

# 3D Animation & Modeling



### **Animate your 3D Characters!**

Master fundamentals of 3D modeling and 3D animation with the industry-standard open-source 3D software Blender. Your child will learn how to build 3D models, manipulate the characters and convert them into animation with lighting and camera work.

- Fundamentals of 3D Modeling with Blender
- Full process of 3D Animation from the preparation, model movement, camera work, and lighting
- Animation editing with the Dopesheet and the graph editor
- Special effects with physics simulation

## After this program

Your child will be able to develop basic 3D models with Blender. Your child can also modify 3D models to animation ready with parenting, pivot point adjustment, and rigging, known as an armature. Then your child can generate 3D animations with background images, lighting, and cameras, insert keyframes, and edit them with the Dope sheet and Graph editor.

#### What students Create (Subject to change)

Several objects, such as a spaceship, desk light, wall light, and robot, to understand Blender's essential transformation functions and parenting.

Several animations, such as a bouncing ball and a humanoid, to master keyframes, timing, and expression with Graph editor.

Animation with a humanoid with a professional level of armature and rigging.

Images of dramatic poses with the humanoid character

A few own 3D characters from scratch

Physical simulation models with fire and water simulations

## **Prerequisite**

No previous 3D animation or modeling experience required

## **Hardware requirements**

A Windows PC or Mac. Please refer to the requirements at blender.org and ensure your PC works with Blender.

A keyboard and a mouse (a mouse with a center wheel is recommended).

An additional monitor or a viewing device such as a PC/Mac/Chromebook/tablet is recommended to show the Zoom screen separately from the Blender screen.

Chromebook and Tablet do not work with Blender.

Stable Wi-Fi is required for Zoom meetings.