

Annex 2a: Model program schedule for the Flexible and Intelligent Products and Processes strand_AFB 11.07.2022_2. amendment 22.04.2025

SWS	1. Semester WiSe	2. Semester SoSe	3. Semester WiSe	4. Semester SoSe
1	Subtractive Manufacturing 3V/1Ü 6 LP	Welding Manufacturing 3V/1Ü 6 LP	Product Design and Process Planning for Casting 3V/1Ü 6 LP	Masterarbeit inkl. Kolloquium 30 LP
2				
3				
4				
5	Advanced System Automation 3V/1Ü 6 LP	Digital Production incl. Lab 2V/1Ü/1P 6 LP	Wireless Sensor Networks 3V/1Ü 6 LP	
6				
7				
8				
9	Advanced Cyber Physical Systems 3V/1Ü 6 LP	Big Data - Manage- ment and Analytics 3V/1Ü 6 LP	18 LP (3 Module) from Electives cata- logue strand "Flexible and Intelli- gent Products and Pro- cesses"	
10				
11				
12				
13	Interdisciplinary and Cross Culture Collabo- ration 6 LP	Interdisciplinary Research Project & Re- search Methodology 1V/3P 6 LP		
14				
15		6 LP (1 Modul) from Electives cata- logue strand "Flexible and Intelli- gent Products and Pro- cesses"		
16				
17				
18				
19	Interdisciplinary Engi- neering Projects & Seminar Intelligent Manufacturing 1S/3P 6 LP			
20				
21				
22				
Summe SWS	22	19	20	20
Summe LP	30	30	30	30

Strand Flexible and Intelligent Products and Processes

	Credit Points
Foundations of manufacturing engineering	Σ 104
Foundations of information technology	30
Interdisciplinary and methodological foundations	18
Focuses in engineering (strand)	8
Methodology of research and work (master's thesis)	24
Personal competence and social skills	24
Team and project work	Σ 16
Knowledge of language and culture	4
Applied working methods (master's thesis)	6
Foundations of manufacturing engineering	6

Annex 2b: Model program schedule for the Manufacturing Analytics and Optimization strand AFB 11.07.2022_2. amendment 22.04.2025

SWS	1. Semester WiSe	2. Semester SoSe	3. Semester WiSe	4. Semester SoSe
1	Subtractive Manufacturing 3V/1Ü 6 LP	Welding Manufacturing 3V/1Ü 6 LP	Product Design and Process Planning for Casting 3V/1Ü 6 LP	Masterarbeit inkl. Kolloquium 30 LP
2				
3				
4				
5	Advanced System Automation 3V/1Ü 6 LP	Digital Production incl. Lab 2V/1Ü/1P 6 LP	Wireless Sensor Networks 3V/1Ü 6 LP	
6				
7				
8				
9	Advanced Cyber Physical Systems 3V/1Ü 6 LP	Big Data - Manage- ment and Analytics 3V/1Ü 6 LP	18 LP (3 Module) from Electives cata- logue strand "Manufacturing Analytics and Optimization"	
10				
11				
12				
13	Interdisciplinary and Cross Culture Collabo- ration 6 LP	Interdisciplinary Research Project & Re- search Methodology 1V/3P 6 LP		
14				
15		6 LP (1 Modul) from Electives cata- logue strand "Manufacturing Analytics and Optimization"		
16				
17				
18				
19	Interdisciplinary Engi- neering Projects & Seminar Intelligent Manufacturing 1S/3P 6 LP			
20				
21				
22				
Summe SWS	22	20	20	20
Summe LP	30	30	30	30

Strand Manufacturing Analytics and Optimization

	Credit Points
Foundations of manufacturing engineering	Σ 104
Foundations of information technology	30
Interdisciplinary and methodological foundations	18
Focuses in engineering (strand)	8
Methodology of research and work (master's thesis)	24
Personal competence and social skills	24
Team and project work	Σ 16
Knowledge of language and culture	4
Applied working methods (master's thesis)	6
Foundations of manufacturing engineering	6