



**CURRICULUM
for
UNDERGRADUATE DEGREE PROGRAM**

**IN
Bachelor of Science (Nutrition and Dietetics)
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 Nutrition and Dietetics 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: Graduates will apply the concepts related to field of nutrition & dietetics for further studies, research and entrepreneurship.

PEO2: Graduates will acquire learning exposures through practical skills to meet the societal demands.

PEO3: Graduates will apply the quality education of nutrition & dietetics for employment and professional growth.

PEO4: Graduates will engage in continuous learning opportunities and acquire knowledge related to the updated and new emerging trends, research as well as practices in the field.

5. Consistency of PEOs with Mission of the Department

PEO Statements	M1	M2	M3
PEO1	3	2	2
PEO2	3	2	2
PEO3	2	1	1
PEO4	2	2	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 Nutrition and Dietetics 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 Nutrition and Dietetics 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: Graduates will acquire various concepts of food science, nutrition & dietetics.

PSO2: Graduates will develop essential skills required for nutritional assessment, diet planning and counselling.

PSO3: Graduates will learn the aspects of various multidisciplinary field of food, nutrition and dietetics.

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 field Nutrition and Dietetics
- High Practical approach through Project work/ hospital internship in which students will visit different wards in the hospital and will be able to gain first-hand knowledge about different patient and diet counselling approaches.
- To impart high competency in the students, the curriculum offers distinct ability enhancement and value-added courses.
- Apart from the major courses, the program offers a range of courses that provides the students a broad range of knowledge and skill set like life skills and mentoring, soft skills, Aptitude, Communication skills, social and professional ethics in personal diet management.
- The curriculum offers multi-disciplinary courses running in the university for different fields.



Course Components of Academic Program

Bachelor of Science (Nutrition and Dietetics)

Program Duration: 6 Semester, 3 years/ 8 Semester, 4 Year

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

Note:

*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. Nutrition and Dietetics 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									
BSCND 101	Food and Nutrition	DSC	3	3	-	-	3	25	25	50	100
FTM 01	Basics of Food Science	MSC	3	3	-	-	3	25	25	50	100
	Select from list of pool courses	MDC	3	3	-	-	3	25	25	50	100
BSCND 102a BSCND 102b	*Elementary biology/ *Elementary mathematics	SEC	3	3	-	-	3	25	25	50	100
BSCND 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
BSCND 104	Professional Communication	AEC	2	2	-	-	2	25	25	50	100
BSCNDL 101	Food and Nutrition Lab	DSC	1	-	-	1	2	25	25	50	100
FTML 01	Basics of Food Science 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.



Graphic Era (Deemed to be University) B.Sc. Nutrition and Dietetics 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									
BSCND 201	Principles of Human Nutrition	DSC	3	3	-	-	3	25	25	50	100
FTM 02	Basic Concepts of Food Microbiology	MSC	3	3	-	-	3	25	25	50	100
	Select from list of pool courses	MDC	3	3	-	-	3	25	25	50	100
BSCND 202	Basics of Computer	SEC	3	3	-	-	3	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
BSCND 203	Career Skills	AEC	2	2	-	-	2	25	25	50	100
BSCNDL 201	Principles of Human Nutrition Lab	DSC	1	-	-	1	2	25	25	50	100
FTML 02	Basic Concepts of Food Microbiology 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. Nutrition and Dietetics 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									
BSCND 301	Public Health Nutrition	DSC	3	3	-	-	3	25	25	50	100
BSCND 302	Nutritional Biochemistry I	DSC	3	3	-	-	3	25	25	50	100
FTM 03	Fundamentals of Food Processing and Preservation Technology	MSC	3	3	-	-	3	25	25	50	100
	Select from list of pool courses	MDC	3	3	-	-	3	25	25	50	100
BSCND 303	Soft Skills	SEC	3	3	-	-	3	25	25	50	100
HSS 301	Literature in Translation	AEC	2	2	-	-	2	25	25	50	100
BSCNDL 301	Public Health Nutrition Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 302	Nutritional Biochemistry I Lab	DSC	1	-	-	1	2	25	25	50	100
FTML 03	Fundamentals of Food Processing and Preservation Technology 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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Semester IV											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCND 401	Human Anatomy and Physiology	DSC	3	3	-	-	3	25	25	50	100
BSCND 402	Nutritional Biochemistry II	DSC	3	3	-	-	3	25	25	50	100
BSCND 403	Nutrition Through Life Cycle	DSC	3	3	-	-	3	25	25	50	100
FTM 04	Introduction to Dairy Technology	MSC	3	3	-	-	3	25	25	50	100
BSCND 404	Internship	INT	2	-	-	-	-	-	-	-	100
MOOC 3	Intellectual Property Rights/ SWAYAM	AEC	2	2	-	-	2	25	25	50	100
BSCNDL 401	Human Anatomy and Physiology Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 402	Nutritional Biochemistry II Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 403	Nutrition Through Life Cycle Lab	DSC	1	-	-	1	2	25	25	50	100
FTML 04	Introduction to Dairy Technology 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.



Graphic Era (Deemed to be University) B.Sc. Nutrition and Dietetics 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									
BSCND 501	Therapeutic Nutrition – I	DSC	3	3	-	-	3	25	25	50	100
BSCND 502	Diet and Nutrition Counselling	DSC	3	3	-	-	3	25	25	50	100
BSCND 503	Introduction to Clinical Nutrition	DSC	3	3	-	-	3	25	25	50	100
BSCND 504	General Nutrition and Meal Planning	DSC	3	3	-	-	3	25	25	50	100
FTM 05	Principles and Processing of Fruits and Vegetables	MSC	3	3	-	-	3	25	25	50	100
BSCNDL 501	Therapeutic Nutrition – I Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 502	Diet and Nutrition Counselling Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 503	Introduction to Clinical Nutrition Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 504	General Nutrition and Meal Planning Lab	DSC	1	-	-	1	2	25	25	50	100
FTML 05	Principles and Processing of Fruits and Vegetables Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	15		05					1000



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Semester VI											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE : EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCND 601	Therapeutic Nutrition – II	DSC	3	3	-	-	3	25	25	50	100
BSCND 602	Culinary Operations in Food Science	DSC	3	3	-	-	3	25	25	50	100
BSCND 603	Community Nutrition	DSC	3	3	-	-	3	25	25	50	100
BSCND 604	Sports Nutrition	DSC	3	3	-	-	3	25	25	50	100
FTM 06	Sensory Evaluation of Food	MSC	3	3	-	-	3	25	25	50	100
BSCNDL 601	Therapeutic Nutrition – II Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 602	Culinary Operations in Food Science Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 603	Community Nutrition Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 604	Sports Nutrition Lab	DSC	1	-	-	1	2	25	25	50	100
FTML 06	Sensory Evaluation of Food Lab	MSC	1	-	-	1	2	25	25	50	100
Total			20	15		05					1000
GRAND TOTAL			120								5700



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Semester VII											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE : EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCND 701	Nutrition Education	DSC	3	3	-	-	3	25	25	50	100
BSCND 702	Techniques in Food Analysis	DSC	3	3	-	-	3	25	25	50	100
BSCND 703	Nutraceuticals for Human Health	DSC	3	3	-	-	3	25	25	50	100
FTM 07	Food Hygiene & Sanitation	MSC	3	3	-	-	3	25	25	50	100
FTM 08	Food Quality Control	MSC	3	3	-	-	3	25	25	50	100
BSCNDL 701	Nutrition Education Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 702	Techniques in Food Analysis Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 703	Nutraceuticals for Human Health Lab	DSC	1	-	-	1	2	25	25	50	100
FTML 07	Food Hygiene & Sanitation Lab	MSC	1	-	-	1	2	25	25	50	100
FTML 08	Food Quality Control 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 semester

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Graphic Era (Deemed to be University) B.Sc. Nutrition and Dietetics Scheme of Teaching and Evaluation 2024 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) as per NEP 2020 (Effective from the academic year 2025-26)											
Semester VIII (With Research)											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE : EVALUATION			
COURSE			Credits	L	T	P	Contact Hr.	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCND 801	New Food Product Development	DSC	3	3	-	-	3	25	25	50	100
BSCND 802	Institutional Food Service Management	DSC	3	3	-	-	3	25	25	50	100
PROJ 101	Dissertation/Research Project	PROJ	12	-	-	-	-	-	-	-	100
BSCNDL 801	New Food Product Development Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 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.) in Nutrition and Dietetics with Research.

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Graphic Era (Deemed to be University) B.Sc. Nutrition and Dietetics 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 (Without Research)											
COURSE MODULE				TEACHING PERIODS				WEIGHTAGE: EVALUATION			
COURSE			Credits	L	T	P	Contact Hrs	CIE	MSE	ESE	Total
Code	Title	NEP Component									
BSCND 801	New Food Product Development	DSC	3	3	-	-	3	25	25	50	100
BSCND 802	Institutional Food Service Management	DSC	3	3	-	-	3	25	25	50	100
BSCND 803	Principles of Economics and Marketing in Foods	DSC	3	3	-	-	3	25	25	50	100
BSCND 804	Food Waste Management	DSC	3	3	-	-	3	25	25	50	100
BSCND 805	Food Biotechnology for Health and Nutrition	DSC	3	3	-	-	3	25	25	50	100
BSCNDL 801	New Food Product Development Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 802	Institutional Food Service Management Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 803	Principles of Economics and Marketing in Foods Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 804	Food Waste Management Lab	DSC	1	-	-	1	2	25	25	50	100
BSCNDL 805	Food Biotechnology for Health and Nutrition Lab	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

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 02/ 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)

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**Minor in Nutrition and Dietetics offered by the Department of Food Science & Technology
(for students of B. Sc. Food Technology)**

Sl. No.	Semester	Course Code	Course Name	Credits
1.	I	NDM 01/ NDML 01	Introduction to Food & Nutrition/ Introduction to Food & Nutrition Lab	04 (03 + 01)
2.	II	NDM 02/ NDML 02	Basics of Human Nutrition/ Basics of Human Nutrition Lab	04 (03 + 01)
3.	III	NDM 03/ NDML 03	Basic Nutritional Biochemistry/ Basic Nutritional Biochemistry Lab	04 (03 + 01)
4.	IV	NDM 04/ NDML 04	Fundamentals of Life Cycle Nutrition/ Fundamentals of Life Cycle Nutrition Lab	04 (03 + 01)
5.	V	NDM 05/ NDML 05	Nutrition Counselling/ Nutrition Counselling Lab	04 (03 + 01)
6.	VI	NDM 06/ NDML 06	Nutrition for Community/ Nutrition for Community Lab	04 (03 + 01)
7.	VII	NDM 07/ NDML 07	Introduction to Nutrition Education/ Introduction to Nutrition Education Lab	04 (03 + 01)
8.	VII	NDM 08/ NDML 08	Nutraceuticals and Functional Foods	04 (03 + 01)

List of exit course offered under 1 Year U.G. certificate in Nutrition and Dietetics

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

List of exit course offered under 2 Year U.G. diploma in Nutrition and Dietetics

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 Nutrition and Dietetics

Sl. No.	Semester	Course Code	Course Name	Credits
1.	V	BSCND 701/ BSCNDL 701	Nutrition Education/ Nutrition Education Lab	04 (03 + 01)
2.	V	BSCND 702/ BSCNDL 702	Techniques in Food Analysis/ Techniques in Food Analysis Lab	04 (03 + 01)
3.	VI	BSCND 802/ BSCNDL 802	Institutional Food Service Management/ Institutional Food Service Management Lab	04 (03 + 01)

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**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	
	ODD	GCE 511	Renewable Energy Systems	03	
	ODD	GCE 711	Environment Protection and Management	03	



4.	EVEN	GCE 612	Environmental Laws and Policies	03	Civil Engineering
	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	
8.	ODD	TAS 305	Introduction to Aerospace Engineering	03	Aerospace Engineering
	EVEN	TAS 411	Introduction to UAS	03	
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,	03	

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			Preservation, and Safety		
11.	ODD	BBA 304 (EC&DM)	E-Commerce and 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
	EVEN	BPY 203	Emotional Intelligence	03	
	ODD	BPS 304	United Nations and Global Conflict	03	
14.	ODD	BCH 104a/ BCH 104b	Micro Economics/ Personal Tax Planning	03	Commerce
	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	BSCND 104	Professional Communication	02
2.	II	BSCND 203	Career Skills	02
3.	III	HSS 301 HSS 303	Literature in Translation Modern English Language	02
4.	IV	BSCND 405/ MOOC 2	Intellectual Property Rights/ SWAYAM	02

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List of course offered under Skill Enhancement (SEC)

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

List of course offered under Value Added (VAC)

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

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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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