

Module	Sub module	Learning Outcome	ECTS
Module A	Tools for idea development and prototyping		
Additive Manufacturing	A1 Basic principles of additive manufacturing technologies (AMT)	A1.1 Definition and history of AMT	0.5
	A3 Development of individual technological processes and new business opportunities of AMT	A3.3 Business model for AMT	0.5
		Total ECTS	1
Module B	Inventive Design and Design Creativity		
Technology Forecasting	B1 Basic principles of Technology Forecasting (TF)	B1.1 Introduction to Forecasting methods and Technology Forecasting	0.5
		B1.2 Contemporary Methods of technology forecasting	0.5
		B1.3 Forecasting – its Application, advantages and limitations, case studies	0.5
		Total ECTS	1.5
Innovative Design Methods	B3 Design creativity and innovation	B3.1 Introduction to design creativity and innovation	0.5
	B4 Design methods and techniques	B4.1 Introduction to design thinking.	0.5
	B5 TRIZ based ideation and problem solving	B5.1 Introduction to the basic concepts of TRIZ	0.5
		Total ECTS	1.5
Module C	Open Innovation and U-E collaboration		
Innovation and entrepreneurship	C1 Basic knowledge of applied innovation	C1.1 Introduction of opportunity identification and creation	1
		C1.2 Approaches and models of innovation opportunities identification	0.5
		C1.3 Product service system design	0.5
	C2 Entrepreneurship management	C2.1 Business modelling	1
		Total ECTS	3
Innovation engineering	C3 Basic contents of innovation process	C3.1 Technology innovation process and application	0.5
		Total ECTS	0.5
Open Innovation management	C5 Crowdsourcing for OI management	C5.1 General overview of crowdsourcing.	0.5
	C6 Management of customer co-creation: tools and methods	C6.1 Basic definitions of collaborative design, participatory design and co-creation with customers and clients.	0.5
		C6.2 Setting up the collaboration	0.5
	C7 Management of collaborative innovation development with external partners: tools and methods	C7.1 Knowing the external stakeholders	0.5
C7.2 Understanding the motivation of the external partners		0.5	
		Total ECTS	2.5
Total ECTS			10