Detailed program of the training period:

A. Mechanical Engineering – designing, modelling, analysis (1 month)

- 3D modeling and designing using Inventor or Unigraphics or CATIA system,
- Finite Element Method Analysis using FEMAP or Nastran or Ansys system,
- Stamping die modeling using Dynaform or Autoform system,
- Experimental research of fatigue life of gear teeth,
- Presentation of power-closed loop test stand,
- Calculating the geometric dimensions of sample of geared wheel for the strength tests,
- Study of flange coupling using the power-closed loop test stand,
- Calculating the flange coupling parameters and experimental verification of the results,
- Measurement of the actual torque transmitted by the coupling using the sensor,
- Dynamics of robots,
- Basics of MATLAB,
- Basics of C++,
- Modeling of mechanical systems using MATLAB software,
- Dynamic analysis of multibody systems using ADAMS software,
- Fundamentals of Finite Element Method (FEM) and Rigid Finite Element Method (RFEM).