

SCHOOL OF SCIENCES

CRITERIA 1

SUB CRITERIA 1.3.4

Percentage of students undertaking research projects / internships

Academic Year

2022-2023

Prof. (Dr.) Vogesh C Goswanii

ITM University Gwalior (M.P.)



SCHOOL OF SCIENCE

Total Number of Research Projects in UG and PG

Research Projects/Internships	Program	Total Number of students involved in research projects
	BSc Food Technology, SOS	11
	MSc Food Technology, SOS	06

The students undertake mini and major projects for increasing their practical knowledge and experience. Students are encouraged to do their research in the university, Food-Industries, and to encourage the research insight in them

Total Number of Internships in UG

	Program	Total Number of students involved in research projects
Internships	BSc Food Technology, SOS	11

In the Food Technology disciplines, there is mandatory 45 days Internship. In the curriculum design it has been incorporated into the programmed and complete it as a mandatory part of final year training.

School of Science TT Moniversity

Gwalior (M.P.)-INDIA-474001

ITM University Gwalior Campus, NH-44, Turari, Gwalior, (M.P.) - 475 001 INDIA mail: info@itmuniversity.ac.in, web: www.itmuniversity.ac.in



Index

S.no	Component	Page No
1.	Details of UG Internship projects	1-2
	List of Students in UG	3
3.	Cover page of thesis with certificates	4-12

Dr. Omveer Singh REGISTRAR ITM University Gwalior (M.P.)

School of Science The Lining Control of Science The Lining Control



Department of Food Technology (2021-2022)

NAME OF COURSE: B.SC. (HONS.) FOOD TECHNOLOGY

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

	Subject				Maximum N	larks A	llotted		Sul		ted ect wi		Total	
S.No.	Subject Code	Subject Name & Title		Theory Slo	t		Practical Slo	ot		Period per week			Total Credits	Remarks
			End Sem.	Mid Sem. MST (Two tests average)	Class Participation	End Sem	Progressive Evaluation	Internal viva	Total Marks	L	Т	Р		
1.	BSFT-101	Introduction to Food Technology	40	30	30	40	30	30	200	4	0	2	06	
2.	BSFT -102	Chemistry	40	30	30	40	30	30	200	4	0	2	06	
3.	BSFT -103	General Microbiology	40	30	30	40	30	30	200	4	0	2	06	
4.	BSFT-104	English Communication	40	30	30	-	-	-	100	2	0	0	02	
5.	BSFT -105	Introduction to Mathematics/ Biology	40	30	30	-	-	-	100	4	0	0	04	
6.	BSFT-106	*NCC-1	40	30	30	_				1	0	1	02	

Minimum Marks for passing in End Semester Theory-30%

Minimum Marks for passing in End Semester Practical – 50%

*Additional subject only for those students who opt for NCC

School of Science ITM University

Gwalior (M.P.)-INDIA-474001

Total Credits 24+2

SEMESTER: FIRST



NAME OF COURSE: B.SC. (HONS.) FOOD TECHNOLOGY

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

					Maximum 1	Marks	Allotted			Credits Allotted Subject wise								
S.No.	Subject	Subject Name & Title		Theory Sl	ot		Practical Slo	ot		Period week		_		Period per week		- 1		Remarks
	Code	Title	End Sem	Mid Sem. MST (Two tests average)	Class Participation	End Sem	Progressive Evaluation	Internal viva	Total Marks	L	Т	P	Credits					
1.	BSFT-201	Technology of Food Preservation	40	30	30	40	30	30	200	4	0	2	06					
2.	BSFT-202	Tools and Techniques	40	30	30	40	30	30	200	4	0	2	06					
3.	BSFT- 203	Food Microbiology	40	30	30	40	30	30	200	4	0	2	06					
4.	BSFT-204	Basics of food Biochemistry	40	30	30	-	-	-	100	4	0	0	04					
5.	BSFT-205	Food and Nutrition	40	30	30	1	-	-	100	4	0	0	04					
6.	BSFT- 206	Hindi I	40	30	30	-	-	-	100	4	0	0	02					
7.	BSFT-207	NCC-2	40	30	30					1	0	1	02					

School of Science ITM University Gwalior (M.P.)-INDIA-474001

Minimum Marks for passing in End Semester Theory– 30% Minimum Marks for passing in End Semester Practical – 50%

*Additional subject only for those students who opt for NCC

Dr. Omveer Singh REGISTRAR ITM University Gwalior (M.P.) **Total Credits 30+2**

SEMESTER: SECOND



NAME OF COURSE: B.SC. (HONS.) FOOD TECHNOLOGY

SEMESTER: THIRD

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

					Maximur	n Marks	Allotted			Credits Allotted Subject wise				
1	Subject			Theory S	lot		Practical Slo	t		Perio	d per	week	Total	
S.No	Subject Code	Subject Name & Title	End Sem.	Mid Sem. MST (Two tests average)	Class Participation	End Sem	Progressive Evaluation	Internal viva	Total Marks	L	Т	Р	Credits	Remarks
1.	BSFT-301	Food Chemistry	40	30	30	40	30	30	200	4	0	2	06	
2.	BSFT-302	Unit operations	40	30	30	-	-	-	100	4	0	0	04	
3.	BSFT- 303	Processing of Cereals, pulses, oilseed and sugar crops	40	30	30	40	30	30	200	4	0	2	06	
4.	BSFT-304	Food Additives	40	30	30	-	-	-	100	4	0	0	04	
5	BSFT-305	Computer Applications	40	30	30	40	30	30	200	4	0	2	06	
6.	BSFT- 307	*NCC-3	40	30	30					1	0	1+5	07	

School of Science ITM University

Gwalior (M.P.)-INDIA-474001

Minimum Marks for passing in End Semester Theory-30%

Minimum Marks for passing in End Semester Practical – 50%

*Additional subject only for those students who opt for NCC

Total Credits 28+7

NAME OF COURSE: B.SC. (HONS.) FOOD TECHNOLOGY

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

			Maximum Marks Allotted							Credits Allotted Subject wise			Allotted		Allotted		
S.No.	Subject	Subject Name &		Theory S	ot	Practical Slot				Period per week		,	Total Credits	Remarks			
	Code		End Sem.	Mid Sem. MST (Two tests average)	Class Participation	End Sem	Progressive Evaluation	Internal viva	Total Marks	L	Т	Р					
1.	BSFT-401	Processing of Fruits and Vegetables Technology	40	30	30	40	30	30	200	4	0	2	06				
2.	BSFT-402	Bakery & confectionary	40	30	30	-	-	-	100	4	0	0	04				
3.	BSFT-403	Technology of flesh foods	40	30	30	40	30	30	200	4	0	2	06				
4.	BSFT-404	Dairy Technology	40	30	30	40	30	30	200	4	0	2	06				
5.	BSFT-405	Disasters Managements	40	30	30	-	-	-	100	2	0	0	02				
6.	BSFT-406	English-II	40	30	30	-	-	-	100	2	0	0	02				
7.	BSFT-407	Intellectual Property Rights (Swayam MOOC)	40	30	30	_	_		100	2	0	0	02				
8.	BSFT-408	*NCC	40	30	30					2	0	1	03				

Minimum Marks for passing in End Semester Theory-30%

Minimum Marks for passing in End Semester Practical – 50%

*Additional subject only for those students who opt for NCC

School of Science ITM University Gwalior (M.P.)-INDIA-474001 Dr. Omveer Singh REGISTRAR ITM University Gwalior (M.P.)

SEMESTER: FOURTH

Total Credits 28+3



NAME OF COURSE: B.SC. (HONS.) FOOD TECHNOLOGY

SEMESTER: FIFTH

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

				Maximum Marks Allotted Subject wise Period per				Maximum Marks Allotted Subject wise Period per				Subject wise			
S.No.	Subject Code	Subject Name & Title		Theory	Slot		Practical Slo	t		week	_		Total Credits	Remarks	
	Code	Titue	End Sem.	Mid Sem. MST (Two tests average)	Class Participation	End Sem	Progressive Evaluation	Internal viva	Total Marks	L	ТР	P	Credits		
1.	BSFT -501	Sensory Evaluation	40	30	30	40	30	30	200	4	0	2	06		
2.	BSFT -502	Post Harvest Technology	40	30	30	-	-	-	100	4	0	0	04		
3.	BSFT -503	Food Hygiene and Food Sanitation	40	30	30	40	30	30	200	4	0	2	06		
4.	BSFT -504	Food Quality Management	40	30	30	-	-	-	100	4	0	0	04		
5.	BSFT -505	Food Packaging	40	30	30	-	-	-	100	4	0	0	04		
6.	BSFT - 506	*NCC	40	30	30					1	0	1+5	07		

Minimum Marks for passing in End Semester Theory-30%

Minimum Marks for passing in End Semester Practical – 50%

*Additional subject only for those students who opt for NCC

School of Science ITM University Gwalior (M.P.)-INDIA-474001 **Total Credits 24+7**



NAME OF COURSE: B.SC. (HONS.) FOOD TECHNOLOGY

SUBJECT WISE DISTRIBUTION OF MARKS AND CORRESPONDING CREDITS

	Codeinad				Maximum N	larks Allo	tted			Credits Allotted Subject wise				
S.No.	Subject Code	Subject Name & Title		Theory Slo	t		Practical Slot		_ , ,	Perio	•		Total Credits	Remarks
			End Sem.	Mid Sem. MST (Two tests average)	Class Participation	End Sem	Progressiv e Evaluation	Internal	Total Marks	L	Т	P		
1.	BSFT - 601	Product Development and Formulation	40	30	30	40	30	30	200	4	0	2	06	
2.	BSFT- 602	Food Industries by- Products and Waste Management	40	30	30	40	30	30	200	4	0	2	06	
3.		Entrepreneurship & Supply Chain Management	40	30	30	-	-	-	100	4	0	0	04	
5.	BSFT- 604	Major Project & Seminar	-	-	-	300	-	-	300	0	0	8	06	
6.	BSFT- 605	*NCC	40	30	30	-	-	-		2	0	1	03	

Minimum Marks for passing in End Semester Theory—30% Minimum Marks for passing in End Semester Practical—50%

*Additional subject only for those students who opt for NCC

Total Credits 24+3

SEMESTER: SIXTH

Dr. Omveer Singh REGISTRAR ITM University Gwalior (M.P.)

School of Science ITM University Gwalior (M.P.)-INDIA-474001



Syllabus()

Title of the Course	Major Project & Seminar
Course Code	BSFT-604

School of Science ITM University Gwalior (M.P.)-INDIA-474001

Part A

Year	3rd	Semester	6th	Credits	L	Т	Р	С			
Tear	Siu	Semester	Out	Credits	0	0	6	6			
Course Type	Project										
Course Category	Projects	s and Internship									
Pre-Requisite/s		p knowledge of all disciple core ect of Food Technolgy program Co-Requisite/s Presentation of research projection internship									
Course Outcomes & Bloom's Level	since of CO2- Id solving. CO3- U problem CO4- D acquire CO5- D	f social and civic and lentify the needs and (BL2-Understand) Itilize their knowledge (BL3-Apply) levelop the confident leader ship qualities	d responsibility(E) d problem of the ge in finding practice require for grown and democration to meet emerge	community and involve tical solution to individuation to individuation to individuation to individuation to individuation to individual to its and individual disast incies and natural disast	them al and f respo	in prok comm onsibili	olem unity ties of				
Course Elements	Entrepr Employ	evelopment ✓ eneurship X rability X esonal Ethics ✓	SDG (Goals)	SDG9(Industry Innovation and Infrastruct Dr. Omveer REGISTR ITM Unive Gwalior (1)							

Human Values X		
Environment X		

Part B

Modules	Contents	Pedagogy	Hours
---------	----------	----------	-------

Part D(Marks Distribution)

			Theory		
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
	0				
	•		Practical		
Total Marks	Minimum Passing Marks	External Evaluation	Min. External Evaluation	Internal Evaluation	Min. Internal Evaluation
300	0	300	0	0	0

School of Science ITM University Gwalior (M.P.)-INDIA-474001

Part E

Books	
Articles	
References Books	
MOOC Courses	
Videos	

Course Articulation Matrix

COs	PO1	PO2	PO3	PO4	PO5	P06	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	-	-	-	-	-	-	-	-	-	-	-	-	3	2	2
CO2	-	-	-	-	-	-	-	-	-	-	-	-	3	2	3
CO3	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3
CO4	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3
CO5	-	-	-	-	-	-	-	-	-	-	-	-	3	3	3
CO6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- 0 (

School of Science ITM University Gwalior (M.P.)-INDIA-474001



DetailsofUGInternship projects

Name of the School: School of Nursing Science and Research, ITM University, Gwalior. Name of the Control of Control ofurseandBranch: B.Sc.Food Technology Session:2022-2023

TotalNo.ofStudentsenrolled:11

SampleofResearchProjects

S.N	Specializatio	n Name of the Student	Roll No.	Title of the project	Duration	Guide's Name	Co Guide's Name
1	B.Sc Food Technology	Divya Chaud hary	BSFN1FT19 004		45 days	Mr. Jaswant Lathoriya	Dr. Hradesh Rajpoot
2	B.Sc Food Technology	Kapil Singh	BSFN1FT19 005	Manufacturing of Ice-cream	45 days	Mr. Atul Srivastava	Dr. Hradesh Rajpoot
3	B.Sc Food Technology	Ku. Akansha Goyanar		Survey of Quality of MultiMillet Protein Shakes	45 days	Mr. Arjun Kumar Sahu	Dr. Hradesh Rajpoot
4	B.Sc Food Technology	Kunal Patil	BSFN1FT19 007	Manufacturing of Ghee and Peda making process	45 days	Mr. Atul Srivastava	Dr. Hradesh Rajpoot
5	D100100	MD. Jishan Ansari	008 S	Manufacturing of Paneer, Shrikhand, Butter milk and Lassi	45 days	Mr. Atul Srivastava	Dr. Hradesh Rajpoot
		ushpendra ingh Dhakad	1	Dairy roduction and nanagement	45 days	Mr. Satendra Singh	Dr. Hradesh Rajpoot
						h C Go	swami

Prof. (Dr.) Yogesh C Goswami
School of Seither TM University
Gwalior (MP LINDIA 47400)

REGISTRAR ITM University Gwalior (M.P.)

7	B.Sc Food Technology	Riya Rai	010	Quality analysis of raw materials, packaging materials and microbiological testing of products		Mr. Ashwini Kumar Saini	Dr. Mamta Thakur
8	B.Sc Food Technology	Sanskar Kushwah	011	Quality analysis of raw materials, packaging materials and microbiological testing of products	45 days	Mr. Ashwini Kumar Saini	Dr. Mamta Thakur
9	B.Sc Food Technology	Shiya Simran Singh	BSFN1FT19 012	Pathogenic Environment Monitoring	45 days	Mr. Jaswant Lathoriya	Dr. Mamta Thakur
10	B.Sc Food Technology	Tandel Tirth Dharmesh	BSFN1FT19 014	Various instrumentation and techniques used in chocolate processing	45 days	Mr. Jaswant Lathoriya	Dr. Mamta Thakur
11	B.Sc Food Technology	Akash Singh Chauhan	BSFN1FT19 016	Manufacturing of cake	45 days	Mr. Atul Srivastava	Dr. Mamta Thakur

Prof. (Dr.) Yokesh C Goswami
School of Science Investigation (M.P.) INDIA 474001

"Pathogenic Environment Monitoring"

Submitted in fulfilment for the award of the degree of Bachelor of Science

in

Food Technology (Honours)



Submitted By

Divya Chaudhary BSFN1FT19004

Under the Supervision of

Mr. Jaswant Lathoriya

Quality Assurance Manager

QMS Lead Auditor

Makson Healthcare Pvt. Ltd.

r.) Vogesh C Goswami Dean TM University

CERTIFICATE

We hereby certify that the work which is being presented in this thesis entitled "Pathogenic Environment Monitoring" at Makson Healthcare Pvt. Ltd., Bhopal, Madhya Pradesh. Her training period was from 4th October, 2021 to 18th November, 2021. The project report is bring submitted to ITM University Gwalior, in partial fulfilment of award of degree of Bachelor of Science in Food Technology.

No part of the report has been submitted for any other degree or diploma.

DEAN,

School of Sciences

Dr. Yogesh C Goswami

Submitted in fulfilment for the award of the degree of Bachelor of Science

in

Food Technology (Honours)



Submitted By:-KAPIL SINGH (BSFN1FT19005)

Under the Supervision of
Mr. Atul Srivastava
Quality Control Manager
Gwalior Sahakari Dugdh Sangh Maryadit
Banmore (M.P.)

Pro (Dr.) Yogesh C Goswami
School of School of Manual Manual
School of School of Manual Manual
Gwalior (Mr.) Hydl Manual

CERTIFICATE

We hereby certify that the work which is being presented in this thesis entitled"Manufacturing Process of Milk and Milk Product"at Gwalior Sahakari Dugdh Sangh Maryadit, Banmore, Madhya Pradesh. His training period was from 21 October, 2021 to 5 December, 2021. The project report is bring submitted to ITM University Gwalior, in partial fulfilment of award of degree of Bachelor of Science in Food Technology.

DEAN,

School of Sciences

Dr. Yogesh C Goswami

(Supervisor)

"Manufacturing of Ghee & Peda Making Process"

Submitted in fulfilment for the award of the degree of Bachelor of Science

in

Food Technology (Honours)



Submitted By

Kunal Patil (BSFN1FT19007)

Under the Supervision of

Mr. Atul Srivastava

Quality Control Manager

Gwalior Sahakari Dugdh Sangh Maryadit Banmore (M.P.)

CERTIFICATE

We hereby certify that the work which is being presented in this thesis entitled "Manufacturing of Ghee & Peda Making Process" at Gwalior Sahakari Dugdh Sangh Maryadit, Banmore, Madhya Pradesh. His training period was from 21June, 2021 to 5thAugust, 2021. The project report is bring submitted to ITM University Gwalior, in partial fulfilment of award of degree of Bachelor of Science in Food Technology.

No part of the report has been submitted for any other degree or diploma.

DEAN,

School of Sciences

Dr. Yogesh C Goswami

(Supervisor)

"Manufacturing of Paneer, Shrikhand, Lassi & Butter Milk"

Submitted in fulfilment for the award of the degree of Bachelor of Science

in

Food Technology (Honours)



Submitted By

Md . Jishan Ansari (BSFN1FT19008)

Under the Supervision of

Mr. Atul Srivastava

Quality Control Manager

Gwalior Sahakari Dugdh Sangh Maryadit Banmore (M.P.)

Prof. (Dr.) Yogesh C Goswami

School of Science TTM University Gwalior (M.P.)-INDIA-474001

CERTIFICATE

We hereby certify that the work which is being presented in this thesis entitled"Manufacturing of Paneer, Shrikhand, Lassi & Butter Milk"at Gwalior Sahakari Dugdh Sangh Maryadit, Banmore, Madhya Pradesh. His training period was from 21June, 2021 to 5thAugust, 2021. The project report is bring submitted to ITM University Gwalior, in partial fulfilment of award of degree of Bachelor of Science in Food Technology.

No part of the report has been submitted for any other degree or diploma.

DEAN,

School of Sciences

Dr. Yogesh C Goswami

(Supervisor)

Submitted in fulfilment for the award of the degree of Bachelor of science

in

Food technology (Honours)



"CELEBRATING DREAMS"

Submitted by

PUSHPENDRA SINGH DHAKAD (BSFN1FT19009)

Under the supervision of

MR. SATENDRA SINGH

Quality Control Manager

Pawanshree food international psytmiLtd.

Dr. Omveer Singh REGISTRAR ITM University Gwalior (M.P.)

(M.P.)-INDIA-474001

a

CERTIFICATE

We hereby certify that the work which is being presented in this thesis entitled "MILK AND MILK TESTING,, Pawanshree food international pvt. Ltd. Maksi Madhya Pradesh. His training period was from 1st September, 2021 to 15th October, 2021. The project report is bring submitted to ITM University Gwalior, in partial fulfilment of award of degree of Bachelor of Science in Food Technology. No part of the report has been submitted for any other degree or diploma.

DEAN,

School of Science

Dr. Yogesh C Goswami

(Supervisor)

Dr. Omveer Singh REGISTRAR ITM University

"Various Instrumentation and Techniques used in Chocolate Processing"

Submitted in fulfilment for the award of the degree of Bachelor of Science

in

Food Technology (Honours)



Submitted By

Tirth Tandel (BSFN1FT19014)

Under the Supervision of

Mr. Jaswant Lathoriya

Quality Assurance Manager

QMS Lead Auditor

Makson Healthcare Pvt. Ltd.

Dean
Dool of Stie HTM University

Gwalfor (M.F.)-INDIA 474001



MHPL/TRG/2019-20 Date: 19th November 2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Tirth Tandel S/o Mr. Dharmesh Tandel have undergone INTERNSHIP on recommendation of ITM University, Gwalior in Quality Assurance Department on the Post of "TRAINEE" in MAKSON HEALTHCARE PVT. LTD" under Mr. Jaswant Lathoriya (Manager – Quality Assurance) from 4th October 2021 to 18th November 2021, which he has completed successfully.

During his training period, we found him hard working and sincere. His character is good.

Wishing him all the success for future.

For, Makson Healthcare Private Limited

Switu Patel (Plant Manager)

> Dr. Omveer Singh REGISTRAR ITM University Gwalior (M.P.)

MAKSON HEALTHCARE PRIVATE LIMITED

6A, Sector- D, Industrial Area, Mandideep, District Raisen (M.P.)-482048

N - U24247MP1994PTC008867

PAN - AABCM0082E

GSTN - 23AABCM0082E1Z3

Registered Office: 6A, Sector- D, Industrial Area, Mandideep, District Raisen (M.P.)-462046 Email: info@maksongroup.com Tel: 07480-233476 Website: www.makson-group.com