LAPT

LONDON ACADEMY OF PROFESSIONAL TRAINING

CERTIFICATE

ISO 31000SMV — Risk Management in Autonomous Systems

ISO Certification Programme

LAPT — London Academy of Professional Training

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Reference TR-SMV-31000SMV • ISO Transport

UKPRN 10067351 • Registered in England and Wales, company 4984798

6	10	60	430	60%	Lifetime
SUBJECTS	CHAPTERS	CLASSES	TOTAL MARKS	PASS MARK	VALIDITY

AT A GLANCE

REFERENCE	**TR-SMV-31000SMV**
AWARD	**Certificate**
ASSESSMENT	**430 marks — 258 to pass (60%)**
PREREQUISITES	**None**
VALIDITY	**Lifetime**
AWARDING BODY	**LAPT — London Academy of Professional Training**

CURRICULUM

1 Case Studies in Risk Management

0 chapters **65 marks**

2 Regulatory Compliance and Standards

5 chapters · 30 classes **85 marks**

- **1 Introduction to Regulatory Frameworks for Autonomous Systems** — 6 classes
  - 1.1 Explore the Key Components of Regulatory Frameworks for Autonomous Systems
  - 1.2 Identify Major Regulatory Bodies and Their Roles in Autonomous Systems
  - 1.3 Analyze Current Regulations Impacting Autonomous System Development
  - 1.4 Examine Compliance Requirements for ISO 31000 in Autonomous Systems
  - 1.5 Discuss Challenges of Regulatory Compliance in Autonomous Operations
  - 1.6 Apply Regulatory Frameworks to Case Studies of Autonomous Systems
- **2 Understanding ISO Standards Relevant to Smart Systems Vehicles** — 6 classes
  - 2.1 Identify Key ISO Standards Impacting Smart Systems Vehicles
  - 2.2 Explain the Importance of Compliance with ISO 31000
  - 2.3 Analyze Risk Management Principles in Autonomous System Frameworks
  - 2.4 Assess the Relationship Between ISO Standards and Regulatory Requirements
  - 2.5 Evaluate Case Studies on ISO Standard Implementation in Smart Vehicles
  - 2.6 Develop a Compliance Checklist for ISO Standards in Autonomous Systems
- **3 Risk Management Principles Applied to Autonomous Systems** — 6 classes
  - 3.1 Identify Key Risk Management Principles for Autonomous Systems
  - 3.2 Analyze the Regulatory Landscape for Autonomous Systems
  - 3.3 Assess the Impact of Risks in Autonomous System Operations
  - 3.4 Develop Risk Mitigation Strategies for Autonomous Technologies
  - 3.5 Implement Monitoring and Review Processes for Risk Management
  - 3.6 Evaluate Compliance with ISO 31000SMV Standards in Practice
- **4 Assessment and Mitigation of Compliance Risks** — 6 classes
  - 4.1 Identify Key Compliance Risks in Autonomous Systems
  - 4.2 Analyze Regulatory Frameworks Impacting Risk Management
  - 4.3 Evaluate Internal Processes for Compliance Risk Assessment
  - 4.4 Develop Mitigation Strategies for Identified Risks
  - 4.5 Implement Compliance Monitoring and Reporting Mechanisms
  - 4.6 Review Case Studies on Compliance Risk Management Successes and Failures
- **5 Future Trends in Regulatory Compliance for Autonomous Vehicles** — 6 classes
  - 5.1 Analyze Emerging Regulatory Trends for Autonomous Vehicles
  - 5.2 Evaluate Key Compliance Frameworks Impacting Autonomous Systems
  - 5.3 Examine International Standards for the Safe Operation of Autonomous Vehicles
  - 5.4 Assess the Role of Technology in Regulatory Compliance for Automation
  - 5.5 Develop Case Studies on Recent Regulatory Changes in the UK
  - 5.6 Design Compliance Strategies for Future Autonomous Vehicle Innovations

3 Risk Analysis in Autonomous Vehicles

5 chapters · 30 classes **105 marks**

- **1 Fundamentals of Risk Analysis in Autonomous Vehicles** — 6 classes
  - 1.1 Define Key Terms and Concepts in Autonomous Vehicle Risk Analysis
  - 1.2 Identify Types of Risks Associated with Autonomous Vehicles
  - 1.3 Analyze Risk Factors in Autonomous System Operations
  - 1.4 Evaluate the Impact of External Environments on Risk Levels
  - 1.5 Develop Risk Mitigation Strategies for Autonomous Vehicles
  - 1.6 Apply Risk Assessment Tools to Real-World Autonomous Vehicle Scenarios
- **2 Identifying and Assessing Risks in Smart Systems Vehicles** — 6 classes
  - 2.1 Define Key Concepts of Risk in Autonomous Vehicles
  - 2.2 Identify Common Risks in Smart Systems Vehicles
  - 2.3 Analyze Impact of Identified Risks on Vehicle Operations
  - 2.4 Evaluate Likelihood of Risks Occurring in Autonomous Systems
  - 2.5 Prioritize Risks Based on Severity and Likelihood
  - 2.6 Develop Mitigation Strategies for High-Priority Risks
- **3 Risk Mitigation Strategies for Autonomous Systems** — 6 classes
  - 3.1 Identify Key Risks in Autonomous Vehicle Systems
  - 3.2 Analyze Risk Factors Affecting Autonomous Operation
  - 3.3 Evaluate Existing Risk Mitigation Strategies
  - 3.4 Develop Custom Risk Mitigation Plans for Specific Scenarios
  - 3.5 Implement Best Practices for Monitoring and Reviewing Risks
  - 3.6 Assess the Effectiveness of Mitigation Strategies Post-Implementation
- **4 Risk Management Standards and Compliance in the Autonomous Vehicle Industry** — 6 classes
  - 4.1 Understand Key Risk Management Standards in Autonomous Vehicles
  - 4.2 Identify Compliance Requirements for Autonomous Vehicle Operations
  - 4.3 Analyze Risk Assessment Methods in Autonomous Systems
  - 4.4 Evaluate the Role of Stakeholders in Risk Management Processes
  - 4.5 Apply ISO 31000 Principles to Case Studies in Autonomous Vehicles
  - 4.6 Develop a Risk Management Framework for Autonomous Vehicle Projects
- **5 Future Trends and Emerging Risks in Autonomous Vehicle Technologies** — 6 classes
  - 5.1 Identify Future Trends in Autonomous Vehicle Technologies
  - 5.2 Analyze Emerging Risks Associated with Autonomous Systems
  - 5.3 Evaluate Regulatory Impacts on Autonomous Vehicle Innovation
  - 5.4 Assess Ethical Considerations in Autonomous Vehicle Deployment
  - 5.5 Develop Strategies for Mitigating Identified Risks
  - 5.6 Create a Risk Management Plan for Future Autonomous Vehicles

4 Strategic Risk Management

0 chapters **65 marks**

5 Team Leadership and Communication

0 chapters **65 marks**

6 Technology and Innovation in Smart Systems

0 chapters **45 marks**