



TILAK MAHARASHTRA VIDYAPEETH

(Declared as deemed to be University)

Reaccredited by NAAC with B++ Grade

M.Sc. Nutrition and Food Science

*(The Late Vaidya P.G. Nanal,
Department of Ayurveda and Yoga)*

As per NEP 2020

Syllabus: 2024-2025

Tilak Maharashtra Vidyapeeth, Pune- 411037
The Late Vd. P.G. Nanal Department of Ayurveda & Yoga
Syllabus for M.Sc (Nutrition and Food Science) 2024-2025

Programme Degree		M.Sc.
Specialization		Nutrition and Food Science
Preamble		<p>Nutrition and dietetics are the subjects which involve food science, medical nutrition therapy, human physiology as well as psychology. But in India, nutrition science combined with traditional Indian food science has exhibited superior results in the therapeutic scenarios.</p> <p>Hence this unique programme of M.Sc. Nutrition and Food Science is designed by considering the modern dietetics principles amalgamated with traditional Indian food science to provide the above significant knowledge by practical oriented and research based approach.</p> <p>This programme not only considers the therapeutic application of the courses offered but also the mental dispositions of the patient and spiritual outlook; that's what makes this programme unique globally.</p> <p>At the end of this programme, the students obtain skill sets to work as nutrition care professionals in hospitals, research institutes, food industries, community service, academics and can have their own consultancy.</p>
Programme Specific Outcomes (POs)		After successful accomplishment of this programme, learner will be able to;
	1.	Apply the knowledge of clinical nutrition amalgamated with traditional Indian food science in the medical nutrition management.
	2.	Develop capacities to be genuine health care professionals for services in various fields of clinical nutrition, medical nutrition management and related areas such as academics, research fields, food industry, community nutrition departments, training and own consultancy.
	3.	Develop abilities including analysis, critical reasoning, counselling skill sets and other soft skills such as public speaking, presentation techniques etc in related areas effectively and efficiently.
	4.	Have a necessary capabilities and abilities to pursue higher education and research in the above mentioned area of specialization.

	5.	Efficiently and responsibly carry out their role as health care professional in the betterment of community and nation.
Eligibility Criteria for the Programme	Any student with graduation from nutrition and dietetics, pure science, life science, bio chemistry, physiology, pharmacy, microbiology etc with minimum second class is eligible. Also medical practitioners (MBBS, BAMS, BHMS) are eligible for the programme.	
Intake	25	
RM: Research Methodology, OJT: On-Job Training, RP: Research Project		

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Structure of the Course

Semester I

Course Code	Course Name	Credits	Theory/ Practical
Major Core			
MSC24N-111TH	Basic Principles of Traditional Indian Diet part I	4	Theory
MSC24N-112TH	Basic Principles of Nutrition Science	4	Theory
MSC24N-113TH	Basics of Anatomy & Physiology	4	Theory
MSC24N-114TH	Nutritional Biochemistry	2	Theory
Research Methodology			
MSC24N-115TH	Research Methodology	4	Theory
Major Elective			
MSC24N-116TH	Nutrition and Immunity	4	Theory
MSC24N-117TH	Diet in Metabolic Disorders	4	Theory
Total		22	
END OF SEMESTER I			

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Structure of the Course

Semester II

Course Code	Course Name	Credits	Theory/ Practical
Major Core			
MSC24N-211TH	Basic Principles of Traditional Indian Diet part II	4	Theory
MSC24N-212TH	Medical Nutrition Therapy (MNT)- Part I	4	Theory
MSC24N- 213P	MNT –I (Traditional and Modern approaches of therapeutic cooking)	2	Practical
MSC24N-214TH	Basic Diet from <i>Kshemakutuhala</i>	4	Theory
Internship/ On Job Training			
MSC24N- 215P	OJT (On Job Training- 1 month's internship)	4	Practical
Major Elective			
MSC24N-216TH	Nutrition for Maternal , Child & Geriatric Health	4	Theory
MSC24N-217TH	Yogic Diet	4	Theory
Total		22	
END OF SEMESTER II			
Exit with Post Graduate Diploma in Nutrition and Food Science (Recommended internship of 4 Credits in Multispecialty Hospital)			
Cumulative credits for PG Diploma (after 3 Years) Degree = 44 CR			
Major		28	
Elective		08	

OJT	04
Research Methodology	04
Total	44

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Structure of the Course

Semester III

Course Code	Course Name	Credits	Theory/ Practical
Major Core			
MSC24N-311TH	Ayurvedic Nutrition Therapy	4	Theory
MSC24N- 312P	MNT-II	2	Practical
MSC24N-313TH	Medical Nutrition Therapy (MNT) Part- II	4	Theory
MSC24N-314TH	Basic Diet from <i>Bhojankutuhala</i>	4	Theory
Research Project			
MSC24N- 315P	Minor Research Project	4	Practical
Major Elective			
MSC24N-316TH	Critical Care Nutrition	4	Theory
MSC24N-317TH	Hospital Catering Management & Diet Counselling	4	Theory
Total		22	
END OF SEMESTER III			

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Structure of the Course

Semester IV

Course Code	Course Name	Credits	Theory/ Practical
Major Core			
MSC24N- 411TH	Community Nutrition	4	Theory
MSC24N- 412TH	Ayurvedic Diet Planning	4	Theory
MSC24N- 413TH	Sports and Fitness Nutrition	4	Theory
Research Project			
MSC24N- 415P	Dissertation	6	Practical
Major Elective			
MSC24N- 416TH	Functional Foods and Nutraceuticals	4	Theory
MSC24N- 417TH	Microbiome and Nutrition	4	Theory
Total		22	
END OF SEMESTER IV			
Elective subjects will be offered only if there are minimum 10 students for the respective selected course. <ul style="list-style-type: none">Nutrition in Diabetes care/ Cardio-metabolic health will be offered as values added course.Micronutrients and Trace elements- Value added course (compulsory) to be completed by January.			
Credit for 1 year PG Degree (after 4 Year UG) = 44 CR			
Major		26	

Elective	08
Research Project	10
Total	44

Cumulative Credit for 2 Year PG Degree = 88 CR

Major	54
Elective	16
Research Practical	10
Research Methodology	04
OJT	04
Total	88

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Course Details

Semester I

Sr.No.	Course details	Marks (Theory)		Marks (Practical)		Total	Credits
		Internal	External	Internal	External		
1.	Basic Principles of Traditional Indian Diet part I (MSC24N- 111TH)	40	60	-	-	100	4
2.	Basic Principles of Nutrition Science (MSC24N-112TH)	40	60	-	-	100	4
3.	Basics of Anatomy & Physiology (MSC24N-113TH)	40	60	-	-	100	4
4.	Nutritional Biochemistry (MSC24N-114TH)	20	30	-	-	50	2
5.	Research Methodology (MSC24N-115TH)	40	60	-	-	100	4
6.	Nutrition and Immunity (MSC24N-116TH)/ Diet in Metabolic Disorders (MSC24N-117TH)	40	60	-	-	100	4
						550	22 Credits

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Course Details

Semester II

Sr.No.	Course details	Marks (Theory)		Marks (Practical)		Total	Credits
		Internal	External	Internal	External		
1.	Basic Principles of Traditional Indian Diet part II (MSC24N-211TH)	40	60	-	-	100	4
2.	Medical Nutrition Therapy (MNT)- Part I (MSC24N-212TH)	40	60	-	-	100	4
3.	MNT –I (Traditional and Modern approaches of therapeutic cooking) (MSC24N-213P)	-	-	20	30	50	2
4.	Basic Diet from Kshemakutuhala (MSC24N-214TH)	40	60	-	-	100	4
5.	OJT (On Job Training- 1 month's internship) (MSC24N-215P)	-	-	50	100	150	4
6.	Nutrition for Maternal , Child & Geriatric Health (MSC24N-216TH)/ Yogic Diet (MSC24N-217TH)	40	60	-	-	100	4
						600	22 Credits

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Course Details

Semester III

Sr.No.	Course details	Marks (Theory)		Marks (Practical)		Total	Credits
		Internal	External	Internal	External		
1.	Ayurvedic Nutrition Therapy (MSC24N-311TH)	40	60	-	-	100	4
2.	Medical Nutrition Therapy (MNT)- Part II (MSC24N-312P)	-	-	50	-	50	2
3.	Medical Nutrition Therapy (MNT)- Part II (MSC24N-313TH)	40	60	-	-	100	4
4.	Basic Diet from <i>Bhojankutuh</i> (MSC24N-314TH)	40	60	-	-	100	4
5.	Minor Research Project (MSC24N-315P)	-	-	-	150	150	4
6.	Critical Care Nutrition (MSC24N-316TH)/ Hospital Catering Management & Diet counselling (MSC24N-317TH)	40	60	-	-	100	4
						600	22 Credits

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Course Details

Semester IV

Sr.No.	Course details	Marks (Theory)		Marks (Practical)		Total	Credits
		Internal	External	Internal	External		
1.	Community Nutrition (MSC24N-411TH)	40	60	-	-	100	4
2.	Ayurvedic Diet Planning (MSC24N-412TH)	40	60	-	-	100	4
3.	Sports & Fitness Nutrition (MSC24N-413TH)	40	60	-	-	100	4
4.	Dissertation (MSC24N-414P)	-	-	-	200	200	6
5.	Functional Foods & Nutraceuticals (MSC24N-415TH)/ Microbiome & Nutrition (MSC24N-416TH)	40	60	-	-	100	4
						600	22 Credits