Remote Operations Centres (ROC) Training Course

Professional Development Training Course Outline

Category	General Training	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Remote Operations Centres (ROCs) are at the heart of modern digital transformation, Industry 4.0, AI-driven monitoring, and real-time operational intelligence. Across sectors such as mining, energy, utilities, transport, and manufacturing, organisations are shifting toward centralized control environments that enable 24/7 remote monitoring, predictive analytics, automation, and optimized decision-making. This training course equips participants with the critical skills required to operate, manage, and optimize Remote Operations Centres using advanced digital tools, SCADA systems, IoT platforms, data analytics dashboards, and AI-assisted decision support systems.

Remote Operations Centres Training Course focuses on building operational excellence through situational awareness, cyber-secure control systems, workflow optimization, incident response management, and performance-driven operations. Learners will gain hands-on knowledge of real-time data interpretation, remote asset management, alarm management strategies, and cross-functional coordination frameworks. The program is designed to bridge the gap between traditional operational control and next-generation smart operations environments powered by cloud computing, machine learning, and integrated command-and-control systems.

Programme Curriculum

Remote Operations Centres (ROC) Training Course

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Course Duration

5 days

Course Objectives

1. Master Remote Operations Centre (ROC) architecture and ecosystem design
2. Develop expertise in real-time data analytics and operational dashboards
3. Understand SCADA systems, IoT integration, and industrial automation
4. Apply predictive maintenance and AI-driven decision-making tools
5. Strengthen incident management and emergency response protocols
6. Enhance cybersecurity awareness for critical infrastructure systems
7. Optimize workflow automation and operational efficiency strategies
8. Implement alarm rationalization and event management frameworks
9. Build competence in remote asset monitoring and control systems
10. Improve cross-functional communication and digital collaboration tools
11. Learn performance benchmarking and KPI-driven operations
12. Apply cloud-based remote monitoring technologies
13. Develop leadership in smart operations and digital control room environments

Target Audience

1. Control Room Operators and Supervisors
2. Mining Operations Professionals
3. Oil & Gas Field Engineers
4. Energy and Utility Grid Controllers
5. Industrial Automation Engineers
6. IT/OT Integration Specialists
7. Operations and Maintenance Managers
8. Safety, Risk, and Compliance Officers

Course Modules

Module 1: ROC Fundamentals & Architecture

- Overview of Remote Operations Centres design principles
- Centralized vs decentralized control systems
- Human-machine interface (HMI) fundamentals
- Data flow architecture in ROC environments
- Operational governance structures

- **Case Study:** Transition of a traditional power plant control room into a centralized ROC model improving efficiency by 35%.

Module 2: SCADA, IoT & Industrial Automation

- SCADA system components and operations
- IoT sensor integration in industrial environments
- Automation protocols
- Real-time equipment monitoring systems
- Digital twin fundamentals
- **Case Study:** Mining company using IoT sensors to reduce equipment downtime by 40%.

Module 3: Real-Time Data Analytics & Dashboards

- KPI dashboards and visualization tools
- Big data ingestion in ROC environments
- Predictive analytics for operations
- Decision-support systems
- Data quality and validation techniques
- **Case Study:** Utility provider optimizing grid performance using real-time analytics dashboards.

Module 4: Incident & Emergency Response Management

- Alarm handling and escalation procedures
- Incident classification frameworks
- Crisis communication protocols
- Root cause analysis (RCA) methods
- Emergency shutdown procedures
- **Case Study:** Oil refinery preventing major incident through automated alarm escalation system.

Module 5: Cybersecurity for ROC Systems

- OT cybersecurity fundamentals
- Network segmentation strategies
- Threat detection and mitigation
- Access control and authentication systems
- Security compliance standards
- **Case Study:** Energy company mitigating ransomware attack through segmented network architecture.

Module 6: Remote Asset Management

- Asset lifecycle monitoring
- Condition-based monitoring systems
- Remote diagnostics tools
- Maintenance scheduling optimization
- Asset performance management (APM)
- **Case Study:** Transport company improving fleet uptime using remote diagnostics tools.

Module 7: Workflow Automation & Smart Operations

- Process automation frameworks
- AI-assisted operational workflows

- Digital SOP integration
- Task prioritization systems
- Robotics process automation (RPA) in ROC
- **Case Study:** Manufacturing plant reducing operational delays by 28% through workflow automation.

Module 8: Leadership in ROC Environments

- Decision-making in high-pressure environments
- Team coordination in control rooms
- Change management in digital transformation
- Performance coaching techniques
- Operational excellence frameworks
- **Case Study:** Airport control operations improving turnaround time via leadership restructuring.

Training Methodology

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com