



# SCHEME OF TEACHING & SYLLABUS

For

**BACHELOR OF SCIENCE**

**B.Sc**

**NUTRITION & DIETETICS**

**(Three Year, Six Semester Program)**

“Based on Outcome Based Education (OBE) , NEP 2020 and NCrF”  
(Academic Session 2024 – 25)

**School of Biotechnology & Life Sciences**

**Shobhit Institute of Engineering & Technology**

[ NAAC 'A' Grade Accredited Deemed-to-be University estd u/s 3 of UGC Act, 1956 ]

**Campus:** NH - 58, Modipuram, Meerut - 250110, Delhi NCR

**NAAC A GRADE ACCREDITED UNIVERSITY**

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AICTE IDEA Lab



NCC





**Syllabus**  
**Bachelors of Science (Nutrition and Dietetics)**  
**Batch: 2024-27**

School of Biotechnology and Life Sciences  
**Faculty of Engineering, Applied Science and Technology (FEAST)**  
**SHOBHIT INSTITUTE OF ENGINEERING AND TECHNOLOGY, MEERUT**  
(A NAAC Accredited Deemed to be University)

# **BACHELOR OF SCIENCE**

## **3 Year Full Time Programme (Academic Session 2024-25)**

### **Vision**

To be recognized as a leading institution in India and globally for academic excellence, transformative research, and holistic development of students, actively contributing towards an empowered, inclusive, and enlightened society.

### **Mission**

**M1.** To provide a comprehensive, multidisciplinary and interdisciplinary education in biotechnology, equipping students with theoretical knowledge and practical skills.

**M2.** To cultivate a passion for scientific inquiry, innovation, and problem-solving, empowering students.

**M3.** To foster practical learning through innovative teaching and learning techniques, and to enhance students' foundation by organizing seminars and workshops.

**M4.** To contribute to the sustainable development of society, improve human health, and promote environmental conservation through the application of biotechnology.

### **Program Objectives (POs)**

- PO1: Nutrition and Human body Knowledge:** Possess knowledge and comprehension of the core information associated with the profession of Dietetics, including food science, physiology and human anatomy, nutritional biochemistry, nutrition science, behavioural, social and planning diets for therapeutic conditions.
- PO2: Thinking Abilities:** Utilize the principles of scientific inquiry, thinking analytically, clearly and critically, while solving problems and making decisions during daily practice. Find, analyse, evaluate and apply information systematically and shall make defensible decisions.
- PO3: Environment and sustainability ability :** To understand the basic knowledge of environment and chemistry, its implications, and energy resource conservation.
- PO4: Communication:** Communicate effectively on complex nutritional activities with the community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentation and give receive clear instruction.
- PO5: Professional Identity and Planning abilities:** understand, analyse and communicate the value of their professional roles in society as community worker, nutritional product developer,
- PO6: Nutritional Product Development:** develop nutritional rich products after analysing their nutritional and sensory qualities to increase nutritional status of population
- PO7: Ethics:** Apply ethical principles and commit to professional ethics and responsibility and norms of dietician practice

Semester	C C	DSE	MDC	AEC	VAC	SEC	MIP	Total Credits	SI/ Exit
I	8	3	3	4	0	4	0	22	-
II	8	8	0	0	8	1	0	25	2
III	8	3	3	0	0	6	0	20	0
IV	12	6	0	3	2	3	0	26	2
V	12	3	0	0	0	5	0	20	0
VI	12	3	3	0	0	4	2	24	0
<b>Total</b>	60	26	09	07	10	23	2	<b>137</b>	4

VAC	Value added courses
CC	Core courses
DSE	Department specific elective.
MDC	Multidisciplinary Course
AEC	Ability enhancement course
SEC	Skill enhancement course
SI	Summer internship
PROJECT/ MZP	Minor Project/Major project

## Teaching Scheme Bachelors of Science (Nutrition and Dietetics)

### B.Sc. (Nutrition and Dietetics)

#### Semester 1

S.No.	Course Type	Course Code	Course Title	L-T-P	Credit Units
1.	CC	T03BSBM0101	Human Anatomy and Physiology-	3-1-0	4
2.	CC	T02BSND0102	Fundamental of Food and Nutrition-1	3-1-0	4
3.	DSE	T02BSND0130	Family Finance and Meal Management	2-1-0	3
4.	AEC	T05ASEN0151	Professional Communication	2-1-0	3
5.	MDC	BC1BAPY0102	Psychology 1	2-1-0	3
6.	AEC	T02BSND0150	Seminar	0-0-2	1
7.	SEC	T02BSND0161	Human Anatomy and Physiology -1	0-0-4	2
8.	SEC	T02BSBM0162	Fundamental of Food and Nutrition-1	0-0-4	2
<b>Total</b>				12-5-10	22

## Semester 2

S.No.	Course Type	Course Code	Course Title	L-T-P	Credit Units
1.	CC	T02BSND0201	Nutrition through life cycle	4-0-0	4
2.	CC	T02BSND0202	Applied Chemistry	4-0-0	4
3.	DSE	T02BSMB0202	Immunology	3-1-0	4
4.	VAC	T02BTAT0280	Environmental studies	2-1-0	3
5.	VAC	T02BSND0281	Field survey	1-0-2	3
6.	SEC	T02BSND0261	Nutrition through life cycle Lab	0-0-2	1
7.	VAC	T06BTME0280	Idea Lab	0-0-4	2
8.	DSE	T05ASMA0241/T02BSBM0235	Biostatistics/ Bioethics & Health Management System	3-1-0	4
		<b>TOTAL</b>		18-3-8	<b>25</b>
9.	EXIT (UG CERTIFICATE)	T02BSND0390	Summer Internship	0-0-4	2
		<b>Total</b>		<b>18-3-12</b>	<b>27</b>

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<sup>2</sup> CC: Core Course, AECC: Ability Enhancement Compulsory Courses, SEC: Skill Enhancement Courses, DSE: Discipline Specific Courses

### Semester 3

S.No.	Course Type	Course Code	Course Title	L-T-P	Credit Units
1.	CC	T02BSND0301	Basic Dietetics and Counselling	3-1-0	4
2.	CC	T02BSND0302	Nutritional Biochemistry -I	3-1-0	4
4.	DSE	T02BSND0330	Food Sanitation & Hygiene	3-0-0	3
5.	MDC	T02BSND0340	Food Science and Technology	3-0-0	3
6.	SEC	T02BSND0360	Clinical case studies	0-1-4	3
7.	SEC	T02BSND0361	Basic Dietetics and Counselling Lab	0-0-2	1
8	SEC	T02BSND0362	Nutritional Biochemistry-I Lab	0-0-2	1
9.	SEC	T02BSND0363	Food Science and Technology Lab	0-0-2	1
		<b>Total</b>		<b>12-03-10</b>	<b>20</b>

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<sup>3</sup> CC: Core Course, AECC: Ability Enhancement Compulsory Courses, SEC: Skill Enhancement Courses, DSE: Discipline Specific Courses

### Semester 4

S.No.	Course Type	Course Code	Course Title	L-T-P	Credit Units
1.	CC	T02BSND0401	Nutritional Biochemistry-II	3-1-0	4
2	CC	T02BSND0402	Food Microbiology	3-1-0	4
3	CC	T02BSND0403	Nutrition Programme planning	3-1-0	4
4.	DSE	T02BSND0430	Community nutrition/ Nutrition for fitness	3-0-0	3
5.	DSE	T02BSND0431	Nutrition and Health Education	3-0-0	3
6.	VAC	T02BSND0480	Campus to Corporate	1-0-2	2
7.	AEC	T02BSND0350	Logical Skills Building and Soft Skills	2-1-0	3
8.	SEC	T02BSND0460	Community nutrition 1 a b	0-0-2	1
9.	SEC	T02BSND0461	Nutritional Biochemistry-II lab	0-0-2	1
10.	SEC	T02BSND0462	Food Microbiology Lab	0-0-2	1
		<b>Total</b>		<b>18-4-8</b>	<b>26</b>
11.	EXIT (UG DIPLOMA )	T01BSND0490	Summer Internship	0-0-4	2
		<b>Total</b>		<b>18-4-12</b>	<b>28</b>



## Semester 5

S.No.	Course Type	Course Code	Course Title	L-T-P	Credit Units
1.	CC	T02BSND0501	Food Service Management	3-1-0	4
2.	CC	T02BSND0502	Food Adulteration	3-1-0	4
3.	CC	T02BSND0503	Preventive Nutrition	3-1-0	4
4.	DSE	T02BSND0530	Therapeutic Nutrition-I	3-0-0	3
5.	SEC	T02BSND0560	Therapeutic Nutrition Lab	0-0-4	2
6.	SEC	T02BSND0561	Food Service Management Lab	0-0-4	2
7.	SEC	T02BSND0562	Food Adulteration Lab	0-0-2	1
		<b>Total</b>		<b>12-3-10</b>	<b>20</b>

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<sup>4</sup> CC: Core Course, AECC: Ability Enhancement Compulsory Courses, SEC: Skill Enhancement Courses, DSE: Discipline Specific Courses

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## Semester 6

S.No.	Course Type	Course Code	Course Title	L-T-P	Credit Units
1.	CC	T02BSND0601	Therapeutic Nutrition-II	3-1-0	4
2.	CC	T02BSND0602	Principles of Food Preservation	3-1-0	4
3.	CC	T02BSND0603	Food Product Development & Sensory analysis	3-1-0	4
4.	MDC	T02BSND0640	Food Toxicity	2-1-0	3
5.	DSE	T02BSND0630	Food Analysis	2-1-0	3
6.	SEC	T02BSND0661	Therapeutic Nutrition-II Lab	0-0-4	2
	SEC	T02BSND0662	Food Preservation and Bakery Lab	0-0-4	2
7.	MP	T02BSND0696	Community Connect Project	0-0-4	2
9.					
<b>Total</b>				<b>13-5-12</b>	<b>24</b>

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<sup>5</sup> CC: Core Course, AECC: Ability Enhancement Compulsory Courses, SEC: Skill Enhancement Courses, DSE: Discipline Specific Courses

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