

### Yenepoya (Deemed to be University)

Recognized under Sec 3(A) of the UGC Act 1956 Accredited by NAAC with 'A+' Grade

## CURRICULUM GOVERNING B.Sc. FOOD SCIENCE, NUTRITION AND DIETETICS PROGRAMME

# Bachelor of Science (B.Sc.) (Honours/ Honours with Research) in Food Science, Nutrition and Dietetics

- 1. Coursework and Internship
- 2. Coursework and Research
- 3. Coursework
- 4. Research

Offered by
Department of Food Science and Nutrition
The Yenepoya Institute of Arts, Science, Commerce and Management

Under the FACULTY OF SCIENCE Yenepoya (Deemed to be University)

2025-26





## Bachelor of Science (B.Sc.) (Honours/Honours with Research) in Food Science, Nutrition and Dietetics

#### Semester 1/Year 1

			Semester 1							
Sl.	Course	Course			urs pe Week	er				
No.	Code	Type	Course Title	T	P	E	CIA	SEE	TOTAL	Credits
1	25FSD101T	CC	Plant Food Science (Theory)	3	0	0	50	50	100	3
2	25FSD101P	CC	Plant Food Science (Practical)	0	2	0	50	50	100	1
3	25FSD102T	CC	Fundamentals of Nutrition–I (Theory)	3	0	0	50	50	100	3
4	25FSD102P	CC	Fundamentals of Nutrition–I (Practical)	0	2	0	50	50	100	1
5	25FSD103T	DSC	Human Physiology–I (Theory)	3	0	0	50	50	100	3
6	25FSD103P	DSC	Human Physiology–I (Practical)	0	2	0	50	50	100	1
7	NME1	ME	ME Group 1	3	0	0	25	25	50	3
8	NVAC1	VAC	VAC Group 1	2	0	0	100	-	100	2
9	NAEC1	AEC	AEC Group 1	4	0	0	50	50	100	4
		TC	OTAL			•			850	21

#### T, Theory; P, Practical; E, Experiential Learning

#### Note:

\*Students enrolled in the programme offered by the Yenepoya Institute of Arts, Science, Commerce and Management under different faculty are obligated to select one Multi-disciplinary Elective course from the available options in the ME Group 1.

\*\* Students enrolled in the programme offered by the Yenepoya Institute of Arts, Science, Commerce and Management under different faculty are obligated to select one Ability Enhancement Course from the available options in AEC list provided under each semester.

\*\*\*Multi-disciplinary Elective/ Ability Enhancement Course/ Value Added Course/ Skill Enhancement Course are common among all UG programmes of the Yenepoya Institute of Arts, Science, Commerce and Management.





#### Semester 2/ Year 1

			Semester 2							
Sl.	Course	Course		1	urs po Veek					
No.	Code	Type	Course Title	T	P	E	CIA	SEE	TOTAL	Credits
1	25FSD201T	CC	Animal Food Science (Theory)	3	0	0	50	50	100	3
2	25FSD201P	CC	Animal Food Science (Practical)	0	2	0	50	50	100	1
3	25FSD202T	CC	Fundamentals of Nutrition–II (Theory)	3	0	0	50	50	100	3
4	25FSD202P	CC	Fundamentals of Nutrition–II (Practical)	0	2	0	50	50	100	1
5	25FSD203T	DSC	Human Physiology—II (Theory)	4	0	0	50	50	100	4
6	25FSD204T	DSC	Bakery, Confectionary and Extruded Foods (Theory)	2	0	0	50	50	100	2
7	NME2	ME	ME Group 2	3	0	0	25	25	50	3
8	NVAC2	VAC	VAC Group 2	2	0	0	50	50	100	2
9	NAEC2	AEC	AEC Group 2	4	0	0	50	50	100	4
		TC	TAL				_		850	23

#### T, Theory; P, Practical; E, Experiential Learning

#### Note:

\*Students enrolled in the programme offered by the Yenepoya Institute of Arts, Science, Commerce and Management under different faculty are obligated to select one Multi-disciplinary Elective course from the available options in the ME Group 2.

\*\* Students enrolled in the programme offered by the Yenepoya Institute of Arts, Science, Commerce and Management under different faculty are obligated to select one Ability Enhancement Course from the available options in AEC list provided under each semester.

\*\*\*Multi-disciplinary Elective/ Ability Enhancement Course/ Value Added Course/ Skill Enhancement Course are common among all UG programmes of the Yenepoya Institute of Arts, Science, Commerce and Management.

#### Exit: UG Certificate in Food Science, Nutrition and Dietetics





#### Semester 3/ Year 2

			Semester 3							
Sl.	Course	Course		H	ours po Week					
No.	Code	Type	Course Title	T	P	E	CIA	SEE	TOTAL	Credits
1	25FSD301T	CC	Dietetics-I (Theory)	3	0	0	50	50	100	3
2	25FSD301P	CC	Dietetics-I (Practical)	0	2	0	50	50	100	1
3	25FSD302T	CC	Nutrition Through Life Cycle–I (Theory)	3	0	0	50	50	100	3
4	25FSD302P	CC	Nutrition Through Life Cycle–I (Practical)	0	2	0	50	50	100	1
5	25FSD303T	CC	Nutritional Biochemistry (Theory)	3	0	0	50	50	100	3
6	25FSD303P	CC	Nutritional Biochemistry (Practical)	0	2	0	50	50	100	1
7	25FSD304T	DSC	Functional Foods and Nutraceuticals (Theory)	2	0	3	50	50	100	3
8	NME3	ME	ME Group 3	3	0	0	25	25	50	3
9	NVAC3	VAC	VAC Group3	2	0	0	50	50	100	2
10	NSEC1	SEC	SEC Group 1	3	0	0	100	-	100	3
			Communication Skills							
	TD TDI	TC	OTAL CONTRACTOR OF THE CONTRAC						950	23

T, Theory; P, Practical; E, Experiential Learning

#### Note:

\*Students enrolled in the programme offered by the Yenepoya Institute of Arts, Science, Commerce and Management under different faculty are obligated to select one Multi-disciplinary Elective course from the available options in the ME Group 3.

\*\*Multi-disciplinary Elective/ Ability Enhancement Course/ Value Added Course/ Skill Enhancement Course are common among all UG programmes of the Yenepoya Institute of Arts, Science, Commerce and Management.





#### Semester 4/ Year 2

			Semester 4							
Sl.	Course	Course		Н	lours p Week					
No.	Code	Type	Course Title	T	P	E	CIA	SEE	TOTAL	Credits
1	25FSD401T	CC	Dietetics-II (Theory)	3	0	0	50	50	100	3
2	25FSD401P	CC	Dietetics-II (Practical)	0	2	0	50	50	100	1
3	25FSD402T	CC	Nutrition Through LifeCycle— II (Theory)	3	0	0	50	50	100	3
4	25FSD402P	CC	Nutrition Through Life Cycle— II (Practical)	0	2	0	50	50	100	1
5	25FSD403T	DSC	Food Microbiology, Sanitation and Hygiene (Theory)	3	0	0	50	50	100	3
6	25FSD403P	DSC	Food Microbiology, Sanitation and Hygiene (Practical)	0	2	0	50	50	100	1
7	25FSD404T	DSC	Public Health (Theory)	4	0	0	50	50	100	4
8	25FSD405T	DSC	Diet Counselling and Patient Care (Theory)	3	0	3	50	50	100	4
9	NSEC2	SEC	SEC Group 2	3	0	0	100	-	100	3
			Leadership and Management Skills							
	. '	TO	TAL						900	23

#### T, Theory; P, Practical; E, Experiential Learning

#### **Note:**

\*Multi-disciplinary Elective/ Ability Enhancement Course/ Value Added Course/ Skill Enhancement Course are common among all UG programmes of the Yenepoya Institute of Arts, Science, Commerce and Management.

#### Exit: UG Diploma in Food Science, Nutrition and Dietetics





## Semester 5/ Year 3

			Semester 5	5						
Sl.	Course	Course		Н	lours p Week					
No.		Type	Course Title	T	P	E	CIA	SEE	TOTAL	Credits
1	25FSD501T	CC	Food Preservation (Theory)	3	0	0	50	50	100	3
2	25FSD501P	CC	Food Preservation (Practical)	0	2	0	50	50	100	1
3	25FSD502T	DSC	Public Health Nutrition (Theory)	4	0	0	50	50	100	4
4	25FSD503T	DSC	Sports Nutrition (Theory)	4	0	0	50	50	100	4
5	25FSD504T	DSC	Fermentation Technology (Theory)	4	0	0	50	50	100	4
6	25FSD505T	DSC	Food Certification and Quality Control (Theory)	4	0	0	50	50	100	4
7	NSEC3	SEC	SEC Group 3	3	0	0	100	-	100	3
			Professional Development							
		TO	ΓAL						700	23

T, Theory; P, Practical; E, Experiential Learning

#### **Note:**

\*Multi-disciplinary Elective/ Ability Enhancement Course/ Value Added Course/ Skill Enhancement Course are common among all UG programmes of the Yenepoya Institute of Arts, Science, Commerce and Management.





### Semester 6/ Year 3

			Semester	6						
				Hou	rs per '	Week				
Sl. No.	Course Code	Course Type	Course Title	T	P	E	CIA	SEE	TOTAL	Credits
1	25FSD601T	CC	Fundamentals of Research Methods (Theory)	4	0	0	50	50	100	4
2	25FSD602T	CC	Data Analysis and Report Writing (Theory)	4	0	0	50	50	100	4
3	25FSD603I 25FSD603P	SEC	a. Internship OR b. Project	0	0	36	100	100	200	12
	,	TO	TAL						400	20

T, Theory; P, Practical; E, Experiential Learning

#### **Note:**

\*Students enrolled in the B.Sc. in Food Science, Nutrition and Dietetics programme offered by the Yenepoya Institute of Arts, Science, Commerce and Management are obligated to select either internship or project during sixth semester.

## Exit: UG Degree in Food Science, Nutrition and Dietetics





## B.Sc. Food Science, Nutrition and Dietetics (Honours/Honours with Research) (Coursework and Internship)

### Semester 7/ Year 4

			Semester 7							
Sl. No.	Course Code	Course Type	Course Title	Н	ours Wee		CIA	SEE	TOTAL	Credits
		<b>J</b> F -		T	P	E				
1	25FSD701CIT	DSC	Food Analysis Techniques (Theory)	3	0	0	50	50	100	3
2	25FSD701CIP	DSC	Food Analysis Techniques (Practical)	0	2	0	50	50	100	1
3	25FSD702CI	DSE	Discipline Specific Elective Group 1	4	0	0	50	50	100	4
4	25FSD703CI	DSE	Discipline Specific Elective Group 2	4	0	0	50	50	100	4
5	25FSD704CI	TDE	Transdisciplinary Elective	4	0	0	50	50	100	4
6	NME4CI	ME	ME Group 4	3	2	0	50	50	100	4
			Total	'			•	•	600	20

T, Theory; P, Practical; E, Experiential Learning

## Semester 8/Year 4

			Semester 8							
Sl. No.	Course Code	Course Type	Course Title	Н	ours Wee		CIA	SEE	TOTAL	Credits
	3022	-3,43		T	P	E				
1	25FSD801CI	DSE	Discipline Specific Elective Group 3	4	0	0	50	50	100	4
2	25FSD802CI	DSE	Discipline Specific Elective Group 4	4	0	0	50	50	100	4
3	25FSDCII	SEC	Internship	0	0	36	100	100	200	12
		•	Total				•	•	400	20

T, Theory; P, Practical; E, Experiential Learning





## B.Sc. Food Science, Nutrition and Dietetics (Honours/ Honours with Research) (Coursework and Research)

#### Semester 7/ Year 4

			Semester 7							
Sl. No.	Course Code	Course Type	Course Title	Н	ours Wee		CIA	SEE	TOTAL	Credits
		- <b>3</b> P -		T	P	E				
1	25FSD701CRT	DSC	Food Analysis Techniques (Theory)	3	0	0	50	50	100	3
2	25FSD701CRP	DSC	Food Analysis Techniques (Practical)	0	2	0	50	50	100	1
3	25FSD702CR	DSE	Discipline Specific Elective Group 1	4	0	0	50	50	100	4
4	25FSD703CR	DSE	Discipline Specific Elective Group 2	4	0	0	50	50	100	4
5	25FSD704CR	TDE	Transdisciplinary Elective	4	0	0	50	50	100	4
6	NME4CR	ME	ME Group 4	3	2	0	50	50	100	4
	'		Total				<b>'</b>		600	20

T, Theory; P, Practical; E, Experiential Learning

#### Semester 8/ Year 4

			Semester 8							
Sl. No.	Course Code	Course Type	Course Title	Н	ours Wee		CIA	SEE	TOTAL	Credits
				T	P	Е				
1	25FSD801CR	DSE	Discipline Specific Elective Group 3	4	0	0	50	50	100	4
2	25FSD802CR	DSE	Discipline Specific Elective Group 4	4	0	0	50	50	100	4
3	25FSDCRRP	SEC	Research Project	0	0	36	100	100	200	12
		•	Total						400	20

T, Theory; P, Practical; E, Experiential Learning





## B.Sc. Food Science, Nutrition and Dietetics (Honours/Honours with Research) (Coursework)

### Semester 7/ Year 4

			Semester 7							
Sl. No.	Course Code	Course Type	Course Title	Н	ours Wee		CIA	SEE	TOTAL	Credits
		Jr		T	P	E				
1	25FSD701CT	DSC	Food Analysis Techniques (Theory)	3	0	0	50	50	100	3
2	25FSD701CP	DSC	Food Analysis Techniques (Practical)	0	2	0	50	50	100	1
3	25FSD702C	DSE	Discipline Specific Elective Group 1	4	0	0	50	50	100	4
4	25FSD703C	DSE	Discipline Specific Elective Group 2	4	0	0	50	50	100	4
5	25FSD704C	TDE	Transdisciplinary Elective	4	0	0	50	50	100	4
6	NME4C	ME	ME Group 4	3	2	0	50	50	100	4
			Total				<b>'</b>		600	20

#### T, Theory; P, Practical; E, Experiential Learning

## Semester 8/Year 4

			Semester 8							
Sl. No.	Course Code	Course Type	Course Title	Н	ours p Week		CIA	SEE	TOTAL	Credits
				T	P	E				
1	25FSD801C	DSE	Discipline Specific Elective Group 3	4	0	0	50	50	100	4
2	25FSD802C	DSE	Discipline Specific Elective Group 4	4	0	0	50	50	100	4
3	25FSD803C	DSE	Discipline Specific Elective Group 5	4	0	0	50	50	100	4
4	25FSD804C	DSE	Discipline Specific Elective Group 6	4	0	0	50	50	100	4
5	25FSD805C	DSE	Discipline Specific Elective Group 7	4	0	0	50	50	100	4
			Total		I	I		I	500	20

T, Theory; P, Practical; E, Experiential Learning





## B.Sc. Food Science, Nutrition and Dietetics (Honours/ Honours with Research) (Research)

#### Semester 7/ Year 4

	Semester 7											
Sl. No.	Course Code	Course Type	Course Title	Hours per Week						SEE	TOTAL	Credits
		-3,00		T	P	E						
1	25FSD701R	DSC	Advanced Data Analysis Tools	3	2	0	50	50	100	4		
2	25FSD702R	DSC	Advanced Research Methodology	3	2	0	50	50	100	4		
3	25FSD703R	DSE	Discipline Specific Elective Group 2*	4	0	0	50	50	100	4		
4	25FSD704R	TDE	Transdisciplinary Elective	4	0	0	50	50	100	4		
5	NME4R	ME	ME Group 4	3	2	0	50	50	100	4		
	Total					500	20					

T, Theory; P, Practical; E, Experiential Learning

### Semester 8/ Year 4

	Semester 8									
Sl. No.	Course Code	Course Type	Course Title	Hours per Week		CIA	SEE	TOTAL	Credits	
		-31		T	P	E				
1	25FSDRRP	SEC	Research Project	0	0	60	200	200	400	20
	Total					400	20			

T, Theory; P, Practical; E, Experiential Learning

<sup>\*</sup>Candidates opting for research vertical will be having SWAYAM courses under Discipline Specific Elective.





#### **Discipline Specific Elective (DSE) Courses:**

	Discipline Specific Elective – DSE*						
<b>C</b>	Food Science	Food Technology	Diet and Nutrition Science				
Groups	A	В	C				
1	25FSD702A	25FSD702B	25FSD702C				
	Advanced Food Chemistry	Food Commodity Management	Fundamentals of Food and				
			Health				
2		25FSD703					
		SWAYAMCourses**					
3	25FSD801A	25FSD801B	25FSD801C				
	Culinary Arts and Cooking	Post Harvest Technology	Cultural Nutrition and				
	Techniques		Dietary Practices				
4	25FSD802A	25FSD802B	25FSD802C				
	Food Additives	Beverage Technology	Adolescent Health and				
			Lifestyle				
5	25FSD803A	25FSD803B	25FSD803C				
	Food Fortification	Mushroom Culture	Fundamentals of Weight				
			Management				
6	25FSD804A	25FSD804B	25FSD804C				
	Global Nutrition	Food Industry Management	Dietary Supplements and				
			Herbal Medicine				
7	25FSD805A	25FSD805B	25FSD805C				
	Food and Nutrition	Food Entrepreneurship and	Career Opportunities in				
	Security	<b>Business Management</b>	Nutrition Sector				

<sup>\*</sup>The course code for Discipline Specific Elective will be modified based on the vertical selected by the students.

## **Transdisciplinary Elective (TDE) Courses:**

Transdisciplinary Elective – TDE			
25FSD704*	SWAYAMCourses**		

<sup>\*</sup>The course code for Transdisciplinary Elective will be modified based on the vertical selected by the students.

#### **Multidisciplinary Elective (ME) Courses:**

Multidisciplinary Elective – ME (Group 4)		
NME4*	Transformative Role of Artificial Intelligence in Food Science and Nutrition	

<sup>\*</sup>The course code for Multidisciplinary Elective will be modified based on the vertical selected by the students.

<sup>\*\*</sup>Candidates opting for SWAYAM courses must register in the beginning of 7<sup>th</sup> semester and should complete the course on or before 8<sup>th</sup> semester end. After certification, the candidate should make a request to the University for the credit transfer.

<sup>\*\*</sup>Candidates opting for SWAYAM courses must register in the beginning of 7<sup>th</sup> semester and should complete the course on or before 8<sup>th</sup> semester end. After certification, the candidate should make a request to the University for the credit transfer.