Hochschule München University of Applied Sciences

Courses in English
Course Description

Department	06 Applied Sciences and Mechatronics
Course title	**Tool Design and Manufacture (MFM275)**
Course number	
Hours per week (SWS)	Blockunterricht, nominell 4
Number of ECTS credits	6
Course objective	This module introduced participants to tool design and manufacture. For this purpose, the module essentially covers various design approaches and also part fabrication and finishing techniques.
Prerequisites	
Recommended reading	Injection Mould Design by R G W Pye. Longman Scientific & Technical.
Teaching methods	Lecture and Project
Assessment methods	
Language of instruction	English
Name of lecturer	Dr.-Ing. Philip Farrugia
Email	philip.farrugia@um.edu.mt
Link	https://sci-intern.hm.edu/fk/modulbeschreibungen.php?lang_nr=&id=1470
Course content	Introduction: tool terminology, mould cavities and cores, bolsters, use of inserts, parting line, line of draw, draft angle. Prototype moulds. Tool Design Methods: Rapid Tooling; Design for Injection Moulding'. The Two Plate Mould; Multiplate Moulds; Undercut Moulds Tool Design Methods: Runner and gate design, ejector systems, venting mould shrinkage, methods of location and aligning each half, mould venting; Runnerless Moulds. Internal and external undercuts, splits, side cores/cavities, hydraulics, internal threads, etc. Design of cooling methods for various core/cavity shapes. Tool Part Fabrication techniques: Machine tools, die sinking, spark erosion, hobbing, castings etc. General Mould Construction. Standard Mould Parts
Remarks	Blockunterricht, ganztägig: 22.-26.04.2024