B. Voc Degree in Food Processing

Detailed curriculum

Department of Food Engineering &Technology
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Course Structure

B. Voc. –Food Processing
Year wise distribution of the Courses
Year-I:: NSQF Level-V

Semester-1 (L_5_Sem_I)

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode	Course type
GC 111	English-I	3	1	0	4	4	Class room	Core (Ability)
GC 112	Mathematics-I	4	0	0	4	4	Class room	Core (GEN)
GC 113	Chemistry-I	3	0	1	4	5	Class room	Core (GEN)
VC 111	Engineering Drawing	1	0	2	3	5	Lab/Workshop	Core (VOC)
	Elective-I (General Elective)	3	0	0	3	3	Class room	Elective (GEN)
VF 112#	Workshop Practice (FP)	0	1	2	3	5	vocational practice	Skill (VOC)
VF 113#	Floor Practice-I	0	1	3	4	7	vocational practice	Skill (VOC)
VF 114#	Food Products Technology -I	0	1	4	5	9	vocational practice	Skill (VOC)
	Total	**14**	**4**	**12**	**30**	**42**		

appropriate window may be provided for industrial engagement leading to vocational practice .

BGC: Common Courses under General component,

BVC: Common Courses under Vocation component,

BVF: Vocational Courses under Food Processing,

Elective-I (General Elective related to Vocational Component)

(3-5 Credits will be offered as internship mode with weightage of 30 hrs for one credit)

Elective-I (General Course under vocational component)

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode
VC 112	Introductory Microbiology	3	0	0	3	3	Class room
VC 113	Industrial Microbiology	3	0	0	3	3	Class room
VC 114	Environmental Microbiology	3	0	0	3	3	Class room

Semester – II (L_5_Sem_II)

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode	Course Type
GC 121	Introductory Computing	2	2	1	5	6	Class room/Lab	Core (GEN)
GC 122	Physics – I	3	0	1	4	5	Class room	Core (GEN)

VC 121	Basic Electrical Systems	2	0	1	3	4	Class room/Lab	Core (VOC)
	Elective II (General Elective)	3	0	0	3	3	Class room	Elective (GEN)
	CBCT 1	3	0	0	3	3	Class room	Generic
VF 122#	Floor Practice-II	0	1	2	3	5	Internship	Skill (VOC)
VF 123#	Agro Processing Operations	0	1	3	4	7	vocational practice	Skill (VOC)
VF 124#	Agro Food Processing Technology	0	1	4	5	9	Internship	Skill (VOC)
	Total	**13**	**5**	**12**	**30**	**42**		

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BGC: Common Courses under General component,

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BVF: Vocational Courses under Food Processing,

CBCT: Choice based Credit Transfer

Elective-II: (General Elective related to vocational component)

(3-5 Credits will be offered as internship mode with weightage of 30 hrs for one credit)

Elective-II (General Elective Related to Vocational Component)

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode
VC 122	Biomolecules	3	0	0	3	3	Class room
VC 123	Enzyme Technology	3	0	0	3	3	Class room
VC 124	Microbial Technology	3	0	0	3	3	Class room

CBCT 1 (Generic) According to University CBCT courses for UG programme

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode
		3	0	0	3	3	Class room

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Year-II:: NSQF Level-VI

Semester-III (L_6_Sem_I)

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode	Course Type
GC 211	Communication skill - I	1	3	0	4	4	Class room	Skill (GEN)
GC 212	Sociology	3	1	0	4	4	Class room	Ability
GC 213	Mathematics - II	4	0	0	4	4	Class room	Core (GEN)
VC 211	Applied Mechanics	3	0	0	3	3	Class room	Core (VOC)
VF 212#	Floor Practice-III	0	1	2	3	5	vocational practice	Skill (VOC)
VF 213#	Food Processing Methods	0	1	3	4	7	vocational practice	Skill (VOC)
VF 214#	Food Products Technology-II	0	1	4	5	9	Internship	Skill (VOC)
	DSE 1 (Elective)	1	0	2	3	5	Class room/ Workshop	Elective (VOC)
	Total	**12**	**7**	**11**	**30**	**41**		

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DSE: Discipline Specific Elective
(3-5 Credits will be offered as internship mode with weightage of 30 hrs for one credit)

DSE-I :: Elective

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode
VF 215	Introductory Food Engineering	1	0	2	3	5	Class room/Workshop
VF 216	Basic Thermodynamics	1	0	2	3	5	Class room/Workshop
VF 217	Electro Technology	1	0	2	3	5	Class room/Workshop
VF 218	Instrumentation and Process Control in Food Processing	1	0	2	3	5	Class room/Workshop

Semester – IV (L_6_Sem_II)

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode	Course Type
GC 221	Chemistry-II	4	0	1	5	6	Class room	Core (GEN)

GC 222	Physics - II	3	0	1	4	5	Class room	Core (GEN)
	CBCT 2	3	0	0	3	3		Generic
VF 221	Food Processing Plant Utilities	2	1	0	3	3	vocational practice	Core (VOC)
VF 222#	Floor Practice-IV	0	1	2	3	5	vocational practice	Skill (VOC)
VF 223#	Food Processing Machines	0	1	3	4	7	vocational practice	Skill (VOC)
VF 224#	Food Products Technology-III	0	1	4	5	9	Internship	Skill (VOC)
	DSE 2(Elective)	2	1	0	3	3	vocational practice	Elective (VOC)
	Total	**14**	**5**	**11**	**30**	**41**		

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BVC: Common Courses under Vocation component,
BVF: Vocational Courses under Food Processing
DSE: Discipline Specific Elective
CBCT: Choice based Credit Transfer
Elective-II: (General Elective related to vocational component)
(3-5 Credits will be offered as internship mode with weightage of 30 hrs for one credit)

DSE 2 :: Elective

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode
VF 225	Food Packaging, Material Handling and Storage	2	1	0	3	3	vocational practice
VF 226	Cereal, Pulses and Oilseed Process Technology	2	1	0	3	3	vocational practice
VF 227	Milling Technology	2	1	0	3	3	vocational practice
VF228	Advanced Food Processing Methods	2	1	0	3	3	vocational practice
VF229	Fermented and Non Fermented Beverages	2	1	0	3	3	vocational practice

CBCT 2 (Generic) According to University CBCT courses for UG programme

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode
		3	0	0	3	3	Class room

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Year-III:: NSQF Level-VII

Semester-V (L_7_Sem_I)

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode	Course Type
GC 311	Communication skill - II	1	1	2	4	6	Class room	Skill(GEN)
GC 312	Environmental Studies	3	0	1	4	5	Class room	Ability
GC 313	Mathematics-III	4	0	0	4	4	Class room	Core(GEN)
GC 314	Computational Laboratory	2	0	3	5	8	Class room	Skill(GEN)
GC 315	Economics & Industrial Statistics	3	1	0	4	3	Class room	Ability
VF 311[#]	Food Safety Standard and Regulations	2	0	1	3	4	vocational practice	Skill(VOC)
VF 312[#]	Floor Practice-V	0	1	2	3	4	vocational practice	Skill(VOC)
	DSE 3(Elective)	3	0	0	3	3	Class room	Elective (VOC)
	Total	**18**	**2**	**10**	**30**	**37**		

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DSE: Discipline Specific Elective

DSE 3-Elective

Course Code	Course Name	L	T	P	CR	CH	Instruction Mode
VF 313	Extrusion Technology	2	1	0	3	4	vocational practice
VF 314	Refrigeration systems	2	1	0	3	4	vocational practice
VF 315	Instrumental methods of Food Analysis	2	1	0	3	4	vocational practice
VF 316	Drying Systems	2	1	0	3		vocational practice

Semester – VI (L_7_Sem_II)

Course Code	Course Name	CR	Instruction Mode
GC 321	Technical Communication and Reporting	3	Skill (GEN)
VF 322[#]	Mini project/Industrial Training	5	Skill (VOC)
VF 323[#]	Case study and project	22	Skill (VOC)

		Total	30	

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(3-5 Credits will be offered as internship mode with weightage of 30 hrs for one credit)

Summary (Category of Courses)

Course Structures

	Core Course	Skill	Elective	Generic

Semester	GEN (8) 34 Credit	VOC (5) 12 Credit	Ability (4) 16 Credit	GEN (3) 16 Credit	VOC (16) 81 Credit	GEN (3) 6 Credit	VOC (2) 9 Credit	Elective (2) 6 Credit
I	GC112 (4) GC113 (4)	VC111 (3)	GC111 (4)		VF112$^{\#}$ (3) VF113$^{\#}$ (4) VF114$^{\#}$ (5)	Elective-I (3)		
II	GC121 (5) GC122 (4)	VC121 (3)			VF122$^{\#}$ (3) VF123$^{\#}$ (4) VF124$^{\#}$ (5)	Elective-II (3)		CBCT-1 (3)
III	GC213 (4)	VC211 (3)	GC212 (4)	GC211 (4)	VF212$^{\#}$ (3) VF213$^{\#}$ (4) VF214$^{\#}$ (5)		DSE-1 (3)	
IV	GC221 (5) GC222 (4)	VF221$^{\#}$(3)			VF222$^{\#}$ (3) VF223$^{\#}$ (4) VF224$^{\#}$ (5)		DSE-2 (3)	CBCT-2 (3)
V	GC313 (4)		GC312 (4) GC315 (4)	GC311 (4) GC314 (5)	VF311$^{\#}$ (3) VF312$^{\#}$ (3)		DSE-3 (3)	
VI				GC321 (3)	VF322$^{\#}$ (5) VF323$^{\#}$(22)			

Year wise distribution of contract hour

First Year:

Serial No.	Course Structure	Contact Hours
1	General Component	350-425
2	Vocational Theory including core, open elective and CBCT	200-250
3	Vocational Practice	350-425
4	Internship	275-325

Second Year:

Serial No.	Course Structure	Contact Hours
1	General Component	350-425
2	Vocational Theory including core, open elective, DSE and CBCT	200-250
3	Vocational Practice	350-425
4	Internship	275-325

Third Year:

Serial No.	Course Structure	Contact Hours
1	General Component	430-450
2	Vocational Theory including DSE	105
3	Vocational Practice including project	600
4	Internship	150