## Major: Fibre and Polymer Engineering Master's Programme in Chemical, Biochemical and Materials Engineering

Course substitution arrangements for students who continue their studies according to the curriculum of 2022-2024 during the transitional period of 1.8.2024 - 31.12.2025, when some of the courses of the curriculum 2022-2024 are no longer taught.

Common compulsory courses (3–5 cr)					
Code	Course name	ECTS credits	Equivalence in 1.8.2024 - 31.12.2025		
<u>CHEM-</u> <u>E0105</u>	Academic Learning Community	3–5	Please contact the teacher		
Compulsory courses (40 cr)					
Code	Course name	ECTS credits	Equivalence in 1.8.2024 - 31.12.2025		
<u>CHEM-</u> E2100	Polymer Synthesis	5	The course continues		
CHEM- E2110	Polymer Technology Laboratory Exercises	5	CHEM-E7125 Experimental Assignments in Chemical Engineering		
<u>CHEM-</u> E2120	Fibres and Fibre Products	5	CHEM-E2122 Fibre Processes		
<u>CHEM-</u> E2130	Polymer Properties	5	The course continues		
<u>CHEM-</u> <u>E2140</u>	Cellulose-based Fibres D	5	CHEM-E2129 Nanocellulose Technology		
<u>CHEM-</u> <u>E2150</u>	Interfacial Phenomena in Biobased Systems D	5	CHEM-E2121 Surface Chemistry of Bio-based Materials D		
<u>CHEM-</u> <u>E2160</u>	Product Development Practices	5	CHEM-E1170 Introduction to Sustainability in the Bioeconomy D *		
<u>CHEM-</u> <u>E2200</u>	Polymer Blends and Composites	5	The course offered for the last time in 2024-2025		
Specialisation courses (choose 20 cr)					
Code	Course name	ECTS credits	Equivalence in 1.8.2024 - 31.12.2025		
CHEM- E2225	Wood Material Science	5	The course continues		
<u>CHEM-</u> <u>E2235</u>	Wood Products and Processes	5	The course continues		
<u>CHEM-</u> <u>E2125</u>	Web-based Natural Fibre Products	5	CHEM-E2236 Board manufacture project course (the first time in autumn 2025). In 2024-2025, a book exam can be arranged.		

<u>CHEM-</u> <u>E2135</u>	Converting of Web-based Products	5	CHEM-E2230 Packaging Surface Modification and Coating. Organised for the first time fall 2025. In 2024- 2025 book exam can be arranged (please contact Eero Hiltunen).
CHEM- E2145	Polymer Reaction Engineering D	5	The course continues
<u>CHEM-</u> E2155	Biopolymers D	5	The course continues
<u>CHEM-</u> <u>E2165</u>	Computer Aided Visualization and Scientific Presentation D	3–5	The course continues
<u>CHEM-</u> <u>E2170</u>	Advanced Wood Science D	5	The course continues
<u>CHEM-</u> <u>E2195</u>	Interfacial Phenomena in Renewable Materials Research Project D	5–10	Individual assignment can be arranged (please contact Juan Valle Delgado)
CHEM- E2205	Materials for a World in Transition D	5	The course continues
<u>CHEM-</u> <u>E2215</u>	Coatings	5	The course offered for the last time in 2024-2025
<u>CHEM-</u> <u>E2220</u>	Product Development Project Course	5	CHEM-E2236 Board manufacture project course or CHEM-E2230 Packaging Surface Modification and Coating
<u>CHEM-</u> <u>E1220</u>	Sustainability in Bioproduct Industry D	5	CHEM-E1170 Introduction to Sustainability in the Bioeconomy D *
			*If students want a second sustainability course in addition to CHEM-E1170 Introduction to Sustainability in the Bioeconomy D, please select Sustainability Assessments for Bioproducts D