

ON-SITE TUNNEL INTERVENTION COURSE (BASIC OR ADVANCED)

Get high quality, hands-on training with instructors, both theoretical and practical live-fire training in the Applus+ TST 600 metre tunnel and training gallery.

WHAT WILL THIS COURSE OFFER YOU?

- **Theoretical training**, methodology and procedures to act safely in fires inside tunnels.
- **Practical experience**, through demonstration exercises, manoeuvres and drills, conducted with real fire in the Applus+ TST tunnel.
- **Basic or advanced level diploma** for fire intervention in tunnels.



BASIC LEVEL PROGRAMME

- **Aimed at:** firefighters and managers looking for basic specialised knowledge in tunnels.
- **Duration:** 3 days (2 days + 1 morning)
- **Theory:** 10,5 hours
- **Practical exercises included:** 3 (6,5 h)
 - Demonstration: smoke evolution.
 - Procedures: for its extensive path of evolution and tracking.
 - Simulation: first-aid response to fires in tunnels.

ADVANCED LEVEL PROGRAMME

- **Aimed at:** firefighters and managers looking for advanced knowledge and training.
- **Duration:** 4 days (3 days + 1 morning)
- **Theory:** 14 hours
- **Practical exercises included:** drills 1 and 2 of the basic course and 3 additional drills (11.5 hours).
 - Drill 1: first response to a fire by mouth.
 - Drill 2: first response to a side access fire.
 - Drill 3: action with two intervention sectors.

INFORMATION AND BOOKING

Applus+ TST is **known worldwide for training firefighters and rescue service providers.**

Hundreds of professionals are trained every year at its facilities in Asturias, where a 600-metre semi-buried tunnel stands out.

Applus+ TST is part of Applus+ Laboratories, the Applus+ Group division that provides testing, certification and development engineering services.



San Pedro de Anes Experimental Centre
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Contact us

HYBRID TUNNEL INTERVENTION COURSE (BASIC OR ADVANCED)

Study the theory at your own pace online and backed up by our live fire practical exercises in our Applus+ TST 600-metre tunnel. All lessons are guided by the same instructors of the highest professional level).

WHAT WILL THIS COURSE OFFER YOU?

- **Theoretical training** to act safely in fires inside tunnels.
- **Practical experience**, thanks to real fire simulations at the Applus+ TST tunnel.
- **Time optimisation**, the theoretical components can be completed online.
- **Basic or advanced level diploma** for fire intervention in tunnels.



BASIC LEVEL PROGRAMME

- **Aimed at:** firefighters and managers looking for basic specialised knowledge in tunnels.
- **Duration:** 2 days (1 day + 1 morning)
- **Theory:** 18 hours online + 5 hours on site.
- **Practical exercises included:** 3 (6,5 h)
 - Demonstration: smoke evolution.
 - Manoeuvre: long evolution and tracking.
 - Simulation: first response to fire in a tunnel.

INFORMATION AND BOOKING

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ADVANCED LEVEL PROGRAMME

- **Dirigido a:** bomberos y mandos que busquen conocimientos y capacitación avanzada.
- **Duración:** 3 días (2 días + 1 mañana)
- **Teoría:** 14 horas
- **Ejercicios prácticos incluidos:** prácticas 1 y 2 del curso básico y 3 simulacros adicionales (11,5 h).
 - **Simulacro 1:** primera respuesta ante incendio por boca.
 - **Simulacro 2:** primera respuesta ante incendio por acceso lateral.
 - **Simulacro 3:** actuación con dos sectores de intervención.



Contact us

ONLINE THEORETICAL COURSE ON TUNNEL INTERVENTION (Cod CEO31)

Learn all about fire fighting best practices in tunnels during 18 hours of training, with first class instructors and at your own pace from any internet-enabled device.

VALUABLE ONLINE TRAINING TO GO THE EXTRA MILE:

- Complement your training and knowledge to understand fires in tunnels and underground infrastructures.
- Learn how to act safely in the event of a fire inside a tunnel.
- Top-level instructors will pass on their experience in this type of intervention.
- Study at your own pace, at any time and from anywhere in the world, online.

WHAT WILL THIS COURSE OFFER YOU?

- Precise knowledge of fire reaction in a tunnel.
- Methods, procedures and intervention tactics to control and extinguish fires in tunnels.
- An Applus+ TST certificate.
- A book edited by the course instructors with all the information on the subject.
- Access to the Applus+ TST blended learning programme with practical exercises, manoeuvres and simulations.

INFORMATION AND RESERVATION

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PROGRAMME

- **Part one:**
 - Introduction
 - Module 1: Intervention problems.
 - Module 2: Fire evolution.
 - Module 3: Ventilation in tunnels.
- **Part two:**
 - Module 4: Safety in tunnels.
 - Module 5: Orientation, search and rescue.
 - Module 6: Intervention methodology



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CERTIFIED COURSE FOR TUNNEL CONTROL ROOM OPERATORS IN FIRE SITUATIONS

Tunnel control room operators play a key role when it comes to fire safety. In this course, you learn to strengthen your decision-making skills in these challenging circumstances.

WHO IS THE COURSE FOR?

- Control room operators looking to improve their performance in the case of fires.
- Tunnel managers who want to improve and certify staff skills.
- Engineers and consultants.
- Public Administration staff with competences in tunnel management.
- Insurance companies and any professional involved in tunnel-related activities.

INFORMATION AND EVENT CONFIRMATION

- **Dates:** to be defined.
- **Duration:** 12 hours.
- **Price:** 1025€ (VAT not included).
- This course is FUNDAE subsidised. Contact us or use the following QR code to sign up



Applus+ TST is known **worldwide for training firefighters and rescue service providers**. Every year, hundreds of professionals are trained at its facilities in Asturias, home to a 600-metre semi-buried tunnel.

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PROGRAMME

- **Pre-assessment and theory:**
 - Theoretical training on fire evolution and types of ventilation in tunnels in Applus+ TST classrooms.
- **Practical exercises with real fire in a tunnel:**
 - Rehearsal-simulation with white smoke from inside the tunnel: evacuation exercises.
 - Smoke evolution from inside the tunnel.
 - Smoke evolution from the control room. Rehearsal-demonstration with real fire.
 - Practice in extinguishing real fire.
- **Operator certification:**
 - Verification of candidates' training, experience and skills.
 - Assessment by the Applus+ Certification Commission.
 - Applus+-certified Tunnel Control Room Operator's Licence in Fire Management, valid for up to 10 years.



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CONTROL ROOM OPERATORS' TUNNEL FIRE MANAGEMENT COURSE

Tailor-made without certification in one or two teaching days

Control room operators in tunnels have a key role in case of fire. Their decisions and actions in an emergency will be key in managing the fire and ventilation systems and participating in a possible evacuation. Operators' reaction to a real fire situation requires critical decision-making in times of stress, both personally and for the people who may be trapped in the tunnel. Therefore, having practical experience in tunnel fire situations with real fire and smoke can make all the difference.

This experimental tunnel is specially prepared to carry out practical exercises with real fire and has a long experience of being used to carry out training for control room operators and road/maintenance personnel, firefighters, mine rescue teams and other professional profiles related to emergencies in closed spaces.

The usual training programme consists of two days. Thanks to the integration of alternative solutions, our course has been optimised to last only one day to meet specific training needs, with less amount but higher quality training exercises.

In this course, the operators, in addition to receiving theoretical knowledge of how a fire evolves in a tunnel, will be able to carry out up to three practical exercises inside the tunnel:

- **Demonstration with real 5MW fire:** smoke evolution from inside the tunnel and from the control room.
- **Mock evaluation exercise:** test-demonstration with white smoke from inside the tunnel.
- **Practice in extinguishing a real fire.**

The usual two-day course includes coffee and lunch for the participants. All exercises will be coordinated and supervised by Applus+ TST personnel, with all necessary safety measures being maintained. In addition, there is the participation of special brigades with great experience, both for the control and evolution of the fire, as well as to act if necessary.



TUNNEL TRAINING WITH REAL FIRE AND SMOKE

Applus+ TST has a 600 metre long tunnel for practical tests, similar to a two-way road tunnel, with emergency exits to a gallery and the most common ventilation systems in tunnels.

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TAILOR-MADE ON-SITE TUNNEL INTERVENTION COURSE (ALL LEVELS)

Get high quality, hands-on, instructor-led training, both theoretical and practical with live fire exercises at the Applus+ TST 600 metre tunnel and training gallery.

WHAT WILL THIS COURSE OFFER YOU?

- Theoretical training, methodology and procedures to act safely in fires inside tunnels.
- Practical experience, through demonstration exercises, manoeuvres and drills, all with real fire in the Applus+ TST tunnel.
- Relevant level diploma on fire intervention in tunnels.

TRAINING EXPERIENCE

Our experimental centre is a world reference in the training of firefighters and rescue services. Training courses are given in Spanish and English.

In the last few years, important corps from all over the world have passed through our training centre:

- National: Madrid, Navarra, Asturias, Oviedo, Levente, Zaragoza...
- International: Portugal, Quito (Ecuador), Nuñoa (Chile), Israel, Andorra...



AVAILABLE PROGRAMME FORMATS

Applus+ TST provides standard training courses and can also adapt them to the professional needs of the participants according to the following levels:

- Initiation course in galleries of 1 and 2 days.
- 1 and 2-day tunnel initiation courses.
- Basic courses in tunnels of 2 and 3 days.
- Advanced courses in tunnels of 3 and 4 days.
- Special 4 and 5-day courses for managers.
- Special 5-day courses for trainers.
- Possibility of other modalities, such as practice with an electric car, on request.



Contact us

TAILOR-MADE ON-SITE TUNNEL INTERVENTION COURSE (ALL LEVELS)

SEMINAR CONTENT

This seminar provides theoretical knowledge and practical experience of real fire situations in confined spaces and tunnels. Training exercises are conducted in real fire scenarios and the different methodologies for interventions are demonstrated.

Thanks to this knowledge, stress levels can be regulated in challenging scenarios, allowing professionals to act more objectively in case of emergency, be it in fire control and extinguishing tasks or control and extinguishing fires or during evacuations.

We offer different training modules, including the possibility of practical training in an electric car. Depending on the level of the course, the programme and content varies, but the following topics are included:

- **Theoretical training:** training on the evolution of fire, extinguishing equipment, ventilation systems; passive protection systems; configuration of a road tunnel and its emergency exits; evacuation measures in the event of fire, special and long-term breathing equipment, etc.
- **Practical exercises and manoeuvres:** based on demonstration, manoeuvre and drill, covering the following aspects: smoke evolution; orientation and search for evacuation in tunnels; handling of self-contained breathing apparatus and fire-fighting equipment.



INFORMATION AND BOOKING:

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