



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

Produce Designs to Specification

Culture and Arts / Visual Arts

Unit Standard 255556 · NQF Level 5 · 14 Credits · 11 Days

COURSE OVERVIEW

This course equips learners with the skills to produce designs that meet specified requirements and standards. Participants will learn to interpret design briefs, apply design principles, and create outputs that satisfy client or organisational specifications. The course ensures competence in translating concepts into tangible design solutions.

Category	Culture and Arts
Subfield	Visual Arts
Unit Standard	255556
Accreditation	SAQA Accredited · NQF Level 5 · 14 Credits
Duration	11 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Interpret design briefs and specifications to determine project requirements.
- Apply design principles and techniques to create outputs that meet specifications.
- Evaluate design solutions against criteria and make adjustments as needed.
- Demonstrate proficiency in using design tools and software for production.
- Present and justify design choices to stakeholders.
- Ensure compliance with relevant quality standards and organisational policies.

WHO SHOULD ATTEND

- This course is ideal for graphic designers, marketing coordinators, and anyone responsible for creating visual or technical designs in a corporate environment.
- It is also suitable for individuals seeking to formalise their design skills against a recognised standard.

COURSE OUTLINE

Day 1: Introduction to Design Specifications and Standards

- Overview of design specification documents
- Components of a design brief (scope, constraints, deliverables)
- Introduction to SAQA unit standards and NQF levels
- Industry-specific standards (e.g., SABS, ISO)
- Reading and interpreting specification sheets
- Common terminology in design specifications

Day 2: Research and Analysis for Design

- Research methods for design (surveys, interviews, observation)
- Understanding target audience and user needs
- Benchmarking against competitors and best practices
- Ergonomic considerations in design
- Legal and regulatory constraints
- Environmental and sustainability factors

Day 3: Conceptual Design and Ideation

- Brainstorming and mind mapping techniques
- Sketching and rough prototyping
- Concept selection matrices
- Design for manufacturing and assembly principles
- Documentation of concepts (sketches, notes)
- Peer review and feedback methods

Day 4: Technical Drawing and CAD Fundamentals

- Reading engineering drawings (views, sections, details)
- Introduction to CAD software (e.g., AutoCAD, SolidWorks)
- Creating 2D sketches and geometric constraints
- Dimensioning and tolerancing (including GD&T; basics)
- Orthographic projection principles
- Isometric and perspective views

Day 5: Material Selection and Specification

- Material categories (metals, polymers, ceramics, composites)
- Mechanical, thermal, and electrical properties
- Material selection criteria (strength, weight, cost)
- Material testing standards (tensile, hardness, impact)
- Sustainability and life cycle assessment
- Material specification sheets and datasheets

Day 6: Design for Manufacturing and Assembly (DFMA)

- DFMA guidelines for machining, casting, molding
- Design for assembly (reducing part count, fasteners)
- Process selection (injection molding, CNC, 3D printing)
- Tolerances and fit types
- Quality control and inspection methods

- Case studies of DFMA improvements

Day 7: Prototyping and Testing

- Prototyping techniques (3D printing, CNC, hand-built)
- Rapid prototyping vs. functional prototypes
- Test planning (test cases, success criteria)
- Mechanical, thermal, and performance testing
- Data collection and analysis
- Design iteration based on test feedback

Day 8: Design Documentation and Specifications Writing

- Structure of a design specification document
- Writing technical descriptions and requirements
- Creating bill of materials (BOM) and parts lists
- Document control procedures (revision history)
- Compliance matrices and checklists
- Software tools for documentation (e.g., MS Word, LaTeX)

Day 9: Quality Assurance and Compliance

- Quality assurance vs. quality control
- Inspection plans and sampling methods
- Non-conformance reporting and root cause analysis
- Corrective and preventive actions (CAPA)
- Regulatory compliance (e.g., SABS, NRCS)
- Auditing design processes

Day 10: Project Management for Design

- Project planning tools (Gantt charts, milestones)
- Resource allocation and budgeting
- Stakeholder communication and reporting
- Risk identification and mitigation strategies
- Change management in design projects
- Project closure and lessons learned

Day 11: Final Project and Assessment

- Final project brief and requirements
- Applying the design process from specification to prototype
- Preparing a design portfolio and presentation
- Peer and instructor feedback
- Summative assessment (written and practical)
- Course evaluation and next steps

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 **14 NQF credits** at **NQF Level 5**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 40,300.00	R 40,300.00
1	In-House	R 52,400.00	R 52,400.00
1	On-Campus (Pretoria)	R 60,500.00	R 60,500.00

UPCOMING SESSIONS

Start	End	Method	Venue
03 Aug 2026	17 Aug 2026	On-Campus	Cape Town, South Africa
04 Aug 2026	18 Aug 2026	On-Campus	Dubai, UAE
05 Aug 2026	19 Aug 2026	On-Campus	Pretoria, South Africa
05 Aug 2026	19 Aug 2026	On-Campus	Lagos, Nigeria
06 Aug 2026	20 Aug 2026	On-Campus	Johannesburg, South Africa
07 Aug 2026	21 Aug 2026	On-Campus	Mauritius
10 Aug 2026	24 Aug 2026	On-Campus	Dubai, UAE
11 Aug 2026	25 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 255556) 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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