**INTERNSHIP POSITION**

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| **Topic** | **Topological optimization of plastic parts** |
| **Specification/**  **Programme**  (min. 100 words) | Optimize plastic part by topological optimization. The goal of the internship is to find a way to topologically optimize plastic parts, while maintaining injection technology. Topological optimizations for printed parts on a 3D printer, for machined and cast parts are known. The goal of the internship is to find CAD procedures for topologically optimizing parts injected mainly from polypropylene. The topic requires knowledge of CAD software, especially CREO from PTC, Inventor from AutoDESK, or Fusion from the same company. It is also possible to use the CATIA program from Dassault. Furthermore, in order to successfully master it, it is necessary to master the basic procedures and calculations of the finite element method. |
| **Time period** | Start from Jun to September |
| **Length of the traineeship - number of months** | 2 - 4 month |
| **Supervisor´s name and contact** | Prof. Ing. Ladislav Ševčík, CSc.  Technical University of Liberec  Faculty of Mechanical Engineering  Department of Machine Parts and Mechanism  Studentská 1402/2  46117 Liberec  ladislav.sevcik@tul.cz |
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| **Documents required** | CV, Letter of motivation, Transcript of Records |