

Competence Area	Study Program of the FBM study line	
General Competences	FBM mandatory 28485 BioBusiness and Process Innovation (5)	
	FBM mandatory: 28857 Good Manufacturing Practice (GMP) - Practical version (Autumn: 7,5) or 28855 Good Manufacturing Practice (GMP) - Theoretical version (Spring: 5)	
	DTU mandatory: 42500 or 42504 Innovation in Engineering (5)	
	CBE mandatory: Chemical and Biochemical Product Design (10) or Process Design: Principles and Methods (10)	Biotech mandatory Computer-aided cell factory design (5)
	CBE mandatory: Chemical Engineering Model Analysis (7.5) or Transport Processes (10)	Biotech mandatory Techniques in protein characterization (5)
Technological Specializations	CBE prerequisite course for 27455: Computer-aided cell factory design (5)	Biotech prerequisite for 28455: Recovery and purification of biological products (5) and Industrial BioReaction Engineering (5)
	CBE (own choice) Among CBE Technical Specialization courses (min. 15)	Biotech (own choice) Among Biotech Technical Specialization courses (min. 10)
	FBM mandatory: 27455 Microbial Adaptation to Industrial Processes (5)	
	FBM mandatory: 28455 Process adaptation in Fermentation Based Biomanufacturing (5)	
Electives	Elective courses: Among CBE courses (max. 17.5)	Elective courses: Among Biotech courses (20)
Practice	FBM Mandatory: FBM practice course in a biotech company (min. 10)	
Thesis	MSc thesis within FBM with CBE supervision (30)	MSc thesis within FBM with Biotech supervision (30)
Title (120)	MSc in Chemical and Biochemical Engineering with specialization in FBM	MSc in Biotechnology with specialization in FBM

Common courses for all FBM-students
 for CBE-students
 for Biotech-students