STUDENT
HANDBOOK

2021/2022

FACULTY OF TECHNOLOGY
UNIVERSITY OF JAFFNA

Chapter 01: The Structure of the Bachelor of Technology Honours Degree Programmes

1.1 Names of the Degree Programmes

Faculty of Technology, University of Jaffna offers two undergraduate degree programmes with five specialization. Table 1.1 shows the approved degree name and the specialization details come under each degree programmes.

Table 1.1: Specialization and approved degree name

Degree Programmes	Specialization	Degree name approved by the UGC
Bachelor of Engineering Technology Honours	Construction Technology	Bachelor of Engineering Technology Honours
	Automobile Technology	
	Electro Technology	
Bachelor of Biosystems Technology Honours	Commercial Green Farming Technology	Bachelor of Biosystems Technology Honours in Commercial Green Farming Technology
	Food Production Technology	Bachelor of Biosystems Technology Honours in Food Production Technology

1.2 Structure and credit distribution of the programme

The undergraduate programme is a credit based and all the admitted students will follow the Pre-semester, semester I and Semester II. From semester III onwards, the students will follow the specialization courses. The detail of the credit distribution for each semester is shown in Tables 1.2 and 1.3.

Table 1.2: Credit distribution for Bachelor of Engineering Technology Honours

Semester		GPA credits			Non-GPA credits			Total credits		
Common curriculum	Pre-semester	-			08			08		
	Semester I	16			-			16		
	Semester II	18			-			18		
Specialization curriculum		Automobile Technology			Construction Technology			Electro Technology		
		GPA	Non-GPA	Total	GPA	Non-GPA	Total	GPA	Non-GPA	Total
	Semester III	18	-	18	17		17	17		17
	Semester IV	18	-	18	17		17	18		18
	Semester V	19	-	19	18		18	17		17
	Semester VI	-	06	06	-	06	06	-	06	06
	Semester VII	17	-	17	19		19	18		18
	Semester VIII	15	-	15	16		16	17		17
Total volume of credits				135			135			135
Total credits for OGPA				121			121			121

Table 1.3: Credit distribution for Bachelor of Biosystems Technology Honours

Semester		GPA credits	Non-GPA credits	Total credits		
Common curriculum	Pre-semester	-	07	07		
	Semester I	14	03	17		
	Semester II	20	-	20		
Specialization curriculum		Commercial Green Farming Technology			Food Production Technology		
		GPA	Non-GPA	Total	GPA	Non-GPA	Total
	Semester III	20	-	20	20	-	20
	Semester IV	20	-	20	20	-	20
	Semester V	21	-	21	21	-	21
	Semester VI	-	06	06	-	06	06
	Semester VII	19	-	19	19	-	19
	Semester VIII	06	-	06	06	-	06
Total volume of credits				136			136
Total credits for OGPA				120			120

1.3 Selection criteria for specialization

The specialization programme commences from third semester (2nd year 1st semester). Students should apply for a specialization within a deadline announced by the Dean's office. The selection is made at the end of the first year study programme based on the preference and merit of the SGPA of first year semester 1 and semester 2.

1.4 Subjects Areas

1) **Core and Elective Subject Area:** Course units in this area are designed to impart the technical content of the curriculum. It includes course units in Mathematics, Basic Science, and Information Communication Technology and specialization courses for both degree programmes.

2) **Enhancement Subjects Area**: Course units in this subject area are designed to either enhance or supplement the technological content of the curriculum.

3) **Complimentary Subjects Area**: Course units in this area are designed to complement technological content of the curriculum. It includes course units in Management, Economics, Professional Ethics, Social Sciences, Humanities, etc.

4) **Auxiliary Subjects Area:** Course units in this subject area are designed to provide basic knowledge on topics that an undergraduate should possess in the present era. The auxiliary course units are treated as non-credit valued course units as they are not taken for the GPA calculation.

1.5 Course Categories

The course units are classified into five categories and arranged into four levels according to the nature of the course and year at which the course is offered and they are defined as follows,

1) **Basic Core (BC) –** Mathematics, Basic Science, Information Communication Technology and foundation course units in the common programme.

2) **Technical Core (TC) –** Core course of a principal subject directly related to the specialization offered in the programme.

3) **Technical Elective (TE) –** Outside the core course of a principal subject which directly related to the specialization offered in the programme and courses offered in addition to the core course to provide broader knowledge of the subject.

4) **Non-Technical (NT) –** Courses on complementary studies which cover courses on Management, Economics, Communication, English, Humanities, Social Sciences, Art and Professional Ethics, not directly related to the principal subjects of specialization.

5) **Skill Enhancement (SE) –** Courses focusing on training or enrich graduates' skills required by an employer skills enhancement courses include industrial placement/internship/field training and final year research project.

1.6 Course Code

Each Course unit is assigned with a code which reflects the subject area of the course, level (year) of study, the sequence number of course unit in that level, course category and credit value of the course. A sample course code is explained in Figure 1.1. The abbreviation of the subject area for a course code is indicated in Table 1.4.
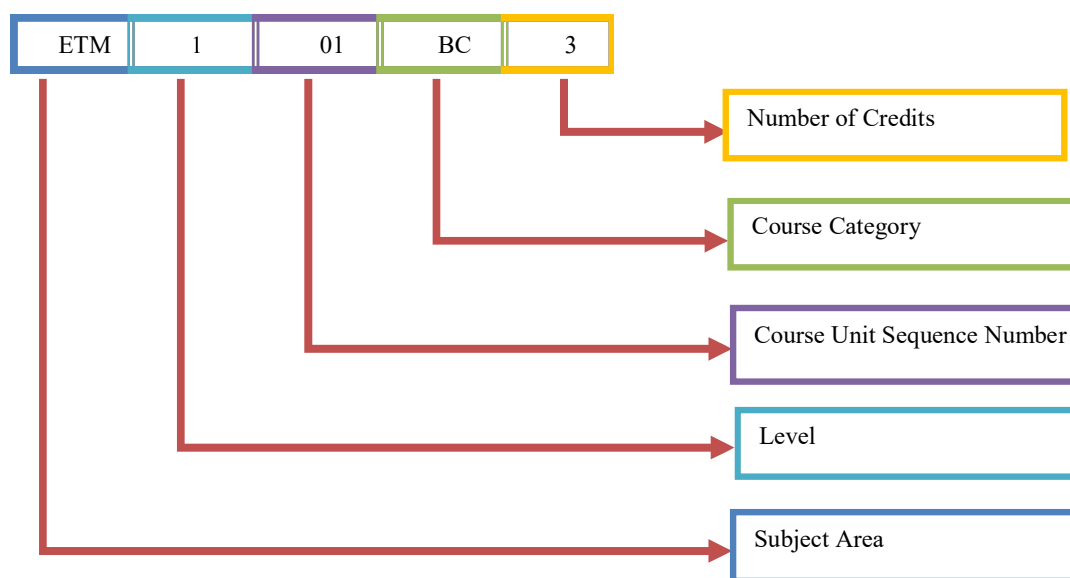

Figure 1.1: Course code and its description.

Table 1.4: Abbreviations of subject areas indicated in the course code

Engineering Technology			Biosystems Technology		
ETM	Mathematics	Core and elective courses	BTM	Mathematics	Core and elective courses
ETS	Science		BTS	Science	
ETC	Construction Technology		BTF	Food Production Technology	
ETA	Automobile Technology		BTG	Commercial Green Farming Technology	
ETE	Electro-Technology				
ETW	Workshop Technology				
ETD	Engineering Drawing				
ETF	Fieldwork				
AST	Auxiliary Subjects for Technology				
CST	Complimentary Subjects for Technology				
EST	Enhancement Subjects for Technology				

1.7 Credit value

A credit value is the number of contact hours of a course. According to the Sri Lanka Qualification Framework (SLQF) the contact hours is defined as follows:

- Course with theory only
    - One credit is equivalent to fifteen hours lectures
- Course with practical only
    - One credit is equivalent to thirty hours laboratory work

1.8 Pre-semester

The pre-semester is essentially introduced to prepare the students with required knowledge in basic subjects to pursue the degree programme.

- BET programme: Basic mathematics, English and Communication, Basics of Information and Communication skills and Personality and Soft Skill Development.
- BST programme: Basic mathematics, Basic English, Basics of Information and Communication skills and Laboratory Techniques.

A student is considered to have completed pre-semester successfully, if he/she obtain a minimum grade of C for each course unit offered in the pre-semester. The grades obtained by the student in pre-semester will be included in his/her academic transcript. However, the grades obtained in pre-semester will not be considered for the OGPA calculation.

1.9 Industrial Training

A student is considered to have completed Industrial Training successfully, if he/she obtains a minimum grade of C for the module. The grade obtained by the student for Industrial Training will be included in his/her academic transcript. However, the grade obtained for Industrial Training will not be considered for the OGPA calculation.

Chapter 02: Evaluation procedures

2.1 Assessment of a course

A course shall be evaluated by means of

(a) **Formative Assessment - Continuous Assessment (CA)**
Consisting of suitable combinations of assignments, reports, presentations, oral examinations, quizzes, spot tests, mid semester examinations, etc. The student will be evaluated during the session time.

(b) **Summative Assessment - End Semester Assessment (ESA)**
At the completion of each semester, students will be evaluated for the theory and/or practical. The evaluation method of each course unit is given along with the approved syllabus.

2.2 Grading system

The mark obtained for each course module is graded and assigned a grade point value (GPV) as indicated in Table 2.1 where the GPV is used to calculate the grade point average (GPA) that indicates the performance of students with respect to a semester/year.

Table 2.1: Percentage mark, grade and GPV

Percentage Marks	Grade	GPV	Description
85 and above	A+	4.00	Excellent
80-84	A	4.00	
75-79	A-	3.70	
70-74	B+	3.30	Good
65-69	B	3.00	
60-64	B-	2.70	
55-59	C+	2.30	Pass
50-54	C	2.00	
45-49	C-	1.70	Weak Pass
40-44	D+	1.30	Conditional Pass
35-39	D	1.00	
00-34	E	0.00	Fail

Note: In order to earn Grade D or above, a student must score more than the minimum prescribed marks for both Continuous Assessments (CA) and End Semester Assessment (ESA).

Table 2.2 shows the references notified for the students when a course module is not completed with various reasons.

Table 2.2: References and its grade points when a course module is not completed.

Reference	Grade Point	Description
E (CA & ESA)	0.0	Both CA and ESA marks are below the prescribed minimum. In complete CA and ESA
E (CA)	0.0	CA mark is below the prescribed minimum. In complete CA
E (ESA)	0.0	ESA mark is below the prescribed minimum. In complete ESA
I	-	Incomplete (Either CA or ESA absent)
Ab	-	Absent for both CA and ESA
NE	-	Not eligible
WH	-	Withheld
N	-	Academic concession

2.3 Semester Grade Point Average

The following formula is used to calculate the SGPA, where C_i is the credit value of ith module in a given semester and GP_i - grade point earned for that module and **n** is the number of GPA modules in that semester.

$$SGPA = \frac{\sum_{i=1}^{n} C_i \, GP_i}{\sum_{i=1}^{n} C_i}$$

Overall Grade Point Average (OGPA) is defined as the GPA of the student at the completion of the degree programme. The calculated OGPA will be rounded to the second decimal place.

2.4 Pass/ Fail criteria of a module

i.   The percentage pass mark for the CA is equivalent to the minimum mark assigned for Grade D+.
ii. The percentage pass mark for the ESA is equivalent to the minimum mark assigned for Grade D.
iii. Grade D or above is required to earn credit value for a module.
iv. Student failing in CA, ESA or both CA and ESA must repeat respective components.
v.   Student is considered to have completed a semester successfully only if he/she has achieved a **SGPA of 2.00** or above, and has, in that semester **No E grade** and no more than three grades at the levels of C-, D+ or D.

vi. All modules for which the students has registered for the semester except, non-GPA modules, will be counted in calculating the SGPA.

2.5 Criteria for English Language modules

Option 1: if the credits allocated to those English Language modules are within 120 credits considered for the degree, normal pass/fail criteria applicable to other compulsory module will apply. However, credits allocated to English Language modules must be non-GPA credits.

Option 2: if the credits allocated to those English Language modules are over and above 120 credits, normal pass/fail criteria or special criteria that require student to pass those modules but not counted towards credits can apply.

In any event passing of those English Language modules (minimum D) is a requirement to earn the degree.

2.6 Academic Progression

A student who has not earned a cumulative GPA of first three semesters of 2.0 or above will not be permitted to register for the fifth semester until the cumulative GPA of the first three semesters is improved as required. Grade obtained for English communication skill and Basic English is not a barrier.

Chapter 03: Award of degree

- For Bachelor of Engineering Technology degree, a student must complete a minimum of 135 credits, including pre-semester and industrial training.
- For Bachelor of Biosystems Technology degree, a student must complete a minimum of 136 credits, including pre-semester and industrial training.
- A student must complete each semester successfully.
- A student must have obtained C grades for modules offered in pre-semester.

Note 1: A student who registered for more than 135 (for BET) or more than 136 (for BST) credits, can drop elective courses on his/her preference for the GPA calculation. However, all the elective courses he/she registered and sat for the examination will be mentioned in the transcript.

3.1 Effective date of the degree award: The effective date of the degree awarded shall be the date of the last assessment/evaluation of the semester in which a student completes the degree program.

3.2 Semester complete: Conditions for the completion of a semester

A student is considered to have completed a semester successfully if he/she satisfies the following conditions:
- If he/she has achieved a SGPA of 2.00 or above
- No E grade in that semester
- No more than three grades at the levels of C- or D in that semester

3.3 Award of class

Cut-off levels of OGPA for awarding classes/Pass

Class/Pass	Condition
First class	OGPA ≥ 3.70
Second class (upper)	3.70 > OGPA ≥ 3.30
Second class (lower)	3.30 > OGPA ≥ 3.00
Pass	3.00 > OGPA ≥ 2.00

All requirements for the award of degree must be completed in four academic years to earn class.

3.4 Maximum period for the completion of the degree

The maximum period for the completion of all requirements for the award of the degree is recommended to be 06 academic years. The Senate of the university may grant one academic year at a time, beyond initial 06 academic years, based on the merit of individual applications, for maximum of 03 years.

Chapter 4: Examination process

4.1 Eligibility for End Semester Examination

- **Attendance**
  A student who has a minimum of 80% attendance in theory class and practical class is eligible to apply for the end semester examination. If not, it will be indicated as NOT ELIGIBLE (NE) and permitted to sit the exam as a repeat candidate at the next available chance. The highest grade provided for this repeat examination is C.

- The faculty shall consider the following documents for the calculation of the 80% attendance requirement.
  - Medical certificate issued by the government hospital/University medical officer to the head of the department.
  - Relevant document for participating in extracurricular activities. Prior approval from the Dean is required.

4.2 Repeating End Semester Examination

The following students are entitled to repeat the *End Semester Examination* of a particular module.

- Absent for a particular module, Not Eligible due to the attendance and students who wish to upgrade their grades to C grade.
- **A student shall repeat the *End Semester Examination* of a module at the next available opportunity. If the student fails to sit that end semester examination without valid reasons acceptable by the Faculty Board and the Senate, he/she shall be**

considered to have forfeited a chance to sit that examination and will be given the grade E for the end semester assessment of that course unit.

- A student who obtained a grade C- or D for a module may repeat the end semester examination of that module in order to upgrade to grade C.
- If a student obtains a lower grade than the previous grade while repeating, he/she is entitled to keep the previous grade.
- The highest grade that could be earned for a repeated course unit is C.
- A student will be allowed to repeat a course unit not more than three times.

4.3 Submitting medical

Those who are unable to attend the examinations due to medical reasons should submit a medical certificate issued by the government hospital/University Medical Officer to the Dean's office **within two weeks** from the absence date. Any other medical certificates should be certified by the University Medical Officer.

Student will be considered as proper candidate for the next *End Semester Examination* if the submitted medical certificate is accepted by the faculty board and the senate of the University of Jaffna.

4.4 Repeating continuous assessment exam

- If a student received E(CA) as the final result of any module, the student will be given one chance to repeat the mid-semester examination only.
- For the Bachelor of Biosystems Technology Honours degree programmes, the student who repeating the mid-semester exam of a particular module in the next available opportunity will get a maximum of 40 marks.
- For the Bachelor of Engineering Technology Honours degree programmes, the student who failed in continuous assessment (CA), can repeat the CA of a particular course in the next available opportunity.
- The repeating students can gain maximum C grade for repeating continuous assessment exam.

Appendix 1: Outline of the Curriculum – ET

Semester	Course Title	Course Code	Credits	Credit sum
Pre-semester	Basic Mathematics	ETM120BC2	2	8
	English and Communication	EST120NT2	2	
	Personality and Soft Skill Development	EST121NT2	2	
	Basics of ICT	ETS120BC2	2	
1	Mathematics for Engineering Technology I	ETM121BC3	3	16
	Science for Engineering Technology I	ETS121BC3	3	
	Engineering Drawing and Workshop Technology I	ETW121BC3	3	
	Metrology	ETF120BC2	2	
	Fundamentals of Construction Technology	ETC120BC3	3	
	Foundation of Computer Systems	ETS122BC2	2	
2	Mathematics for Engineering Technology II	ETM122BC3	3	18
	Science for Engineering Technology II	ETS123BC3	3	
	Engineering Drawing and Workshop Technology II	ETW122BC3	3	
	Foundation in Electro Technology	ETE120BC3	3	
	Foundation in Automobile Technology	ETA120BC3	3	
	Engineering Materials	ETS124BC3	3	

Automobile specialization

Semester	Course Title	Course code	Credits	Credit sum
3	Mathematics for Engineering Technology III	ETM223BC3	3	18
	Economics and Cost Analysis	CST220NT3	3	
	Electrical Installation Practices	ETS225BC3	3	
	Occupational Health and Safety	EST222BC2	2	
	Mechanics for Technologists	ETS226BC3	3	
	Theory of Machines I	ETA221TC3	3	
	Automobile Engine and Components	ETA222TC1	1	
4	Mathematics for Engineering Technology IV	ETM224BC3	3	18
	Control Systems	ETA223TC3	3	

	Automobile Workshop Practice and Management	ETA224TC2	2	
	Automobile Engines	ETA225TC3	3	
	Computer Aided Modelling	ETA226SE2	2	
	Theory of Machines II	ETA227TC2	2	
	Automobile Electronics	ETA228TC3	3	
5	Fundamentals of Electric Propulsion	ETA329TC3	3	19
	Fundamentals of Vehicle Dynamics	ETA330TC3	3	
	Automobile Chassis Systems	ETA331TC2	2	
	Computing for Automobile Technology	ETA332TC2	2	
	Design of Automobile Components	ETA333TC3	3	
	Automobile Drivetrain and Braking	ETA334TC2	2	
	Fault Diagnosis and Maintenance	ETA335TC2	2	
	English for Research	EST323NT2	2	
6	Industrial Training	EST324SE6	6	6
7	Research Project I	EST425SE2	2	17
	Advanced Vehicle Controls	ETA436TC2	2	
	Alternative Fuels and Pollution Control	ETA437TC2	2	
	Automotive Interior Systems	ETA438TC3	3	
	Mechatronics	ETA439TC2	2	
	Professional Ethics and Human Value	CST421NT2	2	
	Industrial Operations Management	CST422NT2	2	
	Elective Module I: i) Advanced Engineering Materials ii) Aerodynamics for Automobile Technology	ETA440TE2 ETA441TE2	2	
8	Research Project II	EST426SE6	6	15
	Capstone Project	EST427SE3	3	
	Advance Electric Propulsion Systems	ETA442TC2	2	
	Entrepreneurship	CST423NT2	2	
	Elective Module II: i) Heavy Vehicle Technology ii) High Performance Vehicle Technology	ETA443TE2 ETA444TE2	2	

Construction specialization

Semester	Course Title	Course Code	Credits	Credit sum
3	Mathematics for Engineering Technology III	ETM223BC3	3	17
	Economics and Cost Analysis	CST220NT3	3	
	Electrical Installation Practices	ETS225BC3	3	
	Occupational Health and Safety	EST222BC2	2	
	Fluid Mechanics and Flow Systems	ETC221TC3	3	
	Mechanics for Technologists	ETS226BC3	3	
4	Mathematics for Engineering Technology IV	ETM224BC3	3	17
	Structural Analysis for Construction Technology	ETC222TC3	3	
	Construction Contract and Cost Estimation	ETC223TC3	3	
	Soil Mechanics	ETC224TC3	3	
	Fundamentals of Building Information Modelling	ETC225TC2	2	
	Concrete Technology and Testing	ETC226TC3	3	
5	Design of Steel and Timber Structures	ETC327TC3	3	18
	Surveying	ETC328TC3	3	
	Construction Management and Planning	ETC329TC3	3	
	Geotechnology	ETC330TC3	3	
	Sustainable Building Technology	ETC331TC2	2	
	Fieldwork in Construction Technology	ETC332TC2	2	
	English for Research	EST323NT2	2	
6	Industrial Training	EST324SE6	6	6
7	Research Project I	EST425SE2	2	19
	Design of Concrete Structures	ETC433TC3	3	
	Water and Wastewater Treatment	ETC434TC3	3	
	Highway Infrastructure Systems	ETC435TC3	3	
	Geotechnical Instrumentation	ETC436TC3	3	
	Professional Ethics and Human Value	CST421NT2	2	
	Elective Module I: i) Tall Building and Bridge Technology ii) Hydraulic and Irrigation Structures iii) Geology for Technologists	ETC437TE3 ETC438TE3 ETC439TE3	3	

Semester	Course Title	Course Code	Credits	Credit sum
8	Research Project II	EST426SE6	6	16
	Capstone Project	EST427SE3	3	
	Building Services	ETC440TC2	2	
	Entrepreneurship	CST423NT2	2	
	Elective Module II: i) Sustainable Concrete Production ii) Construction Biotechnology	ETC441TE3 ETC442TE3	3	

Electro specialization

Semester	Course Title	Course Code	Credits	Credit sum
3	Mathematics for Engineering Technology III	ETM223BC3	3	17
	Economics and Cost Analysis	CST220NT3	3	
	Electrical Installation Practices	ETS225BC3	3	
	Occupational Health and Safety	EST222BC2	2	
	Electrical Power Generation	ETE221TC3	3	
	Mechanics for Technologists	ETS226BC3	3	
4	Mathematics for Engineering Technology IV	ETM224BC3	3	18
	Electrical Machine I	ETE222TC3	3	
	Renewable Power Generation Technology	ETE223TC3	3	
	Control System Engineering	ETE224TC3	3	
	Electronics for Technologists	ETE225TC3	3	
	Computer Programming using C++	ETE226TC3	3	
5	Electrical Transmission and Distribution System	ETE327TC3	3	17
	Electrical Machine II	ETE328TC3	3	
	Transducer Technology	ETE329TC3	3	
	Power Electronics and Applications	ETE330TC3	3	
	Embedded Systems	ETE331TC3	3	
	English for Research	EST323NT2	2	
6	Industrial Training	EST324SE6	6	6
7	Research Project I	EST425SE2	2	18
	Electrical Drives and Control	ETE432TC3	3	
	Communication Systems	ETE433TC3	3	
	Industrial Automation Technology	ETE434TC3	3	

	Professional Ethics and Human Value	CST421NT2	2	
	Industrial Operations Management	CST422NT2	2	
	Elective Modules I : i) Fiber Optic Communication ii) Robotic Technology and Applications iii) Power System Control and Operation iv) Signals Processing Technology	ETE435TE3 ETE436TE3 ETE437TE3 ETE438TE3	3	
8	Research Project II	EST426SE6	6	17
	Capstone Project	EST427SE3	3	
	Robotics	ETE439TC3	3	
	Entrepreneurship	CST423NT2	2	
	Elective Modules II: i) High Voltage Technology ii) Machine Learning iii) Distributed Generation and Smart Grid Technologies iv) Biomedical Instrumentation	ETE440TE3 ETE441TE3 ETE442TE3 ETE443TE3	3	

Appendix 2: Outline of the Curriculum – BST

Semester	Course Title	Course Code	Credits	Credit sum
Pre-semester	Basic Mathematics	BTM101BC2	2	7
	Basic English	AST101NT2	2	
	Basics of Information Communication Technology	EST101BC2	2	
	Laboratory Techniques	EST102BC1	1	
1	Chemistry for Biosystems Technology	BTS121BC3	3	17
	Fundamentals of Physics	BTS122BC3	3	
	Mathematics for Biosystems Technology	BTM122BC3	3	
	Foundation of Computer System	EST123BC2	2	
	Basic Biology	BTS123BC3	3	
	Social Harmony and Active Citizenship	AST122NT1	1	
	English Communication Skills	AST123NT2	2	
2	Introduction to Food Marketing and Business Economics	CST121BC3	3	20
	Food Biochemistry	BTF121BC3	3	

	Plant Production Technology	BTG121BC3	3	
	Basic Microbiology	BTG122TC3	3	
	Basics of Soil science	BTG123BC3	3	
	Livestock and Poultry Production Technology	BTG124BC3	3	
	Principles of Laboratory Instrumentation	BTS124BC2	2	

Green farming specialization

Semester	Course Title	Course code	Credits	Credit sum
3	Post-Harvest Technology	BTF221TC2	2	20
	Biotechnology	BTG221TC3	3	
	Environmental Toxicology	BTG222TC2	2	
	Food Safety and Quality Management	BTF222TC2	2	
	Urban Gardening	BTG223TC2	2	
	Principles of Organic Farming	BTG224TC3	3	
	Aquatic Bioresource Production Technology	BTG225TC3	3	
	Sustainable Soil Fertility Management	BTG226TC3	3	
4	Agro-enterprise Development and Management	CST221NT2	2	20
	Bio and Renewable Energy Technology	BTG227TC3	3	
	Farm Mechanization Technology	BTG228TC3	3	
	Floricultural Technology	BTG229TC3	3	
	Feed Production Technology	BTG230TC3	3	
	Productive Entomology	BTG231TC3	3	
	Forestry, Farming Systems and Agroforestry	BTG232TC3	3	
5	Introduction to Nanotechnology	BTS321TC3	3	21
	Novel Green Product Development	BTG321TC2	2	
	Biostatistics	BTM321BC3	3	
	Industrial Waste Management	BTG322TC3	3	
	Bioagents Production Technology	BTG323TC2	2	
	Water Conservation Technology	BTG324TC3	3	
	GIS and Remote Sensing	BTG325TC3	3	

	Forage Science and Production Technology	BTG326TC2	2	
6	Industrial Training	EST321SE6	6	6
7	Organizational Management	CST421NT3	3	19
	Research Methodology	CST422NT2	2	
	Experimental Design	BTM421BC2	2	
	Environmental Impact Assessment	CST423NT2	2	
	Vermitechnology	BTG421TC2	2	
	Plant Protection Technology	BTG422TC3	3	
	Farm Management Plan	BTG423TC3	3	

	Elective Module:
	   i) Forest Product and Utilization
	   ii) Landscape and Architectural Design
	   iii) Land Degradation and Pollution Management
		BTG424TE2
		BTG425TE2
		BTG426TE2
			2	

8	Research Project	EST421SE6	6	6

Food production specialization

Semester	Course Title	Course code	Credits	Credit sum
3	Post-Harvest Technology	BTF221TC2	2	20
	Biotechnology	BTG221TC3	3	
	Environmental Toxicology	BTG222TC2	2	
	Food Safety and Quality Management	BTF222TC2	2	
	Basics of Food Analysis	BTF223TC2	2	
	Food Preservation Technology	BTF224TC3	3	
	Food and Nutrition	BTF225TC3	3	
	Confectionary and Beverage Technology	BTF226TC3	3	
4	Agro-enterprise Development and Management	CST221NT2	2	20
	Bio and Renewable Energy Technology	BTG227TC3	3	
	Meat and Egg Products Technology	BTF227TC3	3	
	Food Engineering	BTF228TC3	3	
	Food Chemistry	BTF229TC3	3	
	Spice and Herbal Products Technology	BTF230TC2	2	

	Food Packaging and Labelling	BTF231TC2	2	
	Sensory Evaluation of Foods	BTF232TC2	2	
5	Introduction to Nanotechnology	BTS321TC3	3	21
	Novel Food Product Development	BTF321TC2	2	
	Biostatistics	BTM321BC3	3	
	Food Microbiology	BTF322TC2	2	
	Fruits and Vegetables Processing Technology	BTF323TC2	2	
	Grain Science and Technology	BTF324TC3	3	
	Palm and Nut Processing Technology	BTF325TC3	3	
	Dairy Products Technology	BTF326TC3	3	
6	Industrial Training	EST321SE6	6	6
7	Organizational Management	CST421NT3	3	19
	Research Methodology	CST422NT2	2	
	Experimental Design	BTM421BC2	2	
	Environmental Impact Assessment	CST423NT2	2	
	Food Plant Layout and Design	BTF421TC2	2	
	Aquatic Food Processing Technology	BTF422TC3	3	
	Functional Foods and Nutraceuticals	BTF423TC3	3	

	Elective Module:
	  i) Link Tech Entrepreneurship
	  ii) Consumer Driven Cultural Foods Technology
		BTF424TE2
		BTF425TE2
			2	

8	Research Project	EST421SE6	6	6