



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

Rendering Techniques For Digital Design And Visualisation Training

Business, Commerce and Management Studies / Marketing

Unit Standard 117680 · NQF Level 5 · 10 Credits · 7 Days

COURSE OVERVIEW

This course equips learners with advanced rendering techniques for digital design and visualisation, enabling them to produce photorealistic images and animations. Participants will master lighting, shading, material mapping, and post-production workflows to create compelling visual presentations for architectural, industrial, or multimedia projects.

Category	Business, Commerce and Management Studies
Subfield	Marketing
Unit Standard	117680
Accreditation	SAQA Accredited · NQF Level 5 · 10 Credits
Duration	7 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply advanced lighting techniques, including global illumination and HDRI, to achieve realistic rendering effects.
- Analyze material properties and texture mapping to simulate surfaces such as metal, glass, fabric, and wood.
- Evaluate rendering settings and optimize parameters for balancing quality and render time.
- Design complex scenes with layered shaders, displacement maps, and procedural textures.
- Implement post-production workflows using compositing software to enhance rendered outputs.
- Demonstrate proficiency in rendering engines such as V-Ray, Arnold, or Cycles to produce final visualisations.

WHO SHOULD ATTEND

- Digital designers, 3D artists, architects, and visualisation specialists seeking to enhance their rendering skills for professional portfolios and client projects.

COURSE OUTLINE

Day 1: Foundations of Rendering and Digital Design

- Introduction to rendering concepts and terminology.
- Overview of rendering engines (e.g., V-Ray, Arnold, Blender Cycles).
- Scene setup: cameras, lighting basics, and material assignment.
- Navigating the interface and basic rendering workflow.

Day 2: Lighting Techniques and Global Illumination

- Types of lights: point, spot, area, and directional.
- Three-point lighting setup.
- Global illumination principles and settings.
- HDRI lighting and image-based lighting.

Day 3: Material Creation and Texture Mapping

- PBR material workflow: albedo, roughness, metallic.
- Procedural textures vs. bitmap textures.
- UV mapping basics and unwrapping techniques.
- Creating custom materials for different surfaces.

Day 4: Advanced Shading and Render Settings

- Render settings: resolution, samples, anti-aliasing.
- Subsurface scattering for skin and organic materials.
- Displacement and bump mapping.
- Render optimisation techniques.

Day 5: Camera Techniques and Composition

- Camera types and lens settings (focal length, aperture).
- Depth of field and motion blur.
- Composition principles for visualisation.
- Camera animation and path rendering.

Day 6: Post-Processing and Compositing

- Render passes: diffuse, specular, shadows, etc.
- Introduction to compositing in Photoshop or Nuke.
- Colour grading and exposure adjustments.
- Adding atmospheric effects (fog, glare).

Day 7: Portfolio Project and Industry Workflow

- Project brief: create an interior or product visualisation.
- Full workflow: modelling, texturing, lighting, rendering, post.
- Time management and render farm submission.
- Presentation and peer feedback session.

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **10 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 29,600.00	R 29,600.00
1	In-House	R 38,500.00	R 38,500.00
1	On-Campus (Pretoria)	R 44,400.00	R 44,400.00

UPCOMING SESSIONS

Start	End	Method	Venue
03 Aug 2026	11 Aug 2026	On-Campus	Cape Town, South Africa
04 Aug 2026	12 Aug 2026	On-Campus	Dubai, UAE
05 Aug 2026	13 Aug 2026	On-Campus	Pretoria, South Africa
05 Aug 2026	13 Aug 2026	On-Campus	Lagos, Nigeria
06 Aug 2026	14 Aug 2026	On-Campus	Johannesburg, South Africa
07 Aug 2026	17 Aug 2026	On-Campus	Mauritius
10 Aug 2026	18 Aug 2026	On-Campus	Dubai, UAE
11 Aug 2026	19 Aug 2026	On-Campus	Pretoria, South Africa

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

- 1. Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 117680) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
- 2. Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
- 3. Apply by phone or WhatsApp:** call +27 12 004 8389 or WhatsApp +27 65 077 6310 and we will prepare your quotation and reserve your seats.
- 4. Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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