# REV PROJECT BMW X5 INFORMATION SHEET

*This sheet to be kept by inductee*

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| **Instructor Name** | **Instructor Contact Information** |
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| **Supervisor Name** | **Supervisor Contact Information** |
| Thomas Braunl | **1763** |

**Before Driving the REV BMW X5**

Check note the following:

* The BMW X5 is a petrol vehicle.
* This vehicle is **not road-licenced** and must not be driven on public roads.
* The vehicle is equipped with brake-by-wire such that a servo can automatically  
  press down the brake pedal.  
  The vehicle brake can still be operated normally.
* The vehicle is equipped with steer-by-wire such that a motor can turn the steering wheel automatically.  
  The vehicle steering can still be operated normally, even by overriding the steering motor by moving the steering wheel manually.
* The vehicle **does not have accelerate-by-wire** for safety reasons, which means a human driver is required to actively push the accelerator in order to move the vehicle
* The drive-by-wire functions are only functional if an embedded controller or laptop PC (Mac, etc.) is connected to the car’s embedded drive-by-wire controller and sends drive instructions to it.
* All drive-by-wire functions can be deactivated by pressing the **red safety button** to the right of the steering wheel.

**Starting the Vehicle**

Because the car has potentially long standing times, the starter battery is switched off by default.

1. Unlock the car with the key (not the keyless entry)
2. Switch on the starter battery by turning the red handle on the driver side ceiling
3. Start the engine by turning the key in the ignition.

**Decommissioning the Vehicle**

The BMW X5 has a parking bay in the upper basement of the UWA Motorola building. The parking bay is first on the left when entering the basement.

Because the car has potentially long standing times, the starter battery must be switched off.

1. Stop the car by taking out the ignition key.
2. Open the driver side door
3. Lock all doors with the keyless remote
4. Switch off the starter battery by turning the red handle on the driver side ceiling
5. Manually lock the driver door with the key.

**If the vehicle does not start check the following:**

* Fuel tank level.
* Starter battery voltage.

**Transmission**

The BMW X5 uses a standard manual gearbox with a clutch.

**Starter Battery Charging**

In case the voltage level of the starter battery has dropped too low, consult with the REV supervisor, a REV instructor or the UWA workshop in order to charge the starter battery.

**Breakdown Procedures**

In the event the electric vehicle has broken down, contact a REV instructor or the REV Project supervisor. If they cannot be contacted and the vehicle needs to be moved, call the RAC on 131111.

**Emergency Procedures**

In the event of an emergency it is important put the lives of yourself and others first.

**Emergency Stop**

Pushing the red emergency button will let the steering motor free-wheel, so the steering wheel can be moved without interference. At the same time, the brake servo will move to its upper position, releasing the brake pedal in case it had been automatically pressed, in order not to interfere with any foot operation of the brake by the driver.

**Vehicle Fire Extinguisher**

The BMW X5 fire extinguisher is located in the vehicle’s trunk.

**Motorola Basement Fire Extinguisher**

The fire extinguisher for the Motorola building is located in the centre of the eastern wall of the basement.