



CURRICULUM
for
UNDERGRADUATE DEGREE PROGRAM
IN
Bachelor of Science (Food Technology)
Scheme of Teaching and Evaluation 2025
Outcome Based Education (OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2025-26)
In accordance with NEP 2020



Department of Food Science & Technology
GRAPHIC ERA (DEEMED TO BE UNIVERSITY)

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1. Preamble

The role of higher education is very important in securing the gainful employment and/or providing further access to higher education comparable to the best available in the world class institutions elsewhere. The improvement in the quality of higher education, therefore, deserves to be given highest priority to enable the young generation of students to acquire skill, training and knowledge in order to enhance their thinking, comprehension and application abilities and prepare them to compete, succeed and excel globally. Sustained initiatives are required to reform the present higher education system for improving and upgrading the academic resources and learning environments by raising the quality of teaching and standards of achievements in learning outcomes in undergraduate programs. The Graphic Era (Deemed to be University) upgraded its undergraduate programmes in Bachelor of Science (Food Technology) in accordance with model curriculum proposed by UGC and guidelines of NEP, 2020 including Outcome Based Education (OBE) and Choice Based Credit System (CBCS), which makes it student-centric, interactive with well-defined aims, objectives and goals. NEP, 2020 aims at making higher education multidisciplinary learning process. In other words, the curriculum will be flexible, it will allow students to take up creative subject-combinations.

2. About the Program

The Department of Food Science & Technology at Graphic Era (Deemed to be University) offers excellent courses at the undergraduate, postgraduate, and doctoral level, providing students with a solid foundation in food science and technology and preparing them for careers in various sectors of the food industry. The state-of-the-art facilities, highly qualified faculty members, and opportunities for practical experience make it an ideal place for students to pursue a career in the food technology. The courses offered by the department includes B.Sc. Food Technology, B.Sc. (Honours) Food Technology, B.Sc. (Honours) Food Technology with research, B.Sc. Nutrition and Dietetics, B.Sc. (Honours) Nutrition and Dietetics, B.Sc. (Honours) Nutrition and Dietetics (With Research), M.Sc. Food Technology, M.Sc. Foods and Nutrition and doctoral level Ph.D. program in Food Technology. The Department has well-equipped laboratories, research facilities, and a library with a vast collection of books and journals. The department has highly qualified faculty members who are experts in their fields and have extensive experience in teaching and research. The university also provides students



with opportunities for internships, industrial visits, and research projects to gain practical experience in the field. The department has collaborations with various industries and research institutions, providing students with exposure to real-world problems and the latest developments in the field.

3. Vision & Mission

3.1 Vision and Mission of the University

Vision

We visualize Graphic Era (Deemed to be University) as an internationally recognized, enquiry driven, ethically engaged diverse community, whose members work collaboratively for positive transformation in the world, through leadership in teaching, research and social action

Mission

The mission of the University is to promote learning in true spirit and offering knowledge and skills in order to succeed as professionals. The university aims to distinguish itself as a diverse, socially responsible learning community with a high-quality scholarship and academic rigor.

3.2 Vision and Mission of the Department

Vision

The Department of Food Science & Technology envisions to create skilled food technologists and nutritionists through proactive approaches in quality education, research, entrepreneurial and outreach activities, aimed at advancing sustainable societal progress.

Mission

M1. To gain a deep understanding of Food Science and Technology and foster a transformed partnership based on symbiosis between industry and academia for the benefit of the food and health sector.



M2. To establish an environment capable of conducting research for its excellence and global reputation.

M3. To build a life-learning environment among students to effectively contribute to both current and future organizations.

4. Program Educational Objectives (PEOs)

PEO1: To comprehend and implement the principles of latest advances in Food Technology by inculcating a culture of lifelong learning through both theoretical insights and hands-on practical experience.

PEO2: To apply food application tools and techniques within the context of social and global frameworks.

PEO3: To impart competency in students to grasp the interdisciplinary nature of Food Technology, facilitating their seamless transition into both industry and academic fields.

PEO4: To create competent professional graduates with leadership qualities and ethical responsibilities and empowering them to excel both independently and collaboratively within teams.

5. Consistency of PEOs with Mission of the Department

PEO Statements	M1	M2	M3
PEO1	2	2	3
PEO2	2	2	1
PEO3	3	1	2
PEO4	1	1	2

High correlation (3); Medium correlation (2); Low correlation (1)

6. Program Outcomes (POs)

PO1. Problem-solving: Students will acquire basic knowledge of principles and processes underlying Food Technology and will be apply the learning to real life situations as well solve different problems in the field.

PO2. Critical thinking and creativity: Students will develop essential analytical skills and apply reasoning/thought to innovate and conduct independent work in Food Technology areas.



PO3. Research-related skills: Student will be able to appropriately use statistical and other analytical tools and techniques, to develop methodology which enable the student to problematize, synthesize, and articulate issues and design research proposals.

PO4. Team work and leadership qualities: Student will function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO5. Skill development: Student will acquire knowledge and skills necessary for working independently, acquire organizational skills, and time management to set self-defined goals and targets with timeline. Student will acquire skills necessary for pursuing learning activities throughout life aimed at personal development, meeting social, economic, and cultural objectives, and adapting to changing demands of the workplace.

PO6. Modern tool usage: Student will be able to demonstrate the capability to create, select, and apply appropriate techniques, resources, and modern IT tools and software for data analysis in a variety of learning and work situations.

PO7. Multicultural competence and inclusive spirit: Student will be able to demonstrate knowledge of multiple cultural values and beliefs with perspective to respect, honour cultural diversity, gender sensitivity, adopt gender neutral approach, as well as empathy for the less advantage/ differently-abled or learning disabilities.

PO8. Value inculcation: The students will be able to demonstrate the acquisition of knowledge and attitude that are required to embrace and practice constitutional humanities, ethics, human and moral values and perform responsible global citizenship. Also, the student will acquire knowledge to understand regulatory norms, and will adopt ethical practices in the pursuit of science.

PO9. Autonomy, responsibility and accountability: The student will be able to apply knowledge, understanding or skills independently and exercise responsibility as well as accountability in applying knowledge and or skills in work.

PO10. Society, Environment and sustainability: Students will be able to demonstrate the acquisition of and ability to apply the knowledge, skills, attitude and values for mitigating the problems related to society, health, environment, food security, sustainable development.



PO11. Communication: Students will acquire oral and communication skills and will be able to communicate effectively with the community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PO12. Community engagement and service: The student will be able to demonstrate the capability to engage in community-services/activities for promoting the wellbeing of society.

7. Program Specific Outcomes (PSOs)

In addition to these twelve POs, three Program Specific Outcomes (PSOs) are formulated:

PSO1: Acquire comprehensive knowledge in food technology integrated with allied disciplines based on principles and standard practices.

PSO2: Acquire skills to recognize, analyze, and resolve technical challenges within modern food sector, with a focus on delivering safe and nutritious food.

PSO3: Develop technological and managerial skills to become entrepreneurs, inventors, or pursue advanced research and emerge as a responsible leader in the food sector.

8. Program Structure

A. Definition of Credit:

1 Hr. Lecture (L) per week	1 Credit
1 Hr. Tutorial (T) per week	1 Credit
1 Hr. Practical (P) per week	0.5 Credit
2 Hours Practical (P) per week	1 Credit

B. Nomenclature as per NEP 2020

Code	Definitions
DSC	Major Disciplinary Courses
MSC	Minor Stream Course
MDC	Multidisciplinary Courses
AEC	Ability Enhancement Course
SEC	Skill Enhancement Course
INT	Internship
PROJ	Dissertation/ Research Project (Hons.)
VAC	Value Addition Course
MNG	Mandatory Non-Graded Course



Definitions

1. Courses of study – Courses of study indicates pursuance of study in a particular discipline. Every discipline shall offer various categories of courses of study, viz. Major Disciplinary Courses (DSC), Minor Stream Course (MSC), Multidisciplinary Courses (MDC), Ability Enhancement Course (AEC), Skill Enhancement Course (SEC), Value Addition Course (VAC), Internship (INT), Dissertation/Research Project (Hons.) (PROJ) and Mandatory Non-Graded Course (MNG)

a) Major Disciplinary Courses (DSC): Major Disciplinary is a course of study, which should be pursued by a student as a mandatory requirement of his/her programme of study. DSC shall be the core credit courses of that particular discipline which will be appropriately graded and arranged across the semesters of study, being undertaken by the student, with multiple exit options as per NEP 2020.

b) Minor Stream Course (MSC): Minor discipline courses helps a student to gain a broader understanding beyond the major discipline.

c) Multidisciplinary Courses (MDC): Multidisciplinary courses helps students to pursue a multidisciplinary programme of study, the credits to core courses will be distributed among the broad disciplines such as Life sciences, Physical Sciences, Mathematical and Computer Sciences, Data Analysis, Social Sciences, Humanities, etc. MDC shall consist of a pool of courses offered by various disciplines of study in groups of odd and even semesters, from which a student can choose.

d) Ability Enhancement Course (AEC): Ability Enhancement courses aim at enabling the students to acquire and demonstrate the core linguistic skills, including critical reading and expository and academic writing skills, that help students articulate their arguments and present their thinking clearly and coherently and recognize the importance of language as a mediator of knowledge and identity.

e) Skill Enhancement Course (SEC): SE courses are skill-based courses in all disciplines and are aimed at providing hands-on-training, skills, etc.

f) Value Addition Course (VAC): VA courses are value-based courses which are meant to inculcate ethics, culture, Indian Knowledge systems, constitutional values, soft skills, sports education and such similar values to students which will help in all round development of students.



g) Internship (INT): All students will also undergo internships / Apprenticeships in a firm, industry, or organization or Training in labs with faculty and researchers in their own or other HEIs/research institutions.

h) Dissertation/ Research Project (Hons.) (PROJ)

Students choosing a 4-Year Bachelor's degree (Honours with Research) are required to take up research projects under the guidance of a faculty member. The students are expected to complete the Research Project in the eighth semester. The research outcomes of their project work may be published in peer-reviewed journals or may be presented in conferences /seminars or may be patented.

h) Mandatory Non-Graded Course (MNG)

These courses are offered to nurture holistic qualities in a student, making him/her a responsible citizen conscious of societal & global challenges and responsibilities thereof. These include Indian Knowledge System (IKS), Healthy Living and Fitness, Environmental Sciences, Indian Constitution and so on. Generally, shall be offered through hybrid mode with mentors and shall be **evaluated through End Semester examination**.

9. Major Features of Curriculum

- Flexible Choice Based System for students to pursue courses of their interest.
- Includes Range of Courses to cover up the diversity of Food Technology Specializations.
- High practical approach through internship and research project in which students develop skills in identifying, analyzing, and resolving technical challenges within the food industry to address real-world problems.
- To impart high competency in the students, the curriculum offers distinct ability enhancement and value-added courses.
- Apart from the technical course, the program offers a range of courses that provide the students with a broad range of knowledge and skill sets, like life skills and mentoring, soft skills, aptitude, communication skills, social and professional ethics to acquire professional competency, and entrepreneurial skills for economic empowerment.



- The curriculum offers multi-disciplinary courses running in the university for other filed/areas.



Course Components of Academic Program Bachelor of Science (Food Technology)

Program Duration: 6 Semesters, 3 Years/ 8 Semesters, 4 Years

Total Number of Credits: 120 Credits/ 160 Credits

NEP Course Components		*Credits 3 Years	*Credits 4 Years
1.	Major Disciplinary Courses (DSC)	60	80
2.	Minor Stream Course (MSC)	24	32
3.	Multidisciplinary Courses (MDC)	09	09
4.	Ability Enhancement Course (AEC)	08	08
5.	Skill Enhancement Course (SEC)	09	09
6.	Internship (INT)	02	02
7.	Dissertation/ Research Project (Hons.) (PROJ)	-	12
8.	Value Addition Course (VAC)	08	08
9.	Mandatory Non-Graded Course (MNG)** [Induction Program, Constitution of India, Indian Knowledge System]	-	-
Total Credits		120	160

*Minor variation is allowed as per need of the respective disciplines. Do ensure credits offered in every semester meets the exit requirements as specified.

** These courses are mandatory and shall be opted by each student. These courses shall be offered as Mandatory Non-Graded (MNG) *in case they are not part of curriculum*

Note: Curriculum should include 2 credit courses UHV-II, and Disaster Management offered by respective departments in any of the semesters



- **Minor (MSC) Offered by the Parent Department**

Name of the Specialization/Minor	Offered by
Food Technology	Department of Food Science & Technology

- **Minor (MSC) Offered by Other Departments**

Name of the Specialization/Minor	Offered by
Applied Biotechnology	Department of Biotechnology
Environmental Microbiology	Department of Microbiology

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10. Scheme



Graphic Era (Deemed to be University) B.Sc. Food Technology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester I											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 101	Fundamentals of Food Science and Technology	DSC	3	3	-	-	3	25	25	50	100
NDM 01	Introduction to Food & Nutrition	MSC	3	3	-	-	3	25	25	50	100
	Select from list of pool courses	MDC	3	3	-	-	3	25	25	50	100
BSCFT 102a BSCFT 102b	*Elementary Biology/ *Elementary Mathematics	SEC	3	3	-	-	3	25	25	50	100
BSCFT 103	Healthy Living and Fitness	VAC I	2	2	-	-	2	25	25	50	100
DM 001	Disaster Management	VAC II	2	2	-	-	2	25	25	50	100
BSCFT 104	Professional Communication	AEC	2	2	-	-	2	25	25	50	100
BSCFTL 101	Fundamentals of Food Science and Technology Lab	DSC	1	-	-	1	2	25	25	50	100
NDML 01	Introduction to Food & Nutrition Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	18		02					900

Note:

*Biology stream students in 10+2 will opt elementary mathematics or vice-versa.

IP 101	*Induction Program	MNG
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*Induction Program is a non-credit course and will be evaluated as satisfactory and non-satisfactory after successful completion of the course

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Graphic Era (Deemed to be University) B.Sc. Food Technology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester II											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 201	Food Microbiology	DSC	3	3	-	-	3	25	25	50	100
NDM 02	Basics of Human Nutrition	MSC	3	3	-	-	3	25	25	50	100
	Select from list of pool courses	MDC	3	3	-	-	3	25	25	50	100
BSCFT 202	Basics of Computer	SEC	3	3	-	-	2	25	25	50	100
MOOC 01	Environmental Studies/ SWAYAM	VAC I	2	2	-	-	2	25	25	50	100
UHV 201	Universal Human Values-II	VAC II	2	2	-	-	2	25	25	50	100
BSCFT 203	Career Skills	AEC	2	2	-	-	2	25	25	50	100
BSCFTL 201	Food Microbiology Lab	DSC	1	-	-	1	2	25	25	50	100
NDML 02	Basics of Human Nutrition Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	18		02					900

Note:

HSS 203	* Constitution of India	MNG
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*Constitution of India is a non-credit course and will be evaluated as satisfactory and non-satisfactory after successful completion of the course.

*It is mandatory for the candidate opting for EXIT option to undergo Field Visit/ Vocational Course of 4 credits in addition to credits mentioned in I and II semesters to obtain UG Certificate.

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Graphic Era (Deemed to be University) B.Sc. Food Technology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester III											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 301	Food Processing and Preservation Technology	DSC	3	3	-	-	3	25	25	50	100
BSCFT 302	Food Chemistry	DSC	3	3	-	-	3	25	25	50	100
NDM 03	Basic Nutritional Biochemistry	MSC	3	3	-	-	3	25	25	50	100
	Select from list of pool courses	MDC	3	3	-	-	3	25	25	50	100
BSCFT 303	Soft Skills	SEC	3	3	-	-	3	25	25	50	100
HSS 301	Literature in Translation	AEC	2	2	-	-	2	25	25	50	100
BSCFTL 301	Food Processing and Preservation Technology Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 302	Food Chemistry Lab	DSC	1	-	-	1	2	25	25	50	100
NDML 03	Basic Nutritional Biochemistry Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	17		03					900

Note:

HSS 304	*Indian Knowledge System	MNG
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*Indian Knowledge System is a non-credit course and will be evaluated as satisfactory and non-satisfactory after successful completion of the course.

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Graphic Era (Deemed to be University) B.Sc. Food Technology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester IV											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 401	Dairy Technology	DSC	3	3	-	-	3	25	25	50	100
BSCFT 402	Food Engineering	DSC	3	3	-	-	3	25	25	50	100
BSCFT 403	Technology of Cereals, Pulses & Oilseeds	DSC	3	3	-	-	3	25	25	50	100
NDM 04	Fundamentals of Life Cycle Nutrition	MSC	3	3	-	-	3	25	25	50	100
BSCFT 404	Internship	INT	2	-	-	2	-	-	-	-	100
MOOC 03	Intellectual Property Rights/ SWAYAM	AEC	2	2	-	-	2	25	25	50	100
BSCFTL 401	Dairy Technology Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 402	Food Engineering Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 403	Technology of Cereals, Pulses & Oilseeds Lab	DSC	1	-	-	1	2	25	25	50	100
NDML 04	Fundamentals of Life Cycle Nutrition Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	14		06					1000

Note:

*It is mandatory for the candidate opting for EXIT option to undergo Field Visit/ Vocational Course of 4 credits in addition to credits mentioned in III and IV semesters to obtain UG Diploma.

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Graphic Era (Deemed to be University) B.Sc. Food Technology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester V											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 501	Technology of Fruits and Vegetables	DSC	3	3	-	-	3	25	25	50	100
BSCFT 502	Technology of Spices and Plantation Crops	DSC	3	3	-	-	3	25	25	50	100
BSCFT 503	Bakery & Confectionary Technology	DSC	3	3	-	-	3	25	25	50	100
BSCFT 504	Technology of Meat, Poultry, Fish and Egg	DSC	3	3	-	-	3	25	25	50	100
NDM 05	Nutrition Counselling	MSC	3	3	-	-	3	25	25	50	100
BSCFTL 501	Technology of Fruits and Vegetables Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 502	Technology of Spices and Plantation Crops Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 503	Bakery & Confectionary Technology Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 504	Technology of Meat, Poultry, Fish and Egg Lab	DSC	1	-	-	1	2	25	25	50	100
NDML 05	Nutrition Counselling Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	15		05					1000



Graphic Era (Deemed to be University) B.Sc. Food Technology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester VI											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 601	Sensory Evaluation	DSC	3	3	-	-	3	25	25	50	100
BSCFT 602	Food Packaging	DSC	3	3	-	-	3	25	25	50	100
BSCFT 603	Food Additives	DSC	3	3	-	-	3	25	25	50	100
BSCFT 604	Food Safety and Toxicology	DSC	3	3	-	-	3	25	25	50	100
NDM 06	Nutrition for Community	MSC	3	3	-	-	3	25	25	50	100
BSCFTL 601	Sensory Evaluation Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 602	Food Packaging Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 603	Food Additives Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 604	Food Safety and Toxicology Lab	DSC	1	-	-	1	2	25	25	50	100
NDLM 06	Nutrition for Community Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	15		05					1000
GRAND TOTAL			120								5700



Graphic Era (Deemed to be University) B.Sc. (Hons) Food Technology Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester VII											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 701	Food Plant Design & Sanitation	DSC	3	3	-	-	3	25	25	50	100
BSCFT 702	Food Quality Management	DSC	3	3	-	-	3	25	25	50	100
BSCFT 703	Analytical Instrumentation in Food	DSC	3	3	-	-	3	25	25	50	100
NDM 07	Introduction to Nutrition Education	MSC	3	3	-	-	3	25	25	50	100
NDM 08	Nutraceutical and Functional Foods	MSC	3	3	-	-	3	25	25	50	100
BSCFTL 701	Food Plant Design & Sanitation Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 702	Food Quality Management Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 703	Analytical Instrumentation in Food Lab	DSC	1	-	-	1	2	25	25	50	100
NDML 07	Introduction to Nutrition Education Lab	MSC	1	-	-	1	2	25	25	50	100
NDML 08	Nutraceutical and Functional Foods Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	15		05					1000

Note:

Eligibility for UG (Hons) with Research: Students who secure 75% marks and above in the first six semesters.

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Graphic Era (Deemed to be University) B.Sc. (Hons) Food Technology with Research Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester VIII											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 801	New Food Product Development	DSC	3	3	-	-	3	25	25	50	100
BSCFT 802	Institutional Food Service Management	DSC	3	3	-	-	3	25	25	50	100
PROJ 01	Dissertation/ Research Project	PROJ	12	-	-	12	-	-	-	-	100
BSCFTL 801	New Product Development Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 802	Institutional Food Service Management Lab	DSC	1	-	-	1	2	25	25	50	100
Total			20	06		14					500
GRAND TOTAL			160								7200

Note:

The students will be awarded U. G. Degree in B.Sc. (Hons.) Food Technology with Research.

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Graphic Era (Deemed to be University) B.Sc. (Hons) Food Technology without Research Scheme of Teaching and Evaluation 2025 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester VIII											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCFT 801	New Food Product Development	DSC	3	3	-	-	3	25	25	50	100
BSCFT 802	Institutional Food Service Management	DSC	3	3	-	-	3	25	25	50	100
BSCFT 803	Principles of Economics and Marketing in Foods	DSC	3	3	-	-	3	25	25	50	100
BSCFT 804	Food Waste Management	DSC	3	3	-	-	3	25	25	50	100
BSCFT 805	Food Biotechnology for Health and Nutrition	DSC	3	3	-	-	3	25	25	50	100
BSCFTL 801	New Product Development Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 802	Institutional Food Service Management Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 803	Principles of Economics and Marketing in Foods Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 804	Food Waste Management Lab	DSC	1	-	-	1	2	25	25	50	100
BSCFTL 805	Food Biotechnology for Health and Nutrition	DSC	1	-	-	1	2	25	25	50	100
Total			20	15		05					1000
GRAND TOTAL			160								7700

Note:

Honours students not undertaking research will do 3 courses for 12 credits in lieu of a research project / Dissertation.

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Minor in Food Technology offered by the Department of Food Science & Technology for students of B.Sc. Nutrition and Dietetics, B.Sc. Microbiology and B.Sc. Biotechnology

Sl. No.	Semester	Course Code	Course Name	Credits
1.	I	FTM 01/ FTML 01	Basics of Food Science/ Basics of Food Science Lab	04 (03 + 01)
2.	II	FTM 02/ FTML 02	Basics Concepts of Food Microbiology/ Basics Concepts of Food Microbiology Lab	04 (03 + 01)
3.	III	FTM 03/ FTML 03	Fundamentals of Food Processing and Preservation Technology/ Fundamentals of Food Processing and Preservation Technology Lab	04 (03 + 01)
4.	IV	FTM 04/ FTML 04	Introduction to Dairy Technology/ Introduction to Dairy Technology Lab	04 (03 + 01)
5.	V	FTM 05/ FTML 05	Principles and Processing of Fruits and Vegetables/ Principles and Processing of Fruits and Vegetables Lab	04 (03 + 01)
6.	VI	FTM 06/ FTML 06	Sensory Evaluation of Food/ Sensory Evaluation of Food Lab	04 (03 + 01)
7.	VII	FTM 07/ FTML 07	Food Hygiene & Sanitation/ Food Hygiene & Sanitation Lab	04 (03 + 01)
8.	VII	FTM 08/ FTML 08	Food Quality Control/ Food Quality Control Lab	04 (03 + 01)

List of exit course offered under 1 Year U.G. Certificate in Food Technology

Sl. No.	Semester	Course Code	Course Name	Credits
1.	I & II	MOOC 04	Economics of Food	04

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List of exit course offered under 2 Years U.G. Diploma in Food Technology

Sl. No.	Semester	Course Code	Course Name	Credits
1.	III & IV	MOOC 05	Food Laws and Standard	04

List of course offered under 3 Years U.G. Degree in Bachelor of Science (Hons) in Food Technology

Sl. No.	Semester	Course Code	Course Name	Credits
1.	V	BSCFT 702/ BSCFTL 702	Food Quality Management/ Food Quality Management Lab	04 (03 + 01)
2.	V	BSCFT 703/ BSCFTL 703	Analytical Instrumentation in Food/ Analytical Instrumentation in Food Lab	04 (03 + 01)
3.	VI	BSCFT 801/ BSCFTL 801	Institutional Food Service Management/ Institutional Food Service Management Lab	04 (03 + 01)

List of course offered under University Open Elective/Generic Elective/Multidisciplinary Courses (MDC)

Sl.No.	Semester	Course Code	Course Name	Credits	Offered by the Department
1.	ODD	TCS341	Python Programming for Computing	03	Computer Science Engineering
	ODD	TCS521	User Interface Design	03	
	EVEN	TCS492	Fundamental of Cyber Security	03	
	EVEN	TCS421	Fundamental of Statistics and AI	03	
2.	ODD	TEC 342	Foundations of Artificial Intelligence	03	Electronics and Communication Engineering
	ODD	TEC 302	Digital Electronics	03	
	ODD	TEC 701	Computer Architecture	03	
	ODD	TEC 759	Internet of Things and Its Applications	03	
	EVEN	TEC 491	Sensors and Signal Conditioning	03	
	EVEN	TEC 443	Introduction to Machine Learning	03	



	EVEN	TEC 848	Optimization Methods in Machine Learning	03	
	EVEN	TEC 852	Biomedical Signal Processing	03	
3.	ODD	TEE 715	Expert System and Fuzzy Logic	03	Electrical Engineering
	ODD	TEE 307	Electrical Engineering Materials	03	
	EVEN	TEE 402	Introduction to Electrical Energy Sources	03	
	EVEN	TEE 613	Battery Management System	03	
4.	ODD	GCE 511	Renewable Energy Systems	03	Civil Engineering
	ODD	GCE 711	Environment Protection and Management	03	
	EVEN	GCE 612	Environmental Laws and Policies	03	
	EVEN	GCE 813	Ancient architecture and Modern Techniques	03	
5.	ODD	TME 311	Manufacturing Technologies	03	Mechanical Engineering
	ODD	TME 509	Sustainable design and manufacturing	03	
	EVEN	TME 411	Principles of Industrial Engineering	03	
	EVEN	TME 612	Product Engineering and Design Thinking	03	
6.	ODD	TPE 304	Introduction to Petroleum Operations	03	Petroleum Engineering
	ODD	TPE 302	General Geology	03	
	EVEN	TPE 603	Natural Gas Engineering	03	
	EVEN	TPE 624	City Gas Distribution	03	
7.	ODD	TBT 706	Ecology, Environment and Conservation	03	Biotechnology
	ODD	BSBT 104	Agriculture Biotechnology	03	
	ODD	BSBT304	Laboratory skills	03	
	EVEN	TBT 608	Basic Biology for Engineers	03	
	EVEN	TBT 802	Entrepreneurial Biotechnology	03	
	EVEN	BSBT 203	Entrepreneurial Biotechnology	03	
	ODD	TAS 305	Introduction to Aerospace Engineering	03	



8.	EVEN	TAS 411	Introduction to UAS	03	Aerospace Engineering
9.	ODD	BSCM106	Microbiology for the non-Microbiologists	03	Microbiology
	EVEN	BSCM205	Microbes in Human Welfare	03	
10.	ODD	FST 01	Basics of Food and Nutrition Science	03	Food Science & Technology
	EVEN	FST 02	Food Processing, Preservation and Safety	03	
11.	ODD	BBA 304 (EC & DM)	E-Commerce & Digital Marketing	03	Management Studies
	ODD	BBA 304 (ENT)	Entrepreneurship: Theory & Practice	03	
	EVEN	BBA 203	Business Economics	03	
	EVEN	BBA 404 F	Managing Personal Finance	03	
12.	ODD	BHM 103	Introduction To Room Division	03	Hotel Management
	ODD	BHM 502	Food Commodities	03	
	EVEN	BHM 601	Hotel Strategic Management	03	
13.	ODD	BEC 103	Introduction to Economics	03	Humanities and Social Sciences
	ODD	BPS 304	United Nations and Global Conflict	03	
	EVEN	BPY 203	Emotional Intelligence	03	
14.	ODD	BCH 104a/ BCH 104b	Micro Economics/ Personal Tax Planning	03	
	ODD	BCH 304a/ BCH 304b	Investing In Stock Market/ Personal Investment Management	03	
	EVEN	BCH 204a/ BCH 204b	Macro Economics/ Trading in Mutual funds	03	

List of course offered under Ability Enhancement (AEC)

Sl.No.	Semester	Course Code	Course Name	Credits
1.	I	BSCFT 104	Professional Communication	02
2.	II	BSCFT 203	Career Skills	02
3.	III	HSS 301	Literature in Translation	02
4.	IV	MOOC 03	Intellectual Property Rights	02

**List of course offered under Skill Enhancement (SEC)**

Sl.No.	Semester	Course Code	Course Name	Credits
1.	I	BSCFT 102a/ BSCFT 102b	*Elementary Biology/ *Elementary Mathematics	03
2.	II	BSCFT 202	Basics of Computer	03
3.	III	BSCFT 303	Soft Skills	03

List of course offered under Value Added (VAC)

Sl.No.	Semester	Course Code	Course Name	Credits
1.	I	BSCFT 103	Healthy Living and Fitness	02
2.	I	DM 001	Disaster Management	02
3.	II	MOOC 01	Environmental Studies/SWAYAM	02
4.	II	UHV 201	Universal Human Values-II	02

List of Minors offered by Other Departments**a) Minor in Applied Biotechnology offered by the Department of Biotechnology**

Sl. No.	Semester	Course Code	Course Name	Credits
1.	I	BSBT 101M	Principles of Biotechnology	04
2.	II	BSBT 201M	Introduction to Sustainable Development	04
3.	III	BSBT 301M	Cell Biology	04
4.	IV	BSBT 401M	Biochemistry	04
5.	V	BSBT 501M	Immunology	04
6.	VI	BSBT 601M	Biotechnology for One Health	04
7.	VII	BSBT 701M	Nanotechnology	04
8.	VII	BSBT 801M	IPR, Biosafety and Bioethics	04

b) Minor in Environmental Microbiology offered by the Department of Microbiology

Sl. No.	Semester	Course Code	Course Name	Credits
1.	I	BSCM102	Concepts in Microbiology	04
2.	II	BSCM202	Microbial Ecology	04



3.	III	BSCM303	Extremophiles & Adaptations	04
4.	IV	BSCM404	Agro-Environment Microbiology	04
5.	V	BSCM505	Microbes in Green Energy & Sustainable Development	04
6.	VI	BSCM605	Biocomposting & Bioremediation	04
7.	VII	BSCM704	Waste Water Treatment	04
8.	VII	BSCM705	Industrial Waste Management	04

List of course offered under Mandatory Non-Graded Course (MNG)

SL.No.	Semester	Course Code	Course Name	Credits
1.	I	IP 101	Induction Program	-
2.	II	HSS 203	Constitution of India	-
3.	III	HSS 304	Indian Knowledge System	-

List of course offered under SWAYAM

SL.No.	Semester	Course Code	Course Name	Credits
1.	II	MOOC 01	Environmental Studies	02
2.	III	MOOC 02	Applied Positive Psychology	03
3.	IV	MOOC 03	Intellectual Property Rights	02
4.	I & II	MOOC 04	Economics of Food	04
5.	III & IV	MOOC 05	Food Laws and Standard	04

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