

Blender 3D 建模：專業開源 3D 製作

CONNECTION TECHNOLOGY 裝備未來
FUTURE SKILLS

課程費用: HK\$4,500 (最高可獲得資助: HK\$3,000)

*此為最高資助金額，資助款項以最終批核為準。



Blender 是一款強大的3D軟件，以開源軟件的形式發行，用戶不須付費，就能無限制地使用。它的功能包含建模、渲染、動畫製作、雕塑、幾何節點、Python程序編寫、物理模擬、2D動畫製作等。無論在功能以及效能上，都能媲美業界通用的3D軟件，例如Maya、3ds Max、Cinema 4D等。而最重要的是，Blender 能滿足初學者以至專業數碼藝術師的工作需求，而且無須為付費及使用權限問題而煩惱。

課程編號	10013474-02
日期及時間	2023年7月11 · 14 · 18 · 21 · 25 日 19:00 – 22:00 共15小時 (每節3小時)
地點	九龍塘達之路78號生產力大樓
語言	廣東話
課程費用	HK\$4,500* (最高獲得資助港幣3,000元; 2位或以上報名, 可享團體優惠。請聯絡我們查詢詳細)
備註	本課程包括功課實習，建議學生亦在家下載 Blender 軟件方便完成功課。

課程特色

本課程將由基礎入門開始，深入淺出教導學生認識及使用Blender建造模型、貼圖、燈光、鏡頭運用、渲染及製作基本的動畫等。另外還會介紹並示範 Blender 一些特別的功能，例如雕刻、影像合成、幾何節點、物理模擬等，令學員對Blender有更深入的認識，因應學員自己的興趣所在，制定往後學習的方向及重點。

課程內容

課堂	內容
課堂一 從閉源至開源：Blender 基礎	<ul style="list-style-type: none"> 系統介面 - 3D 視窗和導航、工作區 Blender熱鍵 從閉源到開源的 3D 檔案轉換流程和標準
課堂二 案例分析：硬質表面建模 (Hard Surface Modelling)	<ul style="list-style-type: none"> 比較建模流程：切割和合併 (Knife and Join)、物體修改器 (Object Modifier) - 鏡像 (Mirror) 和倒角 (Bevel)、拆邊 (Edge Split) 和實體化 (Solidify)、晶格 (Lattice) 和簡易形變 (Simple Deform)、表面細分 (Subdivision Surface)、收縮包裝 (Shrinkwrap)
課堂三 案例分析：材質 (Material) 和著色器 (Shader)	<ul style="list-style-type: none"> 比較材料和著色器設計流程：材質設定、著色器節點使用、UV映射工具
課堂四 案例分析：Blender照明基礎	<ul style="list-style-type: none"> 比較照明設計流程：HDRI 照明、燈光設計
課堂五 案例分析：Blender 動畫工具	<ul style="list-style-type: none"> 比較動畫工作流程：物體動畫與骨架 (Armature)、動畫相機和燈光、基本模擬效果 (Simulation Effects)

郭芳銓先生

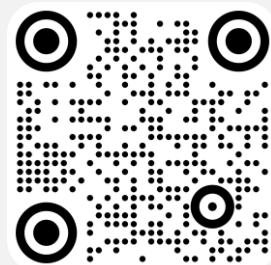
郭先生在設計行業內有20年以上經驗。由平面設計到多媒體設計都擁有深厚經驗。郭先生曾與多個品牌合作，例如 CARTOON NETWORK 亞太地區，也參與過 20 多部電影製作，包括《洩密者們》、《那一天我們會飛》等。郭先生亦參與過幾款獨立遊戲開發，並在東京遊戲展、台北遊戲展和香港動漫遊戲展展出。郭先生對各種新科技都有濃厚興趣，例如 VR、AR、3D Printing及元宇宙概念等；郭先生亦考獲了 Meta Spark Creator 勳章。郭先生對Adobe 系列、Maya、Blender、Spark AR Studio、DaVinci Resolve、Final Cut Pro、Clip Studio paint 和 Unity亦有相當認識。

報名方法

- 請掃描QR code並完成網上報名及付款；或
- 請填妥報名表、連同劃線支票郵寄至香港生產力促進局: 九龍達之路78號生產力大樓三樓 (收件人: Ms KU, DTD)。請於信封上註明課程名稱及編號。報名表請於<https://www.hkpcacademy.org>下載。

申請RTTP培訓資助

公司如需為僱員申請RTTP培訓資助，須於開課至少兩星期前於<https://rttp.vtc.edu.hk/rttp/login>提交申請。另外，申請表連同證明文件亦可電郵至rttp@vtc.edu.hk 提交予秘書處。



學生感想

參加了 HKPC 的五日workshop 學習 blender, 收益良多。多謝導師的教導。我向不同學習教學背景的同學, 取得經驗。

我在中學教視藝科, 認為Blender 好像canvas 一樣, 用 digital 方式學習三維空間的故事。學會了人物 sculpting , 面部 UV wrapping 上 texture的方法。從簡單的貼一張心愛的貼紙到自己建模飛機, 到set animation 動畫設定。

除顏色畫紙外, 有著很多發展的想像空間。之後會用 blender 參加短片比賽, 在人物建模上將有更多心得。



Ms. Angela Lai

支持機構 (以英文字母排序)

Blender 3D Modelling: Open-Source Professional 3D Production

Course Fee: HK\$4,500 (May apply up to HK\$3,000 subsidy)

*Maximum saving, with the final grant subjects to approval.



One of the most powerful and accessible 3D software available, Blender is an open-source software that users can use unlimitedly at no cost. Its features include modelling, rendering, animation, sculpting, geometry nodes, Python programming, physics simulation, 2D animation, and more. In terms of functionality and performance, it is comparable to the commonly used 3D software in the industry, such as Maya, 3ds Max, Cinema 4D, and so on. Most importantly, from beginners to professional digital artists, Blender can meet the needs of its wide spectrum of users without the inhibitions imposed by cost and licensing issues.

Programme code	10013474-02
Date & Time	11, 14,18,21,25 July 2023 19:00 – 22:00 Total 15 hours (5 lectures)
Venue	HKPC Building, 78 Tat Chee Avenue, Kowloon Tong
Medium	Cantonese
Course fee	HK\$4,500* <i>(May apply up to HK\$3,000 subsidy; Group discount will be offered to enrolment of 2 people or above, please contact us for details)</i>
Remarks	The course consists bring-home assignment, students are encouraged to install Blender software at home in order to complete the work.

Programme Highlights

The course will start from the basics and guide students through learning and using Blender for building models, mapping, lighting, setting camera angles, rendering and basic animation. In addition, we will introduce and demonstrate some unique features of Blender, such as sculpting, image compositing, geometry nodes, and physics simulation, so that students can gain a deeper understanding of Blender and pursue future learning goals according to their own interests.

Certificate of Attendance will be issued to participants who have attended 70% or more of the classes.

Course Outline

Session	Agenda
Session 1 Closed- to Open-source: Blender Basics	<ul style="list-style-type: none"> System interface - 3D Viewport and Navigation, Workspaces Hotkeys in Blender Closed-source to open-source 3D file conversion and standards
Session 2 Case Study: Hard-surface Modelling	<ul style="list-style-type: none"> Comparing modelling workflows in performing the following: Knife and Join, Object Modifiers – Mirror and Bevel, Edge Split and Solidify, Lattice And Simple Deform, Subdivision Surface, Shrinkwrap
Session 3 Case Study: Materials and Shaders	<ul style="list-style-type: none"> Comparing materials and shader design workflows in performing the following: Material Assignment, Shader Nodes Usage, UV Mapping Tools
Session 4 Case Study: Lighting Basics in Blender	<ul style="list-style-type: none"> Comparing lighting workflows in performing the following: HDRI lighting, Light Design
Session 5 Case Study: Animation Tools in Blender	<ul style="list-style-type: none"> Comparing software workflows in performing the following: Object Animation with Armature, Camera and Lighting in Animation, Simple Simulation Effects

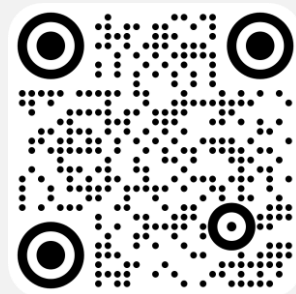
Mr Chris Kwok

Mr. Chris Kwok has more than 20 years of experience in the design and production field, from graphic design to creating interactive content for multiple brands and media, such as Cartoon Network Asia Pacific and FANCL. Mr. Kwok has participated in the production of over 20 international movies like “The Leakers”, “She Remembers, He Forgets”. Mr. Kwok also participated in the production of games and interactive experiences, such as educational games for Smallcampus.net of Hong Kong Education City Limited. He is active in the digital entertainment industry, participating in events such as the Indie Zone of ACGHK with “Dokidoki Daily”, and in the 2020 TGS with “foodieFrog”. Mr Kwok has a wealth of experience applying software such as Adobe Series, Final Cut Pro, Clip Studio Paint, and Unity in design and multimedia projects.

Enrolment method

- Scan the QR code to complete the enrolment and payment online; or
- Mail the crossed cheque with payee name “Hong Kong Productivity Council” in HK dollar) and the application form should be mailed to Hong Kong Productivity Council, 3/F, HKPC Building, 78 Tat Chee Avenue, Kowloon (ATTN to Ms KU, DTD). Please indicate the course name and course code on the envelope. Enrolment form can be downloaded at <https://www.hkpcacademy.org>

RTTP Training Grant Application Companies should submit their RTTP training grant application for their employee(s) via <https://rttp.vtc.edu.hk/rttp/login> at least two weeks before course commencement. Alternatively, application form could be submitted by email to rttp@vtc.edu.hk along with supporting documents.



Student Testimonial

I attended HKPC's five-day workshop to learn Blender and benefitted greatly from it.

Many thanks to our tutor for teaching us. I received valuable experience from fellow students coming from different learning and teaching backgrounds.

I teach secondary level Visual Arts and I think Blender resembles Canvas. Both invite us to learn the wonders of 3D spaces using digital methods. I learnt how to sculpt characters, perform UV unwrapping on faces and apply textures.

From simply sticking stickers onto my own airplane model, to experimenting with set animation settings, my imagination was allowed to run freely beyond static paintings on paper.

In the future, I plan to enter a short film competition with a blender-made piece. By then, I believe that I will have a more thorough understanding of character modelling.



Ms. Angela Lai

Supporting Organisations (in alphabetical order)