



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

Routing And Scheduling Management For Supervisors Training

Services / Transport, Operations and Logistics

Unit Standard 113837 · NQF Level 4 · 16 Credits · 13 Days

COURSE OVERVIEW

This course equips supervisors with the skills to effectively plan, implement, and monitor routing and scheduling activities in a logistics or transport environment. Participants will learn to optimise resource utilisation, minimise costs, and ensure timely deliveries while adhering to operational policies and safety standards.

Category	Services
Subfield	Transport, Operations and Logistics
Unit Standard	113837
Accreditation	SAQA Accredited · NQF Level 4 · 16 Credits
Duration	13 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply routing and scheduling principles to optimise transport operations.
- Analyse operational data to identify inefficiencies in current routing and scheduling processes.
- Evaluate alternative routing strategies to minimise costs and improve service levels.
- Implement scheduling adjustments to accommodate dynamic operational demands.
- Demonstrate compliance with relevant legislation, company policies, and safety standards.
- Monitor and report on routing and scheduling performance using key performance indicators.

WHO SHOULD ATTEND

- This course is designed for supervisors, team leaders, and operations managers in the transport, logistics, or distribution sectors who are responsible for planning and managing routing and scheduling functions.

COURSE OUTLINE

Day 1: Introduction to Routing and Scheduling Management

- Definition and scope of routing and scheduling
- Impact on supply chain efficiency
- Key terms: routes, schedules, nodes, arcs
- Supervisor responsibilities in routing and scheduling
- Course overview and assessment criteria

Day 2: Principles of Route Planning

- Factors affecting route planning: distance, traffic, delivery windows
- Route optimization principles
- Manual vs. automated route planning
- Cost-distance-time trade-offs
- Case study: simple route planning exercise

Day 3: Scheduling Fundamentals

- Elements of a schedule: tasks, time, resources
- Types of schedules: fixed, dynamic, cyclic
- Scheduling constraints: labor, vehicle capacity, legal hours
- Basic scheduling techniques
- Example: creating a daily delivery schedule

Day 4: Vehicle Routing Problem (VRP) Basics

- Introduction to VRP and its variants (CVRP, VRPTW)
- Heuristic methods: nearest neighbor, savings algorithm
- Using software tools for VRP
- Practical exercise: solving a small VRP manually
- Limitations of manual methods

Day 5: Scheduling Algorithms and Techniques

- Scheduling algorithms: FIFO, EDD, SPT
- Priority rules and sequencing
- Workload balancing techniques
- Gantt charts and their application
- Exercise: scheduling jobs with constraints

Day 6: Managing Routing and Scheduling in Warehousing

- Warehouse layout and pick path optimization
- Order picking strategies: batch, zone, wave
- Scheduling warehouse resources: labor, equipment
- Cross-docking scheduling
- Case study: warehouse routing efficiency

Day 7: Technology and Tools for Routing and Scheduling

- Transportation Management Systems (TMS)
- GPS tracking and telematics
- Route optimization software
- Data analytics for performance measurement

- Selecting appropriate technology for your operation

Day 8: Compliance and Regulatory Considerations

- National Road Traffic Act and AARTO
- Driver hours and rest periods (NRTA)
- Dangerous goods routing regulations
- Environmental regulations and fuel efficiency
- Documentation and record-keeping

Day 9: Customer Service and Communication

- Customer service levels and delivery windows
- Exception management: delays, breakdowns
- Communication protocols with drivers
- Customer notification systems
- Role-playing: handling a service failure

Day 10: Cost Management and Performance Metrics

- Cost components: fuel, labor, maintenance
- KPIs: on-time delivery, cost per mile, utilization
- Benchmarking and continuous improvement
- Cost-reduction strategies: consolidation, backhauling
- Exercise: calculating and interpreting KPIs

Day 11: Risk Management and Contingency Planning

- Risk identification: weather, traffic, accidents
- Contingency planning for disruptions
- Mitigation strategies: alternative routes, backup vehicles
- Insurance and liability considerations
- Case study: responding to a major disruption

Day 12: Advanced Topics and Integration

- Dynamic routing and real-time scheduling
- Integration with inventory management (VMI, JIT)
- Multi-modal and intermodal transport scheduling
- Emerging technologies: AI, machine learning
- Group discussion: future of routing and scheduling

Day 13: Final Review and Assessment

- Review of key concepts and tools
- Comprehensive case study: designing a routing and scheduling plan
- Final written assessment
- Action plan for applying skills at work
- Course evaluation and feedback

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 **16 NQF credits** at **NQF Level 4**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 43,500.00	R 43,500.00
1	In-House	R 56,600.00	R 56,600.00
1	On-Campus (Pretoria)	R 65,200.00	R 65,200.00

UPCOMING SESSIONS

Start	End	Method	Venue
05 Aug 2026	21 Aug 2026	On-Campus	Johannesburg, South Africa
06 Aug 2026	24 Aug 2026	On-Campus	Mauritius
07 Aug 2026	25 Aug 2026	On-Campus	Cape Town, South Africa
10 Aug 2026	26 Aug 2026	On-Campus	Pretoria, South Africa
11 Aug 2026	27 Aug 2026	On-Campus	Abu Dhabi, UAE
12 Aug 2026	28 Aug 2026	On-Campus	Durban, South Africa
12 Aug 2026	28 Aug 2026	On-Campus	Mauritius
13 Aug 2026	31 Aug 2026	On-Campus	Cape Town, 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 113837) 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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