

**Guidelines for safety when working on and in electric vehicles, 2,5 HE credits**  
*Riktlinjer för säkerhet vid arbete på och i elfordon, 2,5 hp*

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Established: 2020-12-17

Established by: Department of Engineering Science

Applies from: H21

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**Learning outcomes**

**Knowledge and understanding**

The student must, after completing the course, be able to demonstrate:

- an understanding of the risks associated with working with high voltage and current in electric vehicles
- knowledge and understanding of electrical installations related to electric vehicles
- knowledge of the chemical risks that battery leakage can cause
- knowledge of creating a risk-free working environment when working with electric drive systems for electric vehicles

**Competence and skills**

The student must, after completing the course, be able to demonstrate the ability:

- to perform risk analysis in work with electricity in electric vehicles and their surroundings

**Judgement and approach**

The student must, after completing the course:

- make assessment with regards to safety guidelines prepared by, among others, authorities

**Entry requirements**

Degree of Bachelor of Science in mechanical engineering or equivalent. Additionally the Bachelor of Science degree must be comprised of a minimum of 5 HE credits in programming and 15 HE credits in mathematics. In addition, verified knowledge of English corresponding to the course English B/English 6 in the Swedish Upper Secondary School or equivalent.

**The forms of assessment of student performance**

Individual written exam.

**Course contents**

The course presents the electrical safety guidelines required for work on and in electric vehicles. The course focuses on the creation of a risk-free environment with electric drive systems, electrical safety, maintenance of electrical installations and provides knowledge about the chemical risks that the use of batteries can entail.

### **Other regulations**

Course grading: Failed or Passed

Course language: The teaching is conducted in English.

General rules pertaining to examination at University West are available at [www.hv.se](http://www.hv.se).

If the student has a decision/recommendation on special support due to disability, the examiner has the right to examine the student in a customized examination form.

### **Cycle**

First cycle

### **Progressive specialization**

G1F - first cycle, has less than 60 credits in first-cycle course/s as entry requirements

### **Main field of study**

Electrical Engineering