

University Politehnica Timisoara
Faculty of Engineering Hunedoara

Bachelor studies program: ROAD VEHICLES

Domain of study: Automotive engineering

Mission of the *Road Vehicles* qualification is part of the overall mission of the Faculty of Engineering Hunedoara, which is to train specialists with higher education in technical, economic and managerial engineering fields, particularly for economic sectors of design, research and production in the field of road vehicles and also for sectors of diagnostic, repair and maintenance of motor vehicles. Assumed mission includes training of engineers able to adapt to requirements of market economy and new technologies by covering a learning process designed within the European area of higher education and focused on a basic polyvalent and specialized training to ensure the graduate an advanced knowledge and real opportunities in the competition on the labor market.

The *Road Vehicles* qualification was taught at the Faculty of Engineering Hunedoara since academic year 2003/2004 and was accredited by ARACIS in 2011. Currently, in the labor market (domestic and EU), the demand for specialists engineers in *Road Vehicles* is growing. Competences and skills targeted by potential employers refers to: 3D design, traffic safety, transportation management, fleet technical condition, control of noise and chemical pollution from motor vehicles, operation of intelligent transport systems. Specialist competences may be supplemented by Master degree programs in the fields of Mechanical Engineering and Automotive Engineering. Also, for the *Automotive Engineering* domain of study, which comprises the *Road Vehicles* qualification, "Politehnica" University of Timisoara organizes Ph.D studies since 2005.

Professional competences:

- Operation with the fundamental concepts in the field of engineering science.
- The appropriate use of the concepts in the field of automotive engineering.
- Designing constructive solutions meant to grant the functional requirements of vehicles.
- The design of manufacturing technologies for road vehicles.
- The design and application of the maintenance technologies for road vehicles.
- Operation with the concepts of economical systems and subsystems, whose object of activity is the research, design, manufacturing and maintenance of road vehicles.

Transversal competences:

- Carrying out professional tasks according to the specific requirements, within the deadlines and according to a preestablished work schedule under qualified guidance.
- The easy integration into the work team, by assuming specific roles and achieving a good communication among the group members.
- Achieving personal and professional development, using one's own resources and the modern study instruments.