

POLYMER ENGINEER / SPECIALIST



BASIC DATA

Department: Department of Mechanical Engineering, Faculty of Engineering, UD

Program length: 2 semesters, Credits total: 60

Training starts: in September every year

Mode of attendance: part-time, 6x2 days per semester (Friday and Saturday)

Detailed description (in Hungarian): [program description](#)

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INTRODUCTION

Under the care of the Faculty of Engineering of the University of Debrecen and organized by the Department of Mechanical Engineering, the Polymer Engineer university training was launched in February 2019.

In the world, including Hungary, the trend can be observed that parallel to the relegation of heavy industry to the background, the plastic and chemical industry segments are increasingly coming to the fore. Until now, the domestic plastics and rubber industry has received an unfairly small role in education, companies have typically trained their specialists themselves. We believe that we need to change this and fill this void by providing high-level specialized training.

The training was developed together with the leading players in the plastic and rubber industry in the region, and their leading engineers also play a significant role in the training. The main location of the education is the modernly equipped laboratories of the Department of Mechanical Engineering, ensuring a high standard of theoretical and practical training.

The demand for training in the labour market is well characterized by the fact that many plastic and rubber industry companies have declared their support for the establishment and launch of the Polymer Engineer training.

SUBJECTS

Semester 1	Semester 2
Polymer materials	Plastic extrusion
Rheology and testing of polymers	Rubber processing technologies
Compounding technologies	Design of molding tools for polymer products
Injection molding	Modeling of plastic processing
Blow molding	Finite element analysis of polymer products
Additive manufacturing	Thesis
Polymer composite manufacturing	

LABORATORIAL BACKGROUND

Material Testing Laboratories, Environmental Simulation Laboratory, CAD and CAE Laboratory, Laboratories of industrial partners