



ShakeAM

sharing knowledge in design for AM

SHARING KNOWLEDGE IN DESIGN FOR AM

WP4 ShakeAM teaching and assessment content
A4.1 Develop Competence Units and Learning Outcomes



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Competence Unit (CU) Template

CU: Relevant Principles of MEX for Design	RECOMMENDED CONTACT HOURS
SUBJECT TITLE	
MEX Process Capabilities and Limitations (selecting the process)	2
Design for Process Chain <ul style="list-style-type: none"> • Data Pipeline • Design for Manufacturing (DfM) • Design for Post Processing (DfPP) • Design for Inspection (Dfi) • Preparation for Manufacturing 	11
Design for Sustainability	1
Total	14
WORKLOAD	28

LEARNING OUTCOMES – CU: Relevant Principles of MEX for Design	
KNOWLEDGE	Advanced knowledge of: <ul style="list-style-type: none"> - Theory, principles and applicability of MEX process - Capabilities and limitations of MEX process influencing design - Design considerations required for MEX parts design (for the whole process chain) - Sustainability influence in design
SKILLS	Relate the capabilities and limitations of MEX to design considerations Determine dimensional constraints and geometric tolerances required for MEX parts design Provide solution-based approaches to redefine design problems (Design thinking) within MEX process and parts