

Studies Plan

Mineur : Biotechnologie 2025-26

Minor : Biotechnology

Courses				Exam Session	Exam	Credit
Lang.	Code	Sect.	Teacher			
Biochemical engineering						
E	ChE-311	CGC	Crelier Zinn	Sum	Written	3
Bioimage informatics						
E	BIO-410	SV	Sage Seitz	Sum	Written	4
Bioprocesses and downstream processing						
E	ChE-437	CGC	Crelier Eyer Zinn	Sum	Written	4
Bioreactor modeling and simulation						
E	ChE-320	CGC	Hatzimanikatis	Sum	During the semester	3
Biotechnology lab (for CGC)						
E	ChE-433	CGC	Pick	Sum	During the semester	4
Chemistry of food processes						
E	ENG-435	CGC	Blank	Sum	Written	2
Experimental biochemistry and biophysics						
E	CH-319	CGC	Hovius	Sum	During the semester	4
Fate and behaviour of environmental contaminants						
E	ENV-507	SIE	Aeppli	Sum	Written	4
Fluid mechanics and transport phenomena						
E	ChE-330	CGC	Sivula	Win	During the semester	4
Food biotechnology						
E	ENG-436	CGC	Sybesma	Sum	Written	2
Food chemistry						
F	ENG-433	CGC	Richard	Win	Written	2
Immunoengineering						
E	BIOENG-399	SV	Tang	Sum	Written	4
Introduction to chemical engineering						
E	ChE-201	CGC	Hatzimanikatis	Win	Written	3
Introduction to chemical engineering Laboratory Works						
F	ChE-203	CGC	Buonsanti	Sum	During the semester	2
Introduction to transport phenomena						
E	ChE-204	CGC	Buonsanti	Sum	During the semester	3
Microbiology for engineers						
E	ENV-202	SIE	Bernier-Latmani	Sum	Written	5
Nanobiotechnology						
E	CH-413	CGC	Steinauer	Sum	During the semester	3
New tools & research strategies in personalized health						
E	BIO-491	SV	Fellay Friedli	Sum	During the semester	4
Next-generation biomaterials						
E	BIOENG-458	SV	Persat Tang	Sum	Written	4

Nutrition: from molecules to health						
E	BIO-441	SV	Descombes Hager Rezzi	Win	During the semester	4
Opération unitaire et technologie des procédés						
F	CH-334	CGC	Meyer	Sum	Oral	3
Pharmaceutical biotechnology						
E	ChE-436	CGC	Pick	Win	Written	3
Pharmacology and pharmacokinetics						
E	BIO-478	SV	Firsov Kellenberger	Sum	Written	2
Principles and applications of systems biology						
E	ChE-411	CGC	Hatzimanikatis	Win	During the semester	3
Process development						
E	ChE-459	CGC	Gouveia Braz Maréchal Ribeiro Domingos	Sum	Oral	8
Project in biotechnology						
E	ChE-460	CGC	Profs divers	Sum Win	During the semester	10
Risk management						
E	ENG-430	CGC	Meyer	Sum	During the semester	2
Selected topics in life sciences						
E	BIOENG-430	SV	Mahul Mellier	Win	During the semester	3
Synthetic biology						
E	BIOENG-320	SV	Barth	Sum	Written	4