

Bachelor programmes

Bachelor programme in Food Technology

Academic unit	Coimbra College of Agriculture (ESAC-IPC)
Type	Undergraduate Major Program
Level of qualification	Level 6. First Cycle (Bachelor's Degree) Program. 30 ECTS/ semester during 3 years
Qualification awarded	The students who successfully complete the program are awarded the degree of Bachelor of Science (B.S.) in Bachelor Programme in Food technology
Mode of study	Full-Time
Admission requirements and recognition of prior learning	<p>Foreign European Union citizens who wish to enrol in ESAC-IPC undergraduate degree programmes may apply:</p> <ul style="list-style-type: none"> (a) Through a national contest; (b) Students already enrolled in a foreign Higher Education Institution may ask for transfer during an annual application period, with recognition of prior learning. <p>Non EU citizens who wish to enrol in ESAC-IPC undergraduate degree programmes must apply via the annual application for International Students, using one of the following:</p> <ul style="list-style-type: none"> (a) Those with a qualification giving access to Higher Education, meaning any diploma or certificate issued by a competent authority in the country in which it was awarded can apply directly to the desired bachelor degree; (b) Those or a Diploma of Portuguese secondary school or equivalent degree must apply for the specific ESAC-IPC bachelor degree exams (www.esac.pt); <p>More information on how to apply for the Portuguese first-cycle bachelor programmes: Study in Portugal website.</p>
Qualification requirements	The undergraduate students in this program must be successful in all the courses with a minimum achievement grade of 10, including their compulsory traineeship, and must have completed at least 180 ECTS credits.
Profile of the programme	Coimbra College of Agriculture offers both undergraduate and graduate programs on Food Sciences. The bachelor degree in Food Technology is devoted to improve the quality of food, develop new products and processes by a multidisciplinary perspective using the principles of food processing.
Occupational profiles of graduates	Graduates will have opportunities to work in public establishments and private sectors or have the chance to establish their own private firms.
Access to graduate studies	The graduates of this program can apply to master programs to enhance their academic skills and career. The master program in Food Engineering is a continuity of the bachelor program in Food Technology.
Examination regulations, assessment and grading	<p>Assessment of success</p> <p>Assessment of success in a course may be carried out by a) continuous evaluation or b) exam. The students which do not achieve success during continuous evaluation are admitted to the exam if their presence is $\geq 75\%$.</p> <p>Achievement grade</p> <p>Grades are given in an absolute system scoring 0 to 20. Scores 0 to 9 indicate that the student was unsuccessful in a course (fail). Scores 10 to 20 indicate that the student was successful in a course (pass).</p> <p>Continuous evaluation, final, resit and graduation exams</p> <p>(1) All courses contemplate continuous evaluation, which may be carried out in different ways specified in the respective Course Datasheet.</p> <ul style="list-style-type: none"> a) Assessment by modules: each module is given a percentage contribution to the final grade. The student passes only if the grade for each module is ≥ 7.5 and the final grade of the course is ≥ 9.5. The failed module(s) may be assessed in the final and/or resit exams or the student may choose to assess the whole subject of the course; b) When the course is not divided in modules, the student passes if the final grade of the course is ≥ 9.5. The contribution of each evaluation item for the final grade is specified in the Course Datasheet. The complete subject of a failed course must be assessed in the final and/or resit exams. <p>(2) Final exams: the final exams may assess one or more course modules or the whole course.</p> <p>(3) Resit exams: are the final opportunity for a student to pass a course in a given academic year and are subject to prior registration and fee payment at the Academic Services. The resit exams may assess one or more course modules or the whole course.</p> <p>(4) Graduation exams: available to finalist students with, at the most, three failed courses to fulfil the bachelor program requirements.</p>

Curriculum

1 st year – 1 st (Fall) Semester						
Code	Title	L	LP	Lab	TG	ECTS
8810021	Mathematical analysis	22.5	37.5		9	6
8810020	Biology I		52.5		8	6
8810023	Physics I		45		7	6
1031101	Introduction to food technology I		52.5		8	3
8810026	English language and communication		30		4.5	3
8810022	Chemistry and biochemistry I	30	30		9	6
1 st year – 2 nd (Spring) Semester						
Code	Title	L	LP	Lab	TG	ECTS
8810024	Biology II		52		8	6
8810027	Physics II		45		7	6
8810030	Technical English and communication		30		4.5	3
1031201	Introduction to food technology II		52.5		8	3
8810029	Numerical methods and programming	22.5	37.5		9	6
8810025	Chemistry and biochemistry II	30	30		9	6
2 nd year – 3 rd (Fall) Semester						
Code	Title	L	LP	Lab	TG	ECTS
8810028	Statistics		45		7	5
1032101	Food microbiology		60		9	4
1032103	General food processing		60		9	6
1032104	Plant and animal production		30		4.5	4
1032105	Food chemistry		45		7	5
1032102	Food processing technology I		60		9	6
2 nd year – 4 th (Spring) Semester						
Code	Title	L	LP	Lab	TG	ECTS
1032201	Physical and chemical food analyses		45		7	5
1032202	Sensorial analysis		52.5		8.5	5
1032205	Food biochemistry		45		6.5	5
1032203	Quality management and control		45		6.5	4
1032206	Technology workshops I		67.5		10	6
1032204	Food processing technology II		45		6.5	5
3 rd year – 5 th (Fall) Semester						
Code	Title	L	LP	Lab	TG	ECTS
1033102	Food economics		45		6.5	5
1033101	Water, waste and effluent management in the food industry		45		6.5	5
1033103	Enterprise management and entrepreneurship		45		6.5	4
1033104	Facilities, equipment and instrumentation		45		6.5	5
1033105	Technology workshops II		67.5		10	6
1033106	Industrial planning		52.5		9	5
3 rd year – 6 th (Spring) Semester						
Code	Title	L	LP	Lab	TG	ECTS
1033201	Packaging of food products		28		4	3
1033204	Food hygiene and safety		28		4	3
1033202	Logistics and distribution		28		4	3
1033203	Nutrition and dietetics		28		4	3
1033205	Project		48		7	3
1033206	Traineeship		350		50	15

NOTES:

L=Lecture; LP=Lecture-Practical; Lab=Laboratory; TG=Tutorial guidance. A semester has typically a duration of 15 class weeks