School of Engineering 2023-02-16

Academic Year Overview 2023/2024

Department: Product Development
Programme: **Materials and Manufacturing (master) 120 hp**
Campus: **Jönköping**
Language: **English**

Year 1 (Start Autumn 2023) Programme code: TAMM1

Semester 1 (2023-08-21—2024-01-14)																				Semester 2 (2024-01-15---2024-06-02)																				
34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22
Materials and Manufacturing Technology, 7,5 credits									*Chemical Thermodynamics, 7,5 credits*												*Numerical Analysis, 7,5 credits*									*Continuum Mechanics, 7,5 credits*								
Elective course 7,5 credits *Integrated Product Realization, 7,5 credits* *Multivariable Calculus, 7,5 credits*									*Polymer and Composite Technology, 7,5 credits*												*Surface Technology, 7,5 credits*									*Microstructural Engineering, 7,5 credits*								

Year 2 (Start Autumn 2022) Programme code: TAMM1

Semester 3 (2023-08-21—2024-01-14)																				Semester 3 (2024-01-15---2024-06-02)																				
34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22
Elective courses: *FEA and Optimization Driven Design, 7,5 credits* *Applications of Computational Fluid Dynamics and Heat Transfer, 7,5 credits*									***Elective courses:*** *Manufacturing Process Simulations, 7,5 credits* *Numerical Analysis and Optimization, 7.5 credits* ***Track – Component Realization*** *Advanced CAD, 7,5 credits* *Integrated Product and Production Development, 7,5 credits* *Industrial Placement Course in Materials and Manufacturing, 7,5 credits*												*Final Project Work in Product Development, 30 credits*																			
Track – Foundry Technology																																							
Solidification Processing, 3 credits				*Liquid Metal Processing – Aluminum Alloys, 3 credits*										*Moulding Materials in Foundry Technology, 3 credits*				*Environmental Impact Assessment of Castings, 3 credits*																						
Component Casting, 6 credits									*Analysis of Casting Defects, 3 credits*					*Modelling and Simulation om Casting, 6 credits*																										

	Liquid Metal Processing – Ferrous Alloys, 3 credits		