# DIGITAL DESIGN

bhc

**2022 COURSE INFORMATION**

# COURSE OVERVIEW

The Digital Design online course will equip you with a core set of **digital skills to create, capture and communicate** across a diverse range of design fields. You will learn to visualize, refine, enhance, and present your ideas and designs using digital resources like **computer hardware and software, smartphones, cameras, VR systems, 3D printing and CAD based manufacturing technologies.**

The content is divided into **four modules**, available as a full course or individually:

1. 2D Presentation Design

2. 3D Modelling & Rendering

3. Immersive Presentation & Capture

4. CAD Fabrication

Digital skills to **create**, **capture** and **communicate** design, for

- idea presentation
- concept visualisation
- digital creatives • makers
- interiors • architecture
- product & industrial design
- exhibition & event design
- film & set production
- construction & manufacturing
- property development
- shopfitting & customisation
- woodworking & cabinetry
- hobbyists and inventors
- technophiles

# DELIVERY

**Duration**

All content in this online course is completely self paced, which means you can choose to study whenever it suits you. For best results, we recommend you try to complete **each module in around 4 to 6 weeks** while the information is fresh in your mind.

**Content & Resources**

This course will utilize both text/image notes and video content to facilitate your learning. The course fees also include **2 hours of live lecturer support per module** for any questions or help you need along the way. You can use your support time in any proportion, as and when you need it, within our support open hours.

All content will be made available to you via our **Microsoft Teams** platform – more information about is will be provided when you sign up.

**Assessment**

Each module includes a single final assessment exercise which you need to pass in order to receive a certificate of completion.

**General Information**

All classes and content are in English.

If you reside outside of South Africa, certain other fees/taxes may apply.

The course has specific experience and gear requirements, depending on whether you choose to study the full course or only individual modules:

- Each module builds upon the previous, so if you are applying for the **full course**, you need only the *equipment requirements* for each module.

- If you are applying for **individual modules**, you will need certain *prerequisite experience in addition to equipment requirements*.

# 2D Presentation Design

**Skills:** Learn to source, create, edit and combine 2-dimensional digital media into high quality, visually appealing compositions.

**Who's it for?** Creatives, content creators, or anybody wanting to learn the basics of 2D visual communication for design.

**Content:**

- Introduction to Digital Media
    - File formats and technical properties

- Image Editing
    - Raster image creation and editing software, incl. photo manipulation, adjustments and effects

- Layout & Composition
    - Principles of graphic design
    - Layout software

**Experience & gear requirements:** Computer literacy, medium spec personal computer, internet access.
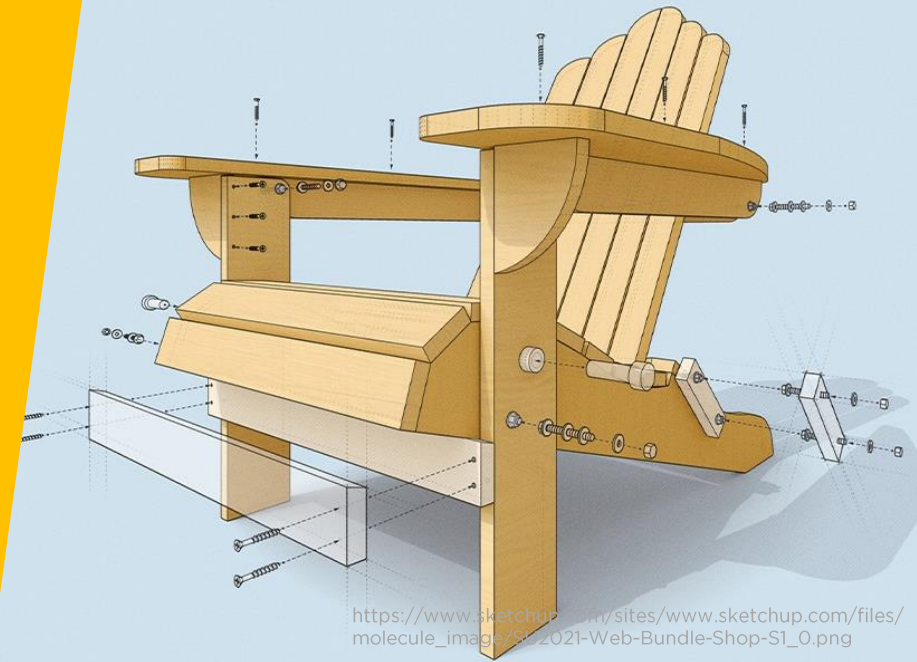
# 3D Modelling & Rendering

**Skills:** Add form to your ideas by learning the principles of digital 3D modelling and rendering to generate realistic images, scenes and technical information from your creations.

**Who's it for?** Anybody who wants to create and communicate designs for physical objects or environments.

**Content:**

- 3D Modelling (using SketchUp)
    - Objects
    - Environments
    - Assets

- Digital Rendering
    - Texturing & Lighting
    - Views & Exporting

**Experience & gear requirements:** Module 1 or computer literacy + 3D spatial ability. Medium/high spec Windows-based computer (or Apple Mac running Windows via Bootcamp/Parallels), internet access.



https://www.sketchup.com/sites/www.sketchup.com/files/molecule_images/Sb2021-Web-Bundle-Shop-S1_0.png

# MODULE OVERVIEW
## Immersive Presentation & Capture

**Skills:** Showcase your creations in immersive mixed reality formats and capture real world information for digital incorporation into your designs.

**Who's it for?** Designers from all fields looking to explore or present 3D content and digitize objects and environments using the latest hardware and software technologies.

**Content:**

- Virtual Reality (using BHC facilities or your own low-cost headset)

- Augmented Reality

- Environment Capture for 360° Virtual Walkthroughs

- 3D Scanning

**Experience & gear requirements:** Modules 1+2 or 3D modelling and rendering capability (ideally Sketchup). Medium/high spec Windows-based computer (or Apple Mac running Windows via Bootcamp/Parallels), internet access, smartphone (Android/Apple, not older than 3yrs)

# CAD Fabrication

**Skills:** Create physical outputs of 3D designs using accessible technologies like desktop 3D printing and CNC sheet material processes.

**Who's it for?** Use these technologies for scale and full size fabrication for product and interior design, model making, furniture making, shopfitting, woodworking, inventing, light engineering or hobby purposes.

**Content:**

- 3D Printing (using BHC facilities)
    - Converting and slicing 3D models
    - Machine and Print settings
    - Printing

- Design for CNC routing and laser cutting
    - Overview of process and design principles
    - Vector drawing and formats
    - Finishing processes

**Experience & gear requirements:** Modules 1+2 or 3D modelling ability (ideally SketchUp). Medium/high spec Windows-based computer (or Apple Mac running Windows via Bootcamp/Parallels), internet access



https://3dwarehouse.sketchup.com/warehouse/v1.0/publiccontent/ed8d3113-17a3-45c2-a3cf-7bd662effff0

https://scholarlyoa.com/wp-content/uploads/2020/07/laser-cutting-640x415.jpg

# FEES

| Full Course | Full Course Fee |
|---|---|
| All modules | R 15 100 |
| Registration Fee | R 850 |

OR

| Individual Modules | Module Fees |
|---|---|
| 2D Presentation Design | R 3 600 |
| 3D Modelling & Rendering | R 4 300 |
| Immersive Presentation & Capture | R 4 300 |
| CAD Fabrication | R 2 900 |
| Registration Fee, per module | R 850 |

# CONTACT US

**General enquiries**

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