BLACKBIRD FOR TRAINING

Software for Temporary Traffic Management for Road Works



Software for Temporary Traffic Management for Road Works

Introduction

This intermediate-to-advanced course focuses on software-supported approaches to planning, evaluating and managing temporary traffic arrangements during road construction and maintenance works.

Participants will explore temporary traffic control systems, work-zone traffic flow, lane closures, traffic diversions, risk assessment, temporary signals, traffic-management layouts, incident management and emergency procedures. The course combines theory with computer-based practical exercises and realistic work-zone scenarios.

Course Objectives

By the end of this course, participants will be able to:

- Understand software-supported temporary traffic management.
- Develop and evaluate temporary traffic management plans.
- Analyse traffic flow through road-work zones.
- Plan lane closures and traffic diversions.
- Evaluate temporary traffic control layouts.
- Assess work-zone traffic safety risks.
- Develop appropriate responses to work-zone incidents.
- Compare alternative traffic-management scenarios.
- Support safer and more efficient road-work traffic operations.

Course Outlines

Day 1 - Digital Approaches to Temporary Traffic Management

- Fundamentals of temporary traffic management for road works.
- Role of software and digital tools in work-zone planning.
- Temporary traffic control systems and layouts.
- Traffic management plans and planning workflows.
- Key safety and operational considerations for road works.

Day 2 - Work-Zone Traffic Flow and Planning - Practical Application



- Traffic flow through road-work zones.
- Lane closures and traffic diversions.
- Assessment of traffic disruption.
- Development of alternative work-zone scenarios.
- Practical Exercise: Develop and compare two lane-closure/diversion scenarios and evaluate their impact on traffic flow and safety.

Day 3 - Temporary Traffic Control Systems - Practical Application

- Temporary traffic signs and road markings.
- Cones, barriers and crash cushions.
- Temporary traffic signals and control systems.
- Evaluation of temporary traffic-control layouts.
- Practical Exercise: Develop and evaluate a temporary traffic-control layout for a road-work scenario.

Day 4 - Work-Zone Risk and Incident Management - Practical Application

- Identification of work-zone traffic risks.
- Traffic incidents during road works.
- Emergency procedures and response arrangements.
- Incident-management measures and traffic control.
- Practical Exercise: Analyse a work-zone incident scenario and develop an appropriate traffic-management and emergency response.

Day 5 - Integrated Work-Zone Traffic Management Case Study

- Developing a complete temporary traffic management plan.
- Integrating traffic flow, safety and risk considerations.
- Evaluating temporary traffic-control arrangements.
- Reviewing alternative work-zone management scenarios.
- Integrated Case Study: Develop and evaluate a complete traffic-management solution for a road construction or maintenance project.

Why Attend This Course? Wins & Losses!

Wins:

- Improved temporary traffic management planning skills.
- Practical experience with work-zone traffic scenarios.
- Better understanding of lane closures and diversions.
- Stronger work-zone risk assessment capabilities.
- Improved ability to evaluate temporary traffic-control layouts.
- Better preparedness for work-zone incidents and emergencies.

Losses if Not Attended:



- Greater reliance on manual work-zone planning.
- Limited ability to compare alternative traffic arrangements.
- Reduced ability to assess traffic disruption.
- Weaker integration of risk assessment into traffic planning.
- Reduced preparedness for work-zone incidents.

Conclusion:

This course provides participants with an applied understanding of software-supported temporary traffic management, combining planning, traffic-flow analysis, risk assessment, temporary traffic-control systems and incident management to support safer road works.

Frequently Asked Questions FAQ

1. Who should attend this course?

Traffic engineers, road safety engineers, work-zone planners, transportation professionals and road construction and maintenance personnel.

2. Does the course cover temporary traffic control devices?

Yes. It covers temporary signs, markings, cones, barriers, crash cushions and temporary traffic signals.

3. Does the course cover lane closures and diversions?

Yes. Participants analyse and develop lane-closure and traffic-diversion scenarios.

4. Does the course include practical computer-based exercises?

Yes. Days 2, 3 and 4 include practical exercises based on work-zone scenarios.

5. Is a specific software package required?

No. The course focuses on software-supported planning and evaluation methodologies rather than a specific software package.

