

Master Degree: Applied Microbiology

1st year

Fall Semester

Course	Time load/Semester (15 weeks)	Weekly Time load				Coeff.	Credits	Evaluation Mode	
		Lecture s	DW	PW	Other			Continuous	Exam
Bacterial Metabolism and Physiology	67h30	1h30	-	03h	82h30	3	6	40%	60%
Molecular and Medical Bacteriology	67h30	1h30	-	03h	82h30	3	6	40%	60%
Fundamental and Applied Virology	67h30	1h30	-	03h	82h30	3	6	40%	60%
Molecular Methods and Metagenomics	37h30	1h30	-	01h	37h30	2	3	40%	60%
Purification and Characterization of Microbial Biomolecules	67h30	1h30	-	03h	82h30	3	6	40%	60%
Biosafety and Hospital Hygiene	45h	1h30	1h30	-	45h	2	2	40%	60%
Communication	22h30	1h30	0	0	2h30	1	1		100%
Total	375h	1h30	1h30	13h	375h	17	30		

Spring Semester

Course	Time load/Semester (15 weeks)	Weekly Time load				Coeff.	Credits	Evaluation Mode	
		Lecture s	DW	PW	Others			Continuous	Exam
Industrial Microbiology and Microbial Biotechnology	67h30	1h30	-	3h	82h30	3	6	40%	60%
Water-related poisoning and pathology	67h30	1h30	-	3h	82h30	3	6	40%	60%
Microbial Toxicity and Food Safety	67h30	1h30	-	3h	82h30	3	6	40%	60%
Cell Culture and Strain Improvement	37h30	1h30	-	1h	37h30	2	3	40%	60%
Microbiological Control Techniques in Food Industry	67h30	1h30	-	3h	82h30	3	6	40%	60%
Cancer and Oncogenic Microorganisms	45h	1h30	1h30	-	45h	2	2	40%	60%
Legislation	22h30	1h30	0	0	22h30	1	1		100%
Total	375h	10h30	1h30	13h	375h	17	30		

2nd year

Fall Semester											
Course	Time load/Semester (15 weeks)	Weekly Time load				Coeff.	Credits	Teaching Mode		Evaluation Mode	
		Lectures	DW	PW	Others			Online	Face to Face	Continuous	Exam
Pharmaceutical engineering and microorganisms	67h30	1h30	-	3h	82h30	3	6		+	40%	60%
Host-microorganism interactions and environment	67h30	1h30	-	3h	82h30	3	6		+	40%	60%
Anti-infective immunity, immunotherapy	67h30	1h30	-	3h	82h30	3	6		+	40%	60%
Enzymology and enzyme engineering	67h30	1h30	-	1h	82h30	2	3		+	40%	60%
Quality control of pharmaceutical products	37h30	1h30	-	3h	37h30	3	6		+	40%	60%
Parasitology and medical mycology	45h	1h30	-	1h30	45h	2	2	+		40%	60%
Entrepreneurship	22h30	1h30	-	-	22h30	1	1	+			100%
Total	375h	10h30	-	14h30	375h	17	30				

Spring Semester			
Activity	Time load	Coeff	Credits
Individual Work	220h00	10	18
Intership	110h00	05	09
Other	45h00	02	03
Total	375h00	17	30

Internship in a company culminating in a thesis and defense.