

**University Politehnica of Timișoara**  
**Faculty of Engineering Hunedoara**

**Master Degree Programme: *Advanced Materials and Technologies for  
Automotive Industry***

The mission of the study program consists of:

- Initial and continuing professional training at university and postgraduate level, in engineering and interdisciplinary fields;
- Scientific and technological research;
- Scientific and technological transfer, production and specific services to third parties.

The program was conceived to provide students new skills in choosing and testing of advanced materials for motor vehicles domain and new skills in modern technologies for processing and manufacturing of vehicle components. The program aim is to ensure specialization at high quality standards, needed to ensure competitiveness in the European space.

The master degree programme meets the growing demand for specialists (for research and industry) with a stock of knowledge and skills in engineering materials domain for the automotive industry, and in addressing the problems of modeling and simulation processes by computer in order to optimize them. Addressing the top problems, such as the development and integration of new materials in high-tech devices in the automotive industry, requires advanced knowledge in areas such as mathematics, materials science, materials technology and computer science.

**Professional competences:**

- Selection and use of advanced materials in the manufacture of motor vehicles.
- Automotive advanced manufacturing technologies.
- Using information technology to design vehicles.
- Quality assurance in the automotive industry.