know C or C++. However, more complex extensions can be created using a C++ API.

This Maya 2023 course is designed for people with little or no knowledge of 3D. I'll teach you the fundamentals of the 3D graphics profession, and we'll see how to model simple objects, animate and texture them, then highlight them with lighting. Finally, we'll see how to export images to create a complete 3D plan.

Like all our training courses, this one will introduce you to the latest stable version and its new features: [Maya 2025 Update](#).

## Objectives

- Understand and assimilate the fundamentals of the latest version of Maya.
- Create your first 3D scenes.
- Create simple animations.
- Cleanly model 3D assets and manage UV unfolding.

## Target audience

Anyone wishing to learn about 3D and improve their Maya knowledge/skills.

## Prerequisites

- Maya license or trial version
- A laptop computer (Windows, Mac or Linux) with the following features:
  - 64-bit multi-core processor with SSE4.2 instruction
  - A [recent dedicated](#) graphics card
  - 8 GB RAM minimum (16 GB or + recommended)
  - 4 GB hard disk space for installation
  - A mouse (no touchpad)
  - Create an [autodesk student](#) account (important)
- [Test My Knowledge](#)

## Our Maya training program

### DAY 1: FUNDAMENTALS

#### Introduction to Maya

- Presentation of the various 3D professions
- Possible use cases
- Introducing Maya (and briefly its competitors)

#### Maya interface

- Getting to grips with the Maya interface
- Explanation of menus
- Navigation in 3D space (rotation, translation, zoom/unzoom, fit)
- Viewport layout for comfortable workflow
- Introducing the outliner

#### Basic object handling

- Creating a project
- Scene unit configuration
- Creation of a first 3D object (primitive)
- Explanation of the sub-elements that make up a 3D object
- 3D object manipulation (translation, rotation, scale, pivot point)
- Some basic shortcuts (G, Z, space, 1, 2, 3, 4, 5, 6)

#### Polygonal modeling: tools and methodology

- Selection tools (>, <, Tab, soft selection) / isolation
- Topology (Triangles / quadrangles / ngons)
- Snap tools (V, X)
- Measure tool
- Duplicate and duplicate special
- Extrude
- Smooth (Tool / Keyboard) + avoid pinch effect
- Fill Hole
- Mirror
- Combine
- Extract
- Bevel
- Bridge
- Circularize
- Merge
- Edit edge flow
- Connect (2 methods)
- Multi-cut
- Target weld
- Delete history / Freeze transformation
- Groups, hierarchies and suffixes
- Layers
- PRACTICAL WORK: Modeling a catapult and a projectile.

## DAY 2: INTRODUCTION TO ANIMATION

### Managing animation with Maya

- Graph editor presentation
- Creating a simple animation
- Non-linear deformers (sine, squash, bend, twist)
- Keyframes / autokey (+ shortcuts)
- Animation curves and tangents
- Pre / post infinity
- Moving keyframes
- Playback speed setting
- Playblast
- Caching
- Export formats
- PRACTICAL WORK: Catapult and projectile animation.

## DAY 3: TEXTURES, MATERIALS, LIGHTING

### Texturing: Realistic physical rendering

- UV unfolding
- Introducing hypershade
- Creating simple shaders
- Texture import
- Camera creation (normal and from view)

- Creation of lights (spotlight, hdri etc)
- Explanations of lights parameters by renderer (scale)
- Render pre-setting
- PRACTICAL WORK: Texturing our objects, setting up simple lighting.

## DAY 4: RENDERING AND EXPORTING THE IMAGE SEQUENCE

### Rendering

- Setting up a rendering cycle
- Advanced rendering settings
- Presentation of render view / IPR
- Export image sequence

## Complementary module (+1 day) : Advanced modeling and rigging techniques

### Advanced modeling

- Sculpting
  - Using sculpting tools
  - Adding organic details to models
- Retopology
  - Retopology techniques
  - Optimizing model geometry
- Modeling in surface subdivision
  - Working with subdivided surfaces

### Advanced Rigging

- Introduction to character animation
  - Understand the basic principles of character animation
- Creation of custom controls, advanced deformers and IK/FK systems
- Skinning: Skinning techniques
- Creating constraints

## Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

## Positioning on entry to training

Positioning on entry to training complies with Qualiopi quality criteria. As soon as

On final registration, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, and his or her expectations and personal objectives for the forthcoming training course, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

## Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

## Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

## Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

## Sanction

A certificate will be issued to each trainee who completes the course.