

ACADEMIC PLAN

Fall / 2025

PROGRAM : Undergraduate
DEGREE: Bachelor of Engineering
CURRICULUM: Biofood Engineering
COLLEGE: Engineering

Faculty Core Requirements [8-8 Courses / 9 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	FACULTY CORE REQUIREMENTS [8 Course(s)/9Cr.]	CSC 201	Computer Programming I - C++	3.000	D	N
		CSC 202	Computer Programming I - VB.NET	3.000	D	N
		ENG 201	Technical writing skills	3.000	D	N
		ENG 301	Research methodology	3.000	D	N
		ENV 215	Renewable Energy resources	1.000	D	N
		LAW 230	Law & Ethics for Engineers	3.000	D	N
		LAW 231	Labor Law	1.000	D	N
		MGT 225	Engineering Economics & Financial Management	3.000	D	N
General Education University Requirement [7-7 Courses / 18 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Business & Management [1 Course(s)/3Cr.]	MGT 223	Project Management for Engineers	3.000	D	Y
	Citizenship and Social Responsibility [1 Course(s)/3Cr.]	LAW 210	Fighting Corruption	3.000	D	N
	Computer Literacy [1 Course(s)/3Cr.]	MIS 210	Computer Skills for Business	3.000	D	N
	Job Readiness [1 Course(s)/3Cr.]	HRM 245	Work Ready Now	3.000	D	N
	Language & Communication [1 Course(s)/3Cr.]	EGN 216	Communication and Scientific Cultures	3.000	D	N
		ENG 200	Writing Skills	3.000	D	N
	Religious Diversity [1 Course(s)/3Cr.]	ESC 205	Judaïsme, Christianité et Islam	3.000	D	N
		ESC 225	Enseignement Social de l'Eglise	3.000	D	N
Major Core Requirements [26-26 Courses / 62 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Major Core Requirements [26 Course(s)/62Cr.]	BFE 200	Introduction to Biofood Engineering	2.000	C	Y
		BFE 303	Modern analytical techniques for food analysis	3.000	C	Y
		BFE 310	Physical-Chemistry of food	3.000	C	Y

Major Core Requirements [26-26 Courses / 62 Cr.]	Major Core Requirements [26 Course(s)/62Cr.]	BFE 410	Food Industries I	3.000	C	Y
		BFE 414	Industrial Microbiology	3.000	C	Y
		BFE 420	Enzymology	3.000	C	Y
		BFE 445	Technofunctional properties of food additives	3.000	C	Y
		BFE 499	Internship I for Biofood Engineering	0.000	C	Y
		BFE 500	Unit Operations in Food Engineering I	3.000	C	Y
		BFE 510	Food processing LAB	1.000	C	Y
		BFE 511	Food Additives LAB	1.000	C	Y
		BFE 512	General Principles of food legislation	1.000	C	Y
		BFE 524	Food packaging and Handling	3.000	C	Y
		BFE 550	Unit Operations in Food Engineering II	3.000	C	Y
		BFE 555	Food industries II	3.000	C	Y
		BFE 560	Biotechnology	3.000	C	Y
		BFE 561	Introduction to food technology	2.000	C	Y
		BFE 565	Quality and safety management in agrifood sectors	3.000	C	Y
		BFE 582	Food industries III	3.000	C	Y
		BFE 599	Industrial visit for biofood engineering	1.000	C	Y
		BFE 698	Final Year Project for Biofood engineering	3.000	C	Y
		BFE 699	Internship II for Biofood engineering	2.000	C	Y
		CME 302	Principles of Chemical and Biofood Engineering	3.000	C	Y
		CME 440	Energy and Heat Transfer	3.000	C	Y
		CME 502	Process Engineering LAB	1.000	C	Y
		CTE 444	Engineering graphing and Software Applications	3.000	C	Y
Science and Math Requirements [21-21 Courses / 48 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Science and Math Requirements [21 Course(s)/48Cr.]	BCH 200	Structural Biochemistry	3.000	D	N
		BCH 300	Metabolics Biochemistry	3.000	D	N
		BCH 400	Food analysis lab	1.000	D	N

Science and Math Requirements [21-21 Courses / 48 Cr.]	Science and Math Requirements [21 Course(s)/48Cr.]	BIO 200	General Biology I: Anatomy-Cells and Molecules	3.000	D	N
		BIO 201	General Biology I: Anatomy-Cells and Molecules Laboratory	1.000	D	N
		BIO 300	General Microbiology	3.000	D	N
		BIO 301	Food microbiology LAB	1.000	D	N
		BIO 305	General Biology II	3.000	D	N
		BIO 310	Plant Physiology	2.000	D	N
		CHM 200	General Chemistry I	3.000	D	N
		CHM 201	General Chemistry I LAB	1.000	D	N
		CHM 300	Organic Chemistry	3.000	D	N
		CHM 301	Organic Chemistry LAB	1.000	D	N
		MAT 200	Fundamental Mathematics for Engineers I	3.000	D	N
		MAT 203	Fundamental Mathematics for Engineers II	3.000	D	N
		MAT 302	Probability and Statistics for engineers	3.000	D	N
		PHY 201	General Physics for Bioengineers	3.000	D	N
		PHY 202	General Physics LAB	1.000	D	N
		PHY 203	Electricity for Bioengineers	3.000	D	N
		PHY 205	Electric Circuits LAB	1.000	D	N
Technical Electives [6-6 Courses / 18 Cr.]	CLASSIFICATION	COURSE	COURSE NAME	COURSE Cr.	Minimum Grade	Required
	Technical Electives [6 Course(s)/18Cr.]	BFE 399	Work Experience:Technical internship BFE	0.000	C	N
		BFE 415	Microeconomic Theory of Food	1.000	C	N
		BFE 430	Waste Management	3.000	C	N
		BFE 446	Genetic Engineering and Molecular Biology	3.000	C	N
		BFE 501	Environmental Engineering	2.000	C	N
		BFE 502	Environmental Engineering LAB	1.000	C	N
		BFE 520	Air and Water Pollution Control	3.000	C	N
		BFE 540	Principles of Toxicology	3.000	C	N

Technical Electives [6-6 Courses / 18 Cr.]	Technical Electives [6 Course(s)/18Cr.]	BFE 563	Machinery and Food Industrial Control	3.000	C	N
		BFE 564	Pharmaceutical Manufacturing	3.000	C	N
		BFE 566	Developmental Biology	3.000	C	N
		BFE 567	Sensorial analysis	3.000	C	N
		BFE 568	Introduction to Ecology and Environment	3.000	C	N
		BFE 570	Bioprocess Engineering	3.000	C	N
		BFE 571	Food Formulation and Product Development	3.000	C	N
		BFE 580	Protein Engineering and Recombinant Proteins	3.000	C	N
		BFE 583	Virology and Immunology	3.000	C	N
		BIO 415	Principles of Pharmacology	3.000	D	N
		CME 402	Safety and Environment in Chemical Industry	3.000	C	N
		CSC 200	Introduction to Computer & Software Tools	3.000	D	N
		GEO 320	Soil Sciences	3.000	D	N
		NTR 321	Fundamentals of Human Nutrition	3.000	D	N