

BMW Security
Driver Training



Sheer
Driving Pleasure

www.bmw-ids.com
www.bmw.de/fahrertraining

BMW Security
Driver Training

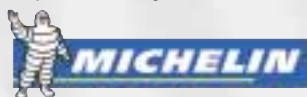


Sheer
Driving Pleasure

Complete
programme

**Experience Security –
Attain Control.**
BMW Driver Training with Security Vehicles.

Sponsored by





BMW Security Driver Training.

Security is the sum of all its constituent parts.

Mobile security involves two fundamental components: vehicles that offer personal protection against criminal attacks while on the road, and control of the vehicle in critical situations. That is why BMW Engineered Mobile Security is founded on a concept which encompasses every aspect.

Secure automobiles from the very outset

BMW is one of the world's few car manufacturers to have its own tradition of building Security vehicles, a tradition the company has had for more than 30 years. This gives BMW a level of experience which produces well-developed solutions to various threat scenarios:

- BMW X5 Security (protection class B4)
- BMW 7 Series High Security (protection class B6/B7)

Secure driving from the very outset

In our special training courses, professional drivers working in the security industry, as well as private drivers of Security vehicles, learn to master their vehicles completely, in critical situations and on any terrain. There are various course levels, teaching safe handling of the vehicles and tactical knowledge, as well as the physics of driving and the science of ballistics. The seminars are held worldwide and under the directorship of BMW Driver Training, whose instructors have many years of experience in the field of Security vehicles. BMW offers specialised winter training courses with series production models as well.



BMW Security Driver Training.

Thorough training creates security.

BMW launched the Driver Training initiative more than two decades ago, thus becoming the first automobile manufacturer to provide such a service. The service has since developed into a comprehensive programme offering the optimum training to drivers of every capability. In the sensitive area of Security vehicles, special courses with differing training levels are provided which can accommodate every degree of driving ability.

You can find contact details and other information such as dates, event locations and registration forms for the Security Driver Training at: www.bmw-ids.com

Exclusive Training Level 3 / 3 days



Participants: Drivers of armoured or non-armoured vehicles in the field of security, after successfully completing Intensive Training Level 2.
Objective: Convey and deepen knowledge of driving characteristics / driver assistance systems / vehicle handling in theory and practice. Discussion and teaching of tactical behaviour.
Duration: 3 days. Arrival the day before, theory in the evening.
Vehicles: BMW 3 Series / BMW 7 Series High Security / BMW X5 Security / Collision cars.

Intensive Training Level 2 / 2 days



Participants: Drivers of armoured or non-armoured vehicles in the field of security, with previous experience of Driver Training.
Objective: Convey and deepen knowledge of driving characteristics / driver assistance systems / vehicle handling in theory and practice.
Duration: 2 days. Arrival the day before, theory in the evening.
Vehicles: BMW 3 Series / BMW 7 Series High Security / BMW X5 Security.

Initial Training Level 1 / 1 day



Participants: Drivers of armoured or non-armoured vehicles in the field of security, with little or no previous experience of Driver Training.
Objective: Convey basic knowledge of driving characteristics / vehicle handling in theory and practice.
Duration: 1 day. Arrival the day before, theory in the evening.
Vehicles: BMW 3 Series / BMW 7 Series High Security.

Additional training courses with BMW series production models:

Winter Training in Sölden, Austria / Sweden

Training objective: improve driving technique under winter conditions. Services: Driver Training and supporting programmes such as skiing, wellness etc. Accommodation in exclusive hotels. Duration: 2-4 days.

Motorcycle Driver Training

Compact, initial and specialised training courses. Training objectives: thorough control of the motorcycle, adapted to the experience of the participants.



Level 1 – Initial Training.

Creating the right basis.



1 day

Theory:

Theory of the dynamics of driving, the role of the driver in the security system.

Practice: Handling

Sitting and holding the steering wheel correctly are essential keys to driving a vehicle safely. Fast responses and precise steering actions are only possible if the body is supported and fixed in position.

Emergency lane change

A vehicle door opens suddenly into the path of your vehicle. A vehicle suddenly drives out of a turning and into the path of your vehicle. A load falls off a truck. These are examples of incidents that force you to steer quickly in order to avoid the obstacle. In such cases, braking is not possible because of the short distance available.



Emergency braking

The driver of a vehicle is forced to perform emergency braking by the sudden appearance of an obstacle. In order to avoid an accident, the vehicle must stop in as short a distance as possible.

Braking / avoiding

To prevent an accident, a driver must bring his vehicle to a standstill in the shortest possible distance. However, if the available distance is not sufficient to stop in, then he should consider the possibility of avoiding the obstacle by steering around it.

Understeering and oversteering

A vehicle enters a corner at a speed too high for the radius of the curve and the prevailing weather or road conditions. The driver attempts to hold the corner by steering sharply. The wheels begin to lose their frictional grip, the vehicle slides slightly towards the outside of the bend with its front wheels (understeering). If the load then changes too quickly or unregulated power is transmitted through the rear axle, the rear of the vehicle may begin to go out of control. This driving scenario is known as oversteering. Only a quick and appropriate response will bring the vehicle back into a stable state.

Slalom / obstacle course

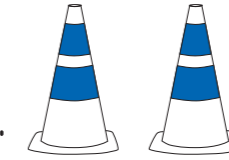
On the slalom / obstacle course, the elements learned during the day are called upon under pressure of time and success. Participants must now put the experience of the training into practice.

Level 1



Level 2 – Intensive Training.

Deepening knowledge – learning new things.



2 days

Theory:

Theory of the dynamics of driving, driver assistance systems, the role of the driver and the security personnel in the security system.

Practice: Handling

Check the sitting position and vehicle handling.

Braking / avoiding

As in Level 1, but at higher speeds and in a choice of directions as specified. Learn how to brake hard while steering. What influence does where you look have on precision steering work? What is the relationship between the reduction of speed and the steering angle? What functions and support are provided by ABS and DSC?

Lane change / double lane change

As in Level 1, but at higher speeds.

Learn various patterns of action and alternative methods of keeping the vehicle stable in difficult situations. Controlled handling by means of the specific employment of steering and braking, with the aim of continuing to drive on stably. Experiencing the handling of vehicles of varying weights.



Braking in corners

A vehicle is rounding a bend with a high level of lateral acceleration. An obstacle suddenly appears in the path of the vehicle which cannot be avoided. Oncoming traffic and structural restrictions make evasive action impossible. The driver must perform an emergency braking operation. Because of the reduced lateral traction, the vehicle will initially understeer. In principle what is aimed at is to maintain braking pressure in order to decelerate as much as possible. However, keeping the vehicle in its own lane and not veering into the oncoming lane may demand a reduction of braking pressure in favour of lateral traction.

Level 2



Oversteering in an oval / drifting

A vehicle loses traction on the rear axle while cornering. The rear wheels spin and lateral traction is lost. This is an unusual and generally unexpected scenario for the driver. Drivers in the field of security must be able to master this situation in order to continue to drive the vehicle safely in an emergency.

Escape turn in reverse

In certain scenarios, a reverse turn may be considered as a means of manoeuvring the vehicle out of a dangerous area. This is an exercise which requires great experience in handling the vehicle; perfect execution is necessary, especially in situations involving a high degree of danger.

Slalom / obstacle course

On the slalom / obstacle course, special demands are placed on the drivers. Multiple tasks require, in addition to the demands of driving, a high degree of concentration and access to cognitive resources. Decisions are needed. Fast, safe and correct responses are learned and tested.

Special sequences in practice:

Offset driving

Endangered persons are often accompanied by several vehicles and security personnel. How are the vehicles positioned in flowing and standing traffic? How does a convoy behave in different traffic densities? What physical aspects must be taken into consideration?

Leaving the road

A vehicle containing an endangered person is forced by external circumstances to leave the road at high speed and drive onto the verge. What behaviour and reactions are expected of the driver? How does a vehicle respond to the sudden change in road surface conditions? How can the driver predict the danger which will arise?



Combination exercises in convoy

Isolated driving exercises with a vehicle have been carried out. How does a convoy respond to suddenly arising situations such as lane changes, double lane changes, or oversteering of the vehicle in front?

Night training

In night training, the various sequences of the day are repeated. The completely different visibility conditions demand particular sensitivity of the drivers, a sensitivity which relates not only to the recognition and avoiding of potential risks. What influence does darkness have on the driver's awareness of dangers? How does the eye react to different lighting conditions?

Off-road training

Driving exercises using the BMW X5 Security away from concrete roads. Driving on open terrain, especially with a Security vehicle, demands special techniques which are taught in this part of the course. The tactical advantages of an SAV in daily use are also explained.

Technical training

The main aspect of technical training is experience relating to Run-Flat tyres. How is a Run-Flat tyre constructed, and how can it be expected to perform? What advantages does a Run-Flat tyre have from a tactical point of view?

Vehicle care and service tips for maintaining the vehicle's value.

Tactical training

Tactical training is carried out by instructors who have gathered experience from all over the world. These instructors have been involved in the prevention and combating of attacks on vehicle convoys in a wide range of security areas.

Tactical training includes instruction in the following areas:

- Checking a vehicle for unknown objects
- Choice of route
- Recognising threats and attacks

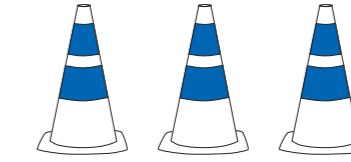


Level 2



Level 3

Level 3 – Exclusive Training. Making knowledge and skill your own.



3 days

Theory:

Theory of the dynamics of driving, driver assistance systems, the role of the driver and security personnel in the security system.

Practice:

Braking / avoiding

The same as in Level 1 and 2, but at higher speeds and with a choice of direction as specified. Learn how to brake hard while steering. What influence does where you look have on precision steering work? What is the relationship between the reduction of speed and the steering angle? When can the brake be released? What functions and support are provided by ABS and DSC?



Lane change / double lane change

As in Level 1 and 2, but at higher speeds and with several vehicles. Learn various patterns of action and alternative methods of keeping the vehicle stable in difficult situations. Controlled handling by means of the specific employment of steering and braking, with the aim of continuing to drive on stably. Experiencing the handling of vehicles of varying weights.

Oversteering in corners

Drivers of Security vehicles must have a particularly high degree of control over their vehicles. In Level 2, trainees learned drifting in a circle as a means of controlling the vehicle. Now, in a bend, the vehicle must be brought into a controlled drift by a careful adjustment of load.



Backwards slalom with turn

Driving backwards places special demands on drivers. There is a lack of orientation, the vehicle responds totally differently than when driving forwards, and the driver must have a high level of sensitivity. The driver must decide when and where to conduct a 180° turn.

Leaving the road on a corner

Leaving the road as in Level 2, but this time on a corner, taking into account and observing lateral forces.

Avoiding obstacles while cornering

Cornering presents drivers with special problems. They must gauge and observe the course around the bend, and control the lateral forces that occur. If this sphere of activity is disrupted by external influences such as attackers, roadblocks, or simply a load falling off a truck, then the driver must take the appropriate action.

Tactical reverse turn with two vehicles

Turning has already been practised using an isolated driving sequence. Coordination training using two vehicles in this particular driving situation is essential for security personnel.

Special sequences in practice:

Contact driving

Driving under paintball fire

Night training

Pace car driving (on racing tracks or suitable terrain)



Off-road training

Driving exercises using the BMW X5 Security away from concrete roads. Driving on open terrain, especially with a Security vehicle, demands special techniques which are taught in this part of the course. The tactical advantages of an SAV in daily use are also explained.

Technical training

The main aspect of technical training is experience relating to Run-Flat tyres. How is a Run-Flat tyre constructed, and how can it be expected to perform? What advantages does a Run-Flat tyre have from a tactical point of view?

Vehicle care and service tips for maintaining the vehicle's value.

Tactical training

Tactical training is carried out by instructors who have gathered experience from all over the world. These instructors have been involved in the prevention and combating of attacks on vehicle convoys in a wide range of security areas.

Tactical training includes instruction in the following areas:

- Checking a vehicle for unknown objects
- Choice of route
- Recognising threats and attacks
- Arriving and departing at critical points
- Principles of personal protection driving



Level 3





The BMW X5 Security.

Security in every situation and on every terrain.

Supremacy and handling

The BMW X5 Security is a vehicle which combines all the benefits of a Sports Activity Vehicle (SAV) with the very latest security technology. Its passenger compartment protects you and your family against violent crimes – robberies, kidnapping and carjacking. It has you feeling more secure than ever before.

Lots of power, less consumption. The V8 petrol engine with VALVETRONIC

The efficient BMW eight-cylinder petrol engine in the BMW X5 Security gives you significantly improved driving performance. It provides power and more torque – but considerably less fuel consumption.

xDrive – the new, intelligent all-wheel drive from BMW

Its sensors enable xDrive to detect instable chassis statuses within the DSC chassis control system (Dynamic Stability Control), and it responds in a fraction of a second. The flexible distribution of power between the front and rear axle supplies the optimum drive to the wheels with the most traction.

Officially tested and certified: protection class B4

The entire vehicle has been tested and certified by the Munich Ballistics Office in accordance with the standards DIN EN 1063 and DIN EN 1522/23-1. Protection class B4 includes handguns up to the .44 Magnum.



Technical specifications:

Model	BMW X5 4.4i Security
Protection class*	B4
Engine	
Cylinders/valves	8/4
Capacity (cm ³)	4398
Nominal power output (kW/rpm)	235/6100
Max. torque (Nm/rpm)	440/3700
Performance	
Maximum speed (km/h)	210**
Acceleration 0–100 km/h (s)	7.8

* The protected areas (the entire passenger compartment) have been tested in compliance with the standards DIN EN 1063 and DIN 1522/23-1, on the basis of the Directive BRV 1999 for testing and certifying "bullet-resistant vehicles" for motorcars and other vehicles.

** Electronically limited.



The BMW 7 Series High Security.

New standards for the highest demands.

More experience – more security

The BMW 7 Series High Security represents a level of development which sets new standards. Innovative technologies and materials have been employed in order to achieve the maximum protective effect. Protection class B6/B7 is the highest security level available from BMW.

Superior power in every situation

Two high-torque engines with VALVETRONIC are available for the BMW 7 Series High Security. The 6.0 litre BMW twelve-cylinder engine generates 327 kW (445 bhp) and accelerates the vehicle from 0 to 100 km/h in approximately 7.5 seconds. The 4.4 litre BMW eight-cylinder engine produces 245 kW (333 bhp) and requires approximately 9.8 seconds to reach 100 km/h from a standing start. Both engines boast a spontaneous and even development of power across the whole range of engine speeds.

Maximum security. Independently tested and certified: protection class B6/B7

The entire vehicle has been tested and certified by the Munich Ballistics Office on the basis of the standards BRV 1999, DIN EN 1063 and DIN EN 1522/23-1. The vehicle officially fulfils the requirements of protection classes B6 and B7.

BMW Pre-Owned High Security Cars

It is important for BMW that High Security cars do not go to the wrong people – either as new or pre-owned. This is why BMW offers purchasers of such cars a buy-back option covering High Security vehicles up to seven years old. Following a thorough technical inspection at BMW's Dingolfing Plant, where all BMW High Security cars



are built in the first place, these vehicles then go into BMW's car pool or are sold as pre-owned High Security cars to special selected customers.

Technical specifications:

Model	745Li High Security	760Li High Security
Protection class*	B6/B7	B6/B7
Engine		
Cylinders/valves	8/4	12/4
Capacity (cm ³)	4396	5972
Nominal power output (kW/rpm)	245/6100	327/6000
Max. torque (Nm/rpm)	450/3600	600/3950
Performance		
Maximum speed (km/h)	210**	210**
Acceleration 0–100 km/h (s)	9.8	7.5

* The protected areas (the entire passenger compartment) have been tested in compliance with the standards DIN EN 1063 and DIN 1522/23-1, on the basis of the Directive BRV 1999 for testing and certifying "bullet-resistant vehicles" for motorcars and other vehicles.

** Electronically limited.

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