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**College of Food Processing Technology and Bioenergy**  
**Anand Agricultural University**  
**Anand-388 110**



**Hon'ble Governor of Gujarat, Shri O.P. Kohli during 15<sup>th</sup> Convocation**



**Farewell of Prof. (Dr.) D.C. Joshi, Founder Dean FPTBE**

# Annual Report

## 2018-19



**Compiled by**

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**Mr. K. Kanzariya, Adm.**

**Er. P. B. Moradiya, FE Dept.**

**College of Food Processing Technology and Bioenergy**  
**Anand Agricultural University**  
**Anand-388 110**

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## College Annual Report

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**Dr. R.F. Sutar**  
**Dean**

## **Anand Agricultural University**

### **Anand**

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### ***Message***

The College of Food Processing Technology and Bioenergy, AAU, Anand is one of the prestigious institutions in the country, which imparts education in the field of Food Processing. The institution is making a steady progress to achieve its vision and mission. The graduates and post graduates of the college have contributed significantly in the sectors such as food plant operations, plant management, food processing, food packaging, food product development, quality testing, equipment manufacturing, marketing, etc. They are providing technical, professional and managerial inputs to their organizations.

The college has pioneered food processing technology education and research in the Gujarat state. Since its inception keeping pace with the technological advancement and other developments, it has upgraded its infrastructure, academic programmes and redesigned the curriculum from time to time.

I feel delighted to forward the Annual Report of College of Food Processing Technology and Bioenergy for the year 2018-19. The brief details about the college, staff and fund utilization, academic programmes, departments, seminars, workshops and trainings, various programmes organized and attended by the staff, publications/faculty achievements, students' welfare activities, training and placement, etc. are comprehended and depicted in the report. Most of the details have been presented in tabular manner which are self-explanatory. The report will also help the College and University to take necessary measures for the further development to strengthen the education, help the processors and related industries in the state and country.

I appreciate the efforts made by Dr. A. K. Sharma and his compilation team, Head of the Departments, Assistant Administrative Officer, and all the staff for supporting in publishing of such informative document.

Anand

(R.F. Sutar)



**Dr. A.K. Sharma**  
Professor

**Anand Agricultural University**

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## ***Acknowledgement***

The present Annual Report is for the year 2018-19 and it contains the salient achievements / activities / programmes carried out by the College of Food Processing Technology and Bioenergy, Anand Agricultural University, Anand in the fulfilment of its aims and objectives concerning food processing teaching, research and extension education. The report highlights different snaps of academic, research, sports and extracurricular activities.

It was not possible to compile and present this report without the active guidance of Dr. R.F. Sutar, Dean of the college. We also gratefully acknowledge the contribution and efforts of all the Head of Departments and their staff, Training and Placement Officer, Academic Section, Research Section, SRC as well as administrative and academic staff of the college. The compilation and publication of this Annual Report is a collective effort of all the members.

Anand  
01/06/2019

(A. K. Sharma)  
& Members

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## **I. ABOUT THE COLLEGE**

The efficient use of resources is the growing concern for all involved in food production, processing, distribution and retailing. The unique features of the raw materials of the food processing industries such as seasonality, perishability and variability in conjunction with sophistication required for processing to maintain high quality standards, necessitates special attention towards focused availability of qualified technical manpower, effective technologies and efficient machinery. The food industries in the country need modernization to face the challenges of the globalization.

Considering the huge demand of the specialized human resource for the fast growing sectors of food industry, the Anand Agricultural University has established a full-fledged College of Food Processing Technology & Bio-Energy in the year of 2008-09 vide Government of Gujarat, Department of Agriculture & Cooperation Notification No - ACV- 122008 - 404 - C.2 dated 29-05-2008. It develops students with high-tech scientific knowledge and technical skills to handle various food resources from farm-to-factory-to-consumers. Efficient production, processing and packaging of various value added processed food products of very high quality are the main aspects being taught to the students. The college produces competent food technologists/engineers to establish, operate and manage various sectors of food processing industries.

### **Vision**

Providing excellent food processing professionals to the industry.

### **Mission**

The primary mission of the college is to produce highly skilled, competent and motivated technical manpower for food processing and allied industries. The technocrats so produced will also be competent to handle all the aspects of research institutes, quality testing laboratories and other related agencies. Also, the college is concerned with the exploitation of novel techniques and technologies to maximize the use of food resources.

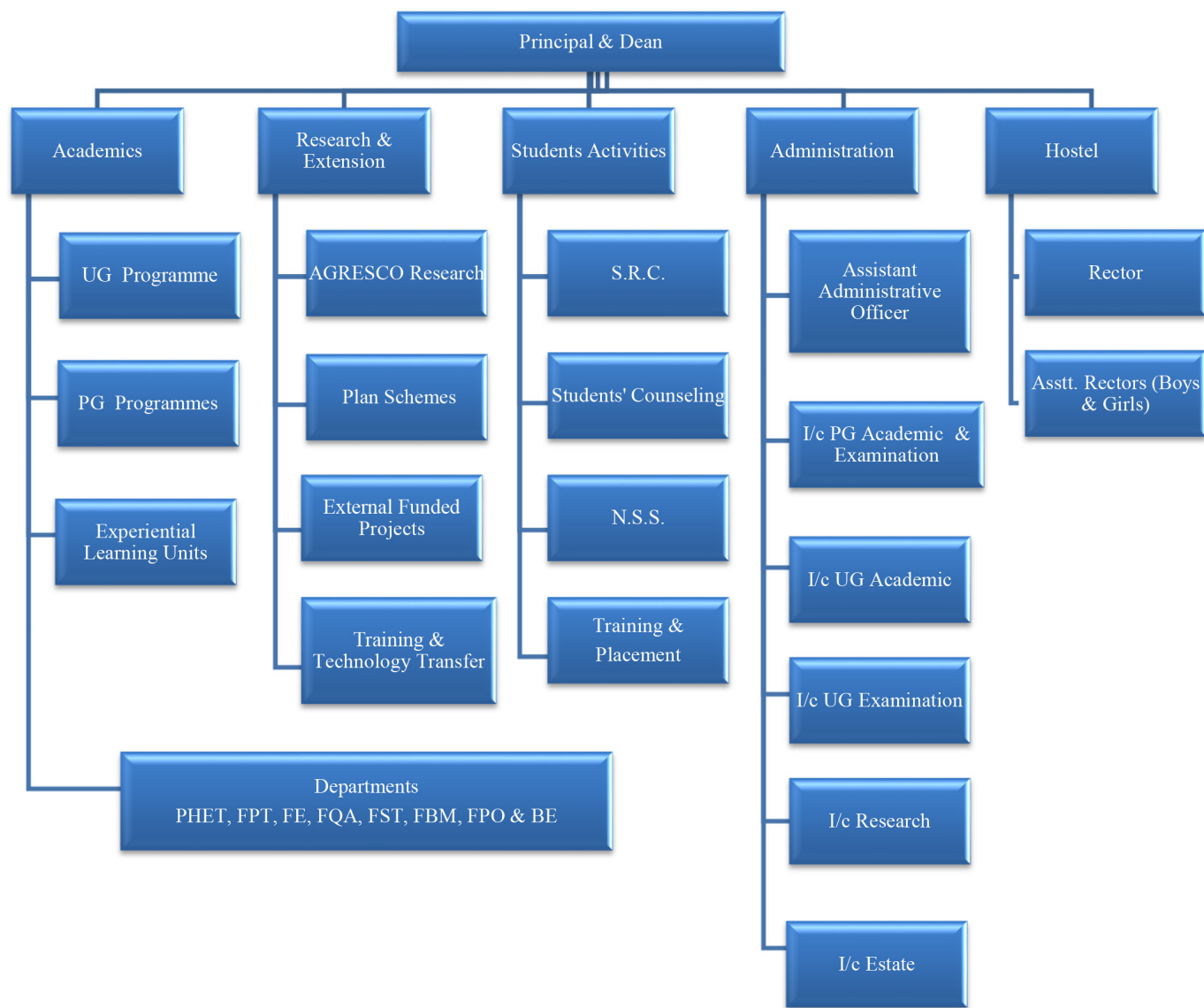
### **Goal**

The goal of the college is to promote the integration of teaching, research and extension in food processing and bio energy by serving as a premier educational and research institute in the field of food processing technology in the State of Gujarat as well in India.

### **Mandates**

- Education and training in the field of food processing technology and bio-energy so as to produce highly skilled and competent manpower for food processing industries and other agencies.
- Basic, applied and adoptive research and development in the area of agro-processing, food technology, food engineering, food quality assurance, bio-energy and other relevant subjects.
- Transfer of technologies and consultancy in different aspects related to food processing industry.

## Organizational Chart of the College of Food Processing Technology and Bio Energy



## II. STAFF POSITION AND FUND UTILIZATION

Table 1 Total Manpower available with the college as on 31.03.2019

Sr. No.	Name of post	Pay Scale (Rs.)	B.H.	Sanctioned	Filled	Vacant
1	Principal	37400-67000 (10000 AGP)	12950	1	0	1
2	Professor	37400-67000 (10000 AGP)	12950	3	3	0
3	Associate Professor	37400-67000 (9000 AGP)	12950	4	4	0
			5073	1	1	0
			6502-3	1	1	0
			12957	1	1	0
4	Assistant Professor	15600-39100 (6000 AGP)	12950	19	17	2
			6502-3	4	0	4
			12075	1	0	1
			12957	3	3	0
5	Senior Research Assistant/ Assistant Instructor	39900-126600	12950	2	2	0
			5073	2	1	1
			6502-3	1	0	1
6	Assistant Instructor (Back)	39900-126600	5029	3	0	3
7	Laboratory Technician	29200-92300	12950	2	2	0
8	Mechanic	25500-81100	12950	1	1	0
9	Assistant Administrative Officer	44900-142400	12950	1	1	0
10	Head Clerk	35400-112400	5073	1	1	0
11	Senior Clerk	25500-81100	12950	1	1	0
			5073	1	1	0
			5229	1	1	0
			7228-01	1	0	1
12	Junior Clerk	19900-63200	12950	1	1	0
			5073	1	0	1
			5229	1	0	1
			7228-01	1	0	1
13	Driver	19900-63200	5073	1	0	1
14	Research Associate	38000+HRA	12993-21	1	1	0
15	Research Associate	38000+HRA	12960	2	2	0
			12969	1	1	0
16	Laboratory Attendant / Peon / Helper / Lab Boy	14800-47100	12950	2	0	2
			12075	1	1	0
			5073	1	0	1
			6502-3	1	0	1
	TOTAL			69	47	22

10

10



Non Plan													
1	Establishment Agril Product Process Engineering, Dairy Science College	5073-00	48,72,000	25,000	0	48,97,000	46,71,384	23,672	0	46,95,056	95.88	94.69	95.88
2	Department of Agricultural Product Process Engineering	6502-03	36,07,000	10,000	0	36,17,000	31,58,073	7,696	0	31,65,769	87.55	76.96	87.52
Total													129206
ICAR													
1	Repair/Renovation of Examination/Lab/Sport Facilities/Green Initiatives	15132-00	0	9,00,000	0	9,00,000	0	8,89,895	0	8,89,895	0.00	98.88	98.88
2	Refurbishing of class rooms	15133-00	0	0	6,00,000	6,00,000	0	0	5,99,820	5,99,820	0.00	0.00	99.97
3	Rural Entrepreneurship Awareness and Development	15657-00	0	3,77,500	0	3,77,500	0	3,77,500	0	3,77,500	0.00	100.00	100.00
4	National Talent Scholarship	15658-00	0	1,22,000	0	1,22,000	0	1,22,000	0	1,22,000	0.00	100.00	100.00
5		15659-00	0	30,000	0	30,000	0	30,000	0	30,000	0.00	100.00	100.00
6	Curriculum Development and Delivery	15911-00	0	3,50,000	0	3,50,000	0	3,19,247	0	3,19,247	0.00	91.21	91.21
	Strengthening of UG/Pg Teaching	15912-00	98,135	3,01,865	0	4,00,000	98,054	2,75,583	0	3,73,637	0.00	91.29	93.41
	Support to Dean	15913-00	0	24,125	5,75,875	6,00,000	0	0	3,59,876	3,59,876	0.00	0.00	62.49
	Student and Faculty Amenities	15921-00	0	2,14,539	2,85,461	5,00,000	0	1,98,488	2,85,461	4,83,949	0.00	92.52	100.00
	ICAR Emeritus Professor Scheme	2044-16	3,28,333	1,00,000	0	4,28,333	3,28,333	0	0	3,28,333	100.00	0.00	0.00
Total													76.65
Other agency													
1	National Service Scheme	18273-00	0	72,250	0	72,250	0	64,315	0	64,315	0.00	89.02	89.02
2	ICAR Junior Research Fellowship for post graduate students	18311-07	5,41,440	6,000	0	5,47,440	5,41,440	6,000	0	5,47,440	100.00	100.00	100.00
3	Inspire Fellowship under INSPIRE Programme	18311-7C	3,24,000	20,000	0	3,44,000	3,00,833	19,991	0	3,20,824	92.85	99.96	93.26
4	ICAR Senior Reserch Fellowship for Ph.D Students	18457-35	3,11,667	0	0	3,11,667	3,11,667	0	0	3,11,667	100.00	0.00	100.00
5	Incubation cum centre of Excellence in Food Processing Technology at AAU, Anand Campus	18492-00	0	0	14,86,057	14,86,057	0	0	14,86,057	14,86,057	0.00	100.00	100.00
6	Student Startup and Innovation Policy	18557-16	0	19,34,368	0	19,34,368	0	6,450	0	6,450	0.00	0.33	0.33
7	Bhutan Student Hostel Fees	18557-67	0	15,98,130	0	15,98,130	0	15,98,130	0	15,98,130	0.00	100.00	100.00
8	Swadeshi Science Movement	18557-68	0	2,00,000	0	2,00,000	0	1,27,024	0	1,27,024	0.00	63.51	63.51
9	Minimal Processing Unit to Enhance Quality of Fruits & Vegetables	18557-79	0	25,00,000	4,42,00,000	4,67,00,000	0	24,98,206	2,36,72,778	2,61,70,984	0.00	99.93	56.04
10	RABI, College of FPT&BE, AAU, Anand	18557-98	0	33,00,000	1,00,00,000	1,33,00,000	0	0	0	0	0.00	0.00	0.00
Total													0

Table 3 Summary of sanctioned grant and utilization (2018-19)

SN	Scheme	Sanctioned Grant				Expenditure				Fund Utilization %				Income
		Pay & Allow	Rec	Non Rec	Total	Pay & Allow	Rec	Non Rec	Total	Pay & Allow	Rec	Non Rec	Total	
(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)	(xi)	(xii)	(ixx)	(vxx)	(xi)
1	Plan	37045000	17823000	6112000	60980000	37009258	17310435	6108434	60428127	99.90	97.12	99.94	99.09	
2	Non Plan	8479000	35000	0	8514000	7829457	31368	0	7860825	92.34	89.62	0.00	92.33	
3	ICAR	426468	2420029	1461336	4307833	426387	2212713	1245157	3884257	99.98	91.43	85.21	90.17	
4	Other agency	1177107	9630748	55686057	66493912	1153940	4320116	25158835	30632891	98.03	44.86	45.18	46.07	
Total		47127575	29908777	63259393	140295745	46419042	23874632	32512426	102806100	98.50	79.82	51.40	73.28	
% of total		33.59	21.32	45.09	100.00	45.15	23.22	31.62	100.00					

Fund utilization		%
Pay and Allowances	:	98.50
Recurring Contingencies	:	79.82
Non-Recurring Contingencies	:	51.40
Overall	:	73.28

### III. ACADEMIC PROGRAMMES

The details regarding the degree programmes offered, academic achievement, category wise students' strength during the year, scholarships awarded to the students, B.Tech. training, M.Tech and Ph.D. theses submitted as well as the details regarding subjects offered during B.Tech., M.Tech. and Ph.D. (FPT/FT) programmes for the academic year 2018-19 are included in this section.

**Table 4 Eligibility criteria for admission in various degree programmes**

Name of the graduate programme	Category wise minimum % requirement of marks in theory subjects in Physics, Chemistry and Mathematics of HSSCE examination			
	General	SC	ST	SEBC
B.Tech. (Food Technology)	40	35	35	40
	Admission is considered on the merit basis of 60% of PCM theory and 40 % GUJCET			
B.Tech. (Food Processing Technology) D-to-D	Admission is considered on the merit basis of 60% of OGPA/percentages achieved in polytechnic and 40 % of entrance test			
M.Tech. (Food Technology)	A candidate (4 Years Bachelor's degree in B.Tech.(FPT) / B.Tech. (Agril. Engg.) is considered on the merit basis of 50% of OGPA (percentage basis) of the last degree and 50 % of common state level entrance examination (a candidate shall have to obtain at least 50% of marks in common entrance examination so as to become eligible for merit list). A candidate who opts for admission on payment basis will be eligible for admission on payment seats by obtaining at least 45% of marks in common entrance examination.			
Ph.D. (Food Technology)	A candidate (M.Tech. in respective discipline) is considered on the merit basis of 6.0 out of 10 points or 60% of OGPA for reserved categories and 6.5 out of 10 points or 65% of OGPA for other candidates and 50 % of common state level entrance examination (a candidate shall have to obtain at least 50% of marks in common entrance examination so as to become eligible for merit list). A candidate who opts for admission on payment basis will be eligible for admission on payment seats by obtaining at least 45% of marks in common entrance examination.			

**Table 5(a) Students intake and admitted in different graduation programmes (2018-19)**

Degree	Name of the College	Admission Capacity		No of students
		Gen/SC/ST/OBC	ICAR	Admitted
B.Tech. (FT)	Food Processing Technology & Bio-Energy, Anand	42	8	49*
B.Tech. (FT) D-to-D	Food Processing Technology & Bio-Energy, Anand	05	0	05
M.Tech. (FPT)	Food Processing Technology & Bio-Energy, Anand	05	2	04
M.Tech. (FPE)	Food Processing Technology & Bio-Energy, Anand	05	2	02
M.Tech. (FSQ)	Food Processing Technology & Bio-Energy, Anand	03	2	02
Ph.D. (FT)	Food Processing Technology & Bio-Energy, Anand	07	3	04

\*Includes Gen/SC/ST/SEBC (34 seats), ICAR (2 seats), other board (2 seats), NRI (3 seats) and PC (1 seat)

**Table 5(b) Students admitted in different post-graduation programmes (2018-19)**

Sr. No.	Subject	Specialization	M. Tech.		Ph.D.		Total
			Regular	ICAR	Regular	ICAR	
1	Food Technology	Food Processing Technology	2	2	2	2	12
2		Food Process Engineering	0	2	-	-	4
3		Food Safety and Quality Assurance	0	2	-	-	4
			2	6	4	2	20

**Table 6(a) Student evaluation as per V Dean' Committee Recommendations**

Examination	UG	PG
Internal (percentage)	50	50
External (percentage)	50	50
Other (percentage)	-	-

**Table 6(b) Frequency of student evaluation**

	UG	PG
Mid-term theory test (UG) and one hourly tests (PG)	1	2
Internal Practical	1	-
Semester End Practical	1	1
Semester End Theory	1	1
Others (Assignments/Presentations)	-	2

**Table 6 (c) Examination and weightage for UG**

- External theory (50%)
- Internal Theory + Practical (50%)
  - Courses with Theory and Practical  
Mid-term Exam (30%) + Assignment (5%) in practical oriented courses + Practical (15%)
  - Courses with only Theory  
Mid-term Exam (40%) + Assignment (10%)
  - Courses with only Practical:  
(100%) Internal

**Table 6(d) Examination and weightage for PG**

- Self-study (Assignments & Presentation)



Theory (20 marks)

- Internal tests

Theory (30 marks) and Practical (40 marks)

- Semester-end Examination

Theory (50 marks) and Practical (60 marks)

- Total marks

Theory (100 marks) and Practical (100 marks)

**Table 7 Passed Out (Graduates and Post Graduates) of AAU in 2018**

<b>Sr. No.</b>	<b>Degree</b>	<b>First Class with Distinction</b>	<b>First Class</b>	<b>Second Class</b>	<b>Pass Class</b>	<b>Total</b>
1	B.Tech. (FPT)	09	20	05	-	34
<b>UG Total</b>						<b>34</b>
2	M.Tech. (FPT)	-	09	01	-	10
3	Ph.D.	04	05	-	-	09
<b>PG (M.Tech. &amp; Ph.D.) Total</b>						<b>19</b>
<b>Total Passed out</b>						<b>53</b>

**Table 8 Class schedules of odd semester (2018-19)**

**COLLEGE OF FOOD PROCESSING TECHNOLOGY AND BIOENRGY, AAU, ANAND**  
(Revised)

**Class Schedule of M. Tech. / Ph.D. (Food Technology) Specialization in**

(i) Food Processing Technology

(ii) Food Process Engineering

(iii) Food Safety and Quality Assurance

**Academic Year: 2018-19**

**Semester: M. Tech. (1<sup>st</sup> Semester) & Ph.D. (1<sup>st</sup> Semester)**

Semester: M. Tech. (1 Semester) & Ph.D. (1 Semester)						
Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday 1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup>
09.00-10.00	FPT 502 (HP)	FPT 502 (HP)	FQA 511(RVP)	FQA 511(RVP)	PGS 504 (AIS) 08.00-10.00	-
	FPT-503 (GPT)	FPT-503 (GPT)	FPT 513 (AR)	FPE 502 (AKS)		-
10.00-11.00	FQA 504 (AMP)	FPT 513 (AR)	FQA 509 (SD)	-		-
	FPE 502 (AKS)	FPE 505 (RBM)				-
11.00-12.00	AG. STAT -512 (VBD)	FPE 512 (SHA)	FPE 512 (SHA)	FPE 504(AN)	PGS 502 (MTP) 10:30-12:30	-
	FPE 504(AN)	AG. STAT -512 (VBD)		FQA 504 (AMP)		
Lunch Break						
14.00-15.00	FPT 513 (AR)	FQA 509 (SD)	-	FQA 504 (AMP) (P)	PGS 501 (RDD) (P)	-
	FPE 505 (RBM)			13.30 to 15.30	14.00-16.00	
15:30-17:30(P)	FPE 504 (AN)	FPE 512 (SHA)	FPE 505 (RBM)	FPE 502 (AKS)	FPT 502 (HP) (P)	-
	FQA511(RMD)	AG. STAT -512 (VBD)	FQA 509 (HGB)	FQA511(RMD)	16.00-18.00	-
	FPT-503 (GPT)					

Course No.	Title	Teacher	Credit
FPE 502	Advances In Food Process Engineering	Dr A K Sharma	3(2+1)
FPT-503	Brewing Technology	Er. G. Tagalpallewar	3(2+1)
FPE 504	Thermal Process Engineering	Dr. A. Nema	3(2+1)
FPE 505	Advances in Dairy Engineering	Er. R B Modi	3(2+1)
FPE 512	Post-Harvest Management and Storage Engineering	Dr. S H Akbari	3(2+1)
FPT 502	Advances in Food Processing Technology	Er. H. Pandey	3(2+1)
FPT 513	Protein Technology	Er. Ameer Ravani	3(3+0)
FQA 504	Advances in Food Chemistry and Nutrition	Er. A M Patel	3(2+1)
FQA 509	Advances in Food Additives & Preservatives	Dr. S. Dutta/ Dr.H G Bhatt(P)	3(2+1)
FQA 511	Advances in Fermentation Technology	Dr. R. Prasad/ Mr. R. Dhingani	4(2+2)
AG. STAT -512	Experimental Designs	Dr. V. B. Darji	3(2+1)

No. AAU/FPTBE/PGAcad/2688-90/18,

Date: 22/10/2018

  
DEAN

**Copy f.w.s. to:**

1. Dean, P G Studies & Director of Research, AAU, Anand
2. Registrar, AAU, Anand
3. Chairman SRC, FPT&BE

**Copy for information & necessary action to:**

4. All concerned teachers
5. Student's Notice Board
6. Academic (U.G.) branch/ PG exam branch, FPT&BE, AAU, Anand
7. Concerned teacher

**COLLEGE OF FOOD PROCESSING TECHNOLOGY AND BIOENRGY, AAU, ANAND**

**Class Schedule of M. Tech. / Ph.D. (Food Technology) Specialization in**

**(i) Food Processing Technology**

**(ii) Food Process Engineering**

**(iii) Food Safety and Quality Assurance**

**Academic Year: 2018-19**

**Semester: M. Tech. (3<sup>rd</sup> & 5<sup>th</sup> Semester) & Ph.D. (3<sup>rd</sup> & 5<sup>th</sup> Semester)**

Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday 1 <sup>st</sup> , 3 <sup>rd</sup> 5 <sup>th</sup>
09.00-10.00	FQA-512 (JKM)	Thesis work	Thesis work	Thesis work	FPT-982 (SD)	Masters Seminar (SD)
10.00-11.00	Thesis work	Thesis work	Thesis work	Doctorate Seminar- FPT-642 (RFS) Doctorate Seminar- FQA-998 (HGB)	FQA-512 (JKM)	Doctorate Seminar- FPE-651 (SSK) Doctorate Seminar- FPT-641 (RVP)
11.00-12.00	FPT-982 (SD)	FPT-982 (SD)	Thesis work	Doctorate Seminar- FPT-999 (SHA)	Thesis work	Thesis work
<b>Lunch Break</b>						
14.30 to 15.00 (Practical)	Thesis work	Thesis work	Thesis work	Thesis work	Thesis work	Seminar
15.30 to 17.30 (Practical)	FPT-597/697, FPE-596/696, FQA-597	FPT-597/697, FPE-596/696, FQA-597	FPT-597/697, FPE-596/696, FQA-597	FQA-512 (JKM)	FPT-597/697, FPE-596/696, FQA-597	

Course No.	Title	Teacher	Credit+
FPT-982	Operational Research	Dr. Samit Dutta	3(3+0)
FQA-512	Advances in Food Microbiology	Er. J K Momin	3(2+1)
FPT-597/ 697, FPE-596/696, FQA-597	Special Problem	Concerned HoD	2(0+2)
FPT-531 FPE-531 FQA-599	Masters Seminar	Dr. Samit Dutta	1(1+0)
FPE-651/ FPT- 641/ FPT-999	Doctorate Seminar (Major)	Dr. S Kapdi Dr. R V Prasad Dr. S H Akbari	1 (1+0)
FPT-642/ FQA- 998/	Doctorate Seminar (Minor)	Dr. R F Sutar Dr. H G Bhatt	1 (1+0)
FPT-541/641, FPE-541/641, FQA-541	Thesis work	Respective Guide	5(0+5)

No. AAU/FPTBE/PGAcad/  
Date: 20/7/2018

1162-63/18,

*[Signature]*  
DEAN

**Copy f.w.r.s. to:**

1. Dean, P G Studies & Director of Research, AAU, Anand
2. Registrar, AAU, Anand
3. Chairman SRC, FPT&BE

**Copy for information & necessary action to:**

4. All concerned teachers
  5. Student's Notice Board
- UG branch/ PG exam branch. FPT&BE, AAU, Anand, Concerned teacher



**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for First Semester B.Tech (FT) w.e.f.: 1<sup>st</sup> August, 2018**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	FQA-111(L) RD	FQA-111 (L) RD	MATH-111 (L) NDP	MATH-111 (L) NDP	FPE-111 (L) AN	ENG-111 (L) NC
10:00-11:00	FPE 113 (L) NVS	ESD 111 (L) SSK	FBM-111 (P)I PSP (10.00-12.00)	FQA-112 (L) AMP	FQA-112 (L) AMP	
11:00– 12:00	FPE-112 (L) MM	FPE-111 (L) AN	ENG-111 (P) (II) NC (10.00-12.00)		FBM-111 (L) PSP	
12:00 – 13:30	<b>LUNCH BREAK</b>					
13:30– 15:30	FPE-113 (P) II NVS	FQA-112(P) II AMP	FPE-113 (P) II NVS	FPE-112(P) II MM	FPE-112(P) I MM	NSS
	FPE-112(P) I MM	ESD (P) I SSK	FPE 111 (P) I AN	FPE-113 (P) I NVS	FPE 111 (P) II AN	
15:35 – 17:35	ENG-111 (P) (I) NC	FPE-113 (P) I NVS	FQA-112(P) I AMP		FQA-111(P) I RD	
	FBM-111 (P)II PSP	FPE-112(P) II MM	FQA-111(P) II RD	SRC Activities	ESD (P) II SSK	

**Details of Courses and Course Teachers**

S. No.	Course No.	Title of the Course	Credits	Teacher's Name
1	FQA 111	General Microbiology	3 (2+1)	R.Dhingani
2	FQA 112	Food Chemistry of Macronutrients	3 (2+1)	A.M.Patel
3	ENG 111	English Language	2 (1+1)	Nischal Chavda
4	MATH 111	Engineering Mathematics-I	2 (2+0)	Nitin D. Patel
5	ESD 111	Environmental Sciences & Disaster Management	2 (1+1)	S. S. Kapdi
6	FPE 111	Basic Electrical Engineering	3 (2+1)	A.Nakiya
7	FPE 112	Workshop Technology	3 (1+2)	Mahesh Makwana
8	FPE 113	Engineering Drawing and Graphics	3 (1+2)	Nirav Shah
9	FBM 111	Computer Programming and Data Structures	2 (1+1)	P.S. Parsania
	PED111	NSS	1 (0+1)*	K.V.Vala
<b>Total</b>			<b>23(13+10)</b>	<b>Venue: Lecture Hall-I</b>
<b>* Non-Credit Course</b>				

No. AAU/FPTBE/UGAcad/ 1007/18 Date: 11 / 07 /2018

  
Principal

**Copy f.w.r.s. to:**

- 1 Registrar, AAU, Anand
- 2 Chairman, SRC, FPTBE, AAU, Anand
- 3 HoD: FPT/FPE/FQA/BE/PHT/FBM

**Copy for information & necessary action to:**

- 4 All concerned Teachers
- 5 Student's notice board
- 6 Academic (P.G.)/Exam Branch/T&P, FPTBE, AAU, Anand



**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for Third Semester B.Tech (FPT) w.e.f.: 16<sup>th</sup> July, 2018**  
**(4<sup>th</sup> Deans')**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	PHE-231 (L) (SHA)	FQA-231(L) (KSD/HC)	FQA-231(L) (KSD/HC)	PHE-231 (L.) (SHA)	PHE-231 (L.) (SHA)	FPE-231 (L) (NVS)
10:00 – 11:00	FPE-232 (L) (NVS)	ENV-231 (L) (SSK)	FPE-233 (L) (AN)	FPE-233 (L.) (AN)	FPT-231(L) (AVR)	
11:00 – 13:00		FPE-231(P) (NVS)	FPE-231 (L) (NVS) (11:00-12:00)	FPT-231(L) (AVR) (11:00-12:00)		
12:00– 13:30	<b>LUNCH BREAK</b>					
13:30– 15:30	FPE-232(P) (NVS)		FPE-232(P) (NVS)	ENV-(P) SSK	FPT-231(P) (AVR)	NSS
15:35 – 17:35	FPE 233(P) (AN)	FQA-231(P) (KSD/HC)	PHE-231 (P) (SHA)		SRC Activities	

**Details of Courses and Course Teachers**

Sr. No.	Course No.	Title of the Course	Credits	Teacher's Name
1.	FQA-231	Food Biochemistry & Human Nutrition	2+1	K.S.Damle/ Heena Chavda
2	FPE-231	Fluid Mechanics	2+1	N. V. Shah
3	FPE-232	Engineering Drawing & Graphics	1+2	N. V. Shah
4	FPE-233	Food Process Engineering-I	2+1	A.Nema
5	ENV-231	Environment Science	1+1	S.S.Kapdi
6	FPT-231	Food Processing Technology-I	2+1	Amec Ravani
7	PHE-231	Post-Harvest Engineering	3+1	S.H.Akbari
8	NSS-231	NSS	0+1*	K.V.Vala
<b>Total</b>			<b>13+8</b>	<b>Venue: Lecture Hall-II</b>

  
Principal

No. AAU/FPTBE/UGAcad/ 879 /18 Date: 26-06-2018

Copy f.w.r.s. to:

- 1 Registrar, AAU, Anand
- 2 Chairman, SRC, FPTBE, AAU, Anand
- 3 HoD: FPT / FPE / FQA / BE / PHE / FBM

Copy for information & necessary action to:

- 4 All concerned Teachers
- 5 Student's notice board (UG)
- 6 Academic (P.G.) / Exam Branch/T&P, FPTBE, AAU, Anand

**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for Third Semester B.Tech (FT) w.e.f.: 16<sup>th</sup> July, 2018**  
**(5<sup>th</sup> Deans')**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	STAT 231 (L) (ANK)	FQA-231(L) (KSD/HC)	FQA-231(L) (KSD/HC)	FPE-232 (L) (KVV)	FPE-232 (L) (KVV)	FPT 231 (L) RBM
10:00 – 11:00	FPE 233 (L) AN	FPE 233 (L) AN	FQA 232 (L) BHJ	FQA 232 (L) BHJ	FPE-231 (L) (MM)	
11:00 – 12:00	FPT-232 (L) (SHA/AVR)		FPE-231 (L) (MM)		FPT-232 (L) (SHA/AVR)	
12:00 – 13:30	<b>LUNCH BREAK</b>					
13:30 – 15:30	STAT 231-(P) I&II (ANK)	FPE-231(P) II (MM)	FPE-231(P) I (MM)	FPT-232 (P) II (SHA/AVR) FPE 233 (P) I (AN)	FPT 231 (P) II RBM FPE-232 (P) I (KVV)	NSS
15:35 – 17:35	FQA 232 (P) II BHJ FQA-231(P) I (KSD/HC)	FQA 232 (P) I BHJ FQA-231(P) II (KSD/HC)	SRC Activities	FPT-232 (P) I (SHA/AVR) FPE 233 (P) II (AN)	FPT 231 (P) I RBM FPE-232 (P) II (KVV)	

**Details of Courses and Course Teachers**

S. No.	Course No.	Title of the Course	Credits	Teacher's Name
1	FQA 231	Food Biochemistry and Nutrition	3 (2+1)	K.S.Damle/ Heena Chawda
2	FQA 232	Industrial Microbiology	3 (2+1)	B.H.Joshi
3	FPE 231	Heat and Mass Transfer in Food Processing	3(2+1)	Mahesh Makwana
4	FPE 232	Food Refrigeration and Cold Chain	3 (2+1)	K.V.Vala
5	FPE 233	Fundamentals of Food Engineering	3 (2+1)	A.Nema
6	FPT 231	Processing Technology of Liquid Milk	2 (1+1)	R.B.Modi
7	FPT 232	Processing Technology of Cereals	3 (2+1)	S.H.Akbari/ Amees Ravani
8	STAT 231	Statistical Methods and Numerical Analysis	2 (1+1)	A.N.Khokhar
9	PED 231	NSS	1 (0+1)*	K.V.Vala
<b>Total</b>			<b>22(14+8)</b>	Venue: Lecture Hall-II
* Non-Credit Course				

*(Signature)*  
Principal

No. AAU/FPTBE/UGAcad/ 880 /18 Date: 26-07-2018

**Copy f.w.r.s. to:**

- 1 Registrar, AAU, Anand
- 2 Chairman, SRC, FPTBE, AAU, Anand
- 3 HoD: FPT / FPE / FQA / BE / PHE / FBM

**Copy for information & necessary action to:**

- 4 All concerned Teachers
- 5 Student's notice board (UG)
- 6 Academic (P.G.) / Exam Branch/T&P, FPTBE, AAU, Anand

**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for Fifth Semester B.Tech (FPT) w.e.f.: 16<sup>th</sup> July, 2018**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00-10:00	FPE-353-(L) (AKS)	FPE-353-(L) (AKS)	FPE-352-(L) (AN)	FPT-351 (L) (HPS)	FPT-351 (L) (HPS)	FPT-351 (L) (HPS)
10:00-11:00	FPT-352 (L) (GPT)	FPT-352 (L) (GPT)	FPT-352 (L) (GPT)	FQA-351 (L) (JKM)	FPE-352(L) (AN)	
11:00-12:00	FPE-351-(L) (KVV)	FPE-351-(L) (KVV)	PHE-351(L) (KVV)	PHE-351(L) (KVV)	FQA-351(L) (JKM)	
12:00-13:30	<b>LUNCH BREAK</b>					
13:30-15:30	FQA-351(P) II (JKM)	FPT-351(P) II (HPS)	PHE 351(P) I (KVV)	PHE-351 (P) II (KVV)	FPE-352(P) II (BJ)	
		FQA-351(P) I (JKM)	FPT-352(P) II (GPT)	FPE-352 (P) I (BJ)	FPT- 352(P) I (GPT)	
15:35-17:35	FPE-351(P) II (KVV)	FPE-351(P) I (KVV)				
	FPT-351(P) I (HPS)		FPE-353(P) II (AKS)	SRC Activities	FPE-353(P) I (AKS)	

**Details of Courses and Course Teachers**

S. No.	Course No.	Title of the Course	Credits	Teacher's Name
1	FQA-351	Food Plant Sanitation	2+1	J.K.Momin
2	FPE-351	Process Equipment Design	2+1	K.V.Vala
3	FPE-352	Bio Process Engineering	2+1	A.Nema(Ty)/ Bhavesh Joshi(P)
4	FPE-353	Food Plant Utilities & Services	2+1	A.K.Sharma
5	FPT-351	Processing Technology of Fruits & Vegetables	3+1	H. P. Sharma
6	FPT-352	Processing Technology of Milk & Milk Products	3+1	Govind P.T.
7	PHE-351	Storage Structures & Environment Control	2+1	K.V.Vala
<b>Total</b>			<b>16+7</b>	<b>Venue: Lecture Hall-III</b>

No. AAU/FPTBE/UGAcad/ 867-69/18 Date: 26-6-2018

  
Principal

**Copy f.w.r.s. to:**

- 1 Registrar, AAU, Anand
- 2 Chairman, SRC, FPTBE, AAU, Anand
- 3 HoD: FPT / FPE / FQA / BE / PHE / FBM

**Copy for information & necessary action to:**

- 4 All concerned Teachers
- 5 Student's notice board(UG)
- 6 Academic (P.G.) / Exam Branch/T&P, FPTBE, AAU, Anand.

**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for Seventh Semester B.Tech (FPT) w.e.f.: 16<sup>th</sup> July, 2018**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	FPT 471(L) (RBM)	FBM 471 (L) (DBP)	FPT 471(L) (RBM)	FBM 471 (L) (DBP)	FBM 471 (L) (DBP)	FPE 473 (L) (GPT)
10:00 – 11:00	FPE-472(L) (PSP)	FPT 472 (L) (HPS/DP)	FPT 472 (L) (HPS/DP)	FPE 473 (L) (GPT)	FPE 473 (L) (GPT)	
11:00 – 12:00	FPT-473 (L) (HP)	FPT-473 (L) (HP)	FPT 473 (L) (HP)	FPE 471 (L) (AKS)	FPE -471(L) (AKS)	Central Library Visit
12:00– 13:30	<b>LUNCH BREAK</b>					
13:30– 15:30	FPT 472 (L) (HPS/DP) (13:30-14:30)	FPE 472(P)II (PSP)	FPT 473(P) II (HP)	FPE-471(P) II (AKS)	FPT 473(P) I (HP)	
		FPE-471(P) I (AKS)	FPT-472(P) I (HPS/DP)	FPE 473 (P) I (GPT)	FPT-472(P) II (HPS/DP)	
15:35 – 17:35	FPT471(P)I (RBM)			SRC Activities		Personality Development
	FPT471(P)II (RBM)	FPE 473 (P) II (GPT)	FPE 472(P)I (PSP)			

**Details of Courses and Course Teachers**

S. No.	Course No.	Title of the Course	Credits	Teacher's Name
1	FPE 471	Food Plant Design & Layout	(2+1)	A.K.Sharma
2	FPE 472	IT Applications in Food Industry	(1+1)	P.S.Parsania
3	FPT 471	Food Packaging Technology & Equipment	(2+1)	R.B.Modi
4	FPT 472	Bakery & Confectionary Products	(3+1)	H.P.Sharma/ Devesh Patel
5	FPT 473	Functional Foods & Nutraceuticals	(3+1)	H.Pandey
6	FPE 473	Dairy Engineering	(3+1)	Govind P.T.
7	FBM 471	Marketing Management & International Trade	(3+0)	Deval Patel
<b>Total</b>			<b>17+6</b>	<b>Venue: Lecture Hall-IV</b>

No. AAU/FPTBE/UGAcad/ 850 /18

Date: 16-06-2018

*(Signature)*  
Principal

**Copy f.w.r.s. to:**

- 1 Registrar, AAU, Anand
- 2 Chairman, SRC, FPTBE, AAU
- 3 HoD: FPT / FPE / FQA / BE / PHE / FBM

**Copy for information & necessary action to:**

- 4 All concerned Teachers
- 5 Student's notice board
- 6 Academic (PG) / Exam Branch/T&P, FPTBE, AAU, Anand.
- 7 Central Library, AAU, Anand

*Handwritten signature*

**COLLEGE OF FOOD PROCESSING TECHNOLOGY AND BIOENERGY, AAU, ANAND**

**Class Schedule of**

**M. Tech. / Ph.D. (Food Processing Technology) and**  
**M. Tech. / Ph.D. (Food Technology) Specialization in**

(i) Food Processing Technology

(ii) Food Process Engineering

(iii) Food Safety and Quality Assurance

**Academic Year: 2018-19 (w.e.f. 1<sup>st</sup> April, 2019) EVEN SEMESTER**

**Semester: Second (M. Tech./Ph. D.)**

Time/Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday 1 <sup>st</sup> & 3 <sup>rd</sup>
09.00 – 10.00	FPT-515 (HP) FQA-516 (BHJ)	FPT-501 (RBM)	FQA-516 (BHJ)	FPT-510(AR) FPE-506 (AN)	FPE-506 (AN) FPT-510 (AR)	Thesis Work
10.00-11.00	FPT-517(HP)	FPT-518 (SD)	FPT-518 (SD)	FPE-501(MM) FQA-503(RVP)	FQA-503(RVP)	PGS 503 (RSP/RS) (10.00-12.00)
11.00-12.00	FPT-510(AR)	FPT-515 (HP)	FPT-517(HF)	FQA-501(HGB)	FPT-501 (RBM)	
<b>Lunch Break</b>						
13.30-15.30 (Practical)	FPE-501(MM)	Thesis Work	FPT-501 (RBM)	FQA-501 (HGB)	FQA-501(HGB)	PGS 505 (NMV) (14.00-16.00)
15.30-17.30 (Practical)	FPT-518 (SD)	FPT-515 (HS) FQA-516 (BHJ)	PGS 506 (NVS) (16.00-17.00)	FPE-501(MM)	FPE-506 (AN)	Thesis Work

Course No.	Title	Teacher	Credit
FPE-501	Computer Aided Design of Food Plant, Machinery And Equipment	Er. M. Makwana	3(1+2)
FPE-506	Engineering, Textural & Rheological Characteristics of Food Materials	Dr. A. Nema	3(2+1)
FPT 501	Advances in Food Packaging Technology	Er. R B Modi	3(2+1)
FPT-510	Lipid Technology	Dr. A Ravani	3(3+0)
FPT-515	Technology for RTE/RTC Food Products	Dr H Pandey / Dr. Harsh Sharma	3(2+1)
FPT-517	Technology of Frozen Foods	Dr H Pandey	2(2+0)
FPT 518	Traditional and Value-added Food Products	Dr. Samit Dutta	3(2+1)
FQA-501	Advances in Analytical Techniques	Dr. H G Bhatt	3(1+2)
FQA-503	Food Safety and Risk Analysis	Dr. R V Prasad	2(2+0)
FQA-516	Advances in Food Biotechnology	Dr. B H Joshi	3(2+1)
PGS- 503(e course)	Intellectual Property and its management in Agriculture	Dr. R S Pundir/ Dr R. Singh	1(1+0)
PGS- 505 (e course)	Agricultural Research, Research ethics and Rural Development Programs	Dr N M Vegad	1(1+0)
PGS- 506 (e course)	Disaster Management	Er. N V Shah	1(1+0)

No. AAU/FPTBE/PGAcad/1431-19/19

Date:

**PRINCIPAL**

**Copy F.W.R.S. to:**

1. Dean, P G Studies & Director of Research, AAU, Anand
2. Registrar, AAU, Anand
3. Chairman SRC, FPT&BE

**Copy for information & necessary action to:**

1. All concerned teachers
2. Student's Notice Board
3. Academic (U.G.), Faculty of FPT&BE, AAU, Anand



**Table 9 Class schedules of even semester (2018-19)**

**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for Second Semester B.Tech (FT) w.e.f.:16/01/2019**

**Academic Year: 2018-19**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	FPE 123(L) AN	FQA 122(L) AMP	FPE 123(L) AN	FQA 122(L) AMP	FPE 121(L) MM	FPT 121(L) AVR
10:00 – 11:00	FPE 122(L) NVS	FQA 121(L) JKM	MATH 121(L) NDP	MATH 121(L) NDP	FQA 121(L) JKM	
11:00 – 12:00	FPE-124 (L) THB	FPE 122(L) NVS	FPE-124 (L) THB	FPE 121(L) MM	FPT 121(L) AVR	
12:00 – 13:30	<b>LUNCH BREAK</b>					
13:30– 15:30	FQA 122 (P) I AMP		FPE 122(P) I NVS	FPE 123 (P) I AN	FPE 123 (P) II AN	NSS
	FPE-124 (P) II THB		FPE 121 (P) II MM	FQA 121 (P) II JKM	FQA 121 (P) I JKM	
15:35 – 17:35	FPE 121 (P) I MM		SRC Activities	FPT 121(P) I AVR	FPT 121(P) II AVR	
	FPE 122(P) II NVS	FQA 122 (P) II AMP			FPE-124 (P) I THB	

**Details of Courses and Course Teachers**

	<b>Courses</b>		<b>Credits</b>	<b>Course Teachers</b>
1	FQA 121	Food Microbiology	3 (2+1)	Sh.J.K.Momin
2	FQA 122	Food Chemistry of Micronutrients	3 (2+1)	Sh.A.M.Patel
3	FPE 121	Food Thermodynamics	3(2+1)	Er.Mahesh Makwana
4	FPE 122	Fluid Mechanics	3 (2+1)	Er.Nirav Shah
5	FPE 123	Post-Harvest Engineering	3 (2+1)	Dr.A.Nema
6	FPE 124	Basic Electronics Engineering	3 (2+1)	Er.T.H.Bhatt
7	FPT 121	Fundamentals of Food Processing	3 (2+1)	Dr.Amee Ravani
8	MATH 121	Engineering Mathematics-II	2 (2+0)	Dr.N.D.Patel
	PED 121	NCC/NSS/Physical Education	1 (0+1)*	Dr.K.V.Vala
	<b>Total</b>		<b>23 (16+7)</b>	
	* Non-Credit Course			<b>Venue: Lecture Hall-II</b>

  
Principal

No. AAU/FPTBE/UGAcad/ 3436 /18 Date: 28/12/2018

**Copy f.w.r.s. to:**

- 1 Registrar, AAU, Anand
- 2 Chairman, SRC, FPTBE, AAU, Anand
- 3 HoD: FPT/FPE/FQA/BE/PHT/FBM

**Copy for information & necessary action to:**

- 4 All concerned Teachers
- 5 Student's notice board
- 6 Academic (P.G.)/Exam Branch/T&P, FPTBE, AAU, Anand

**Academic Achievements**



**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for Fourth Semester B.Tech.(FPT) w.e.f.: 01/01/2019**  
**(4<sup>th</sup> Deans')**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	PHE 241(L) AKS	FPT 242(L) SHA	FPT 242(L) SHA	FPT 242(L) SHA	PHE 241(L) AKS	FPE 242 (L) HGB/NVS
10:00 – 11:00	FPT 243 (L) AVR	FPE 243(L) KVV	FPE 243(L) KVV	FPE 243(L) KVV	FPT 241(L) HP	
11:00 – 12:00	FPT 241(L) HP	FPE 241 (L) AKS	FPE 242 (L) HGB/NVS	FPT 243 (L) AVR	FPE 241 (L) AKS	
12:00 – 13:30	<b>LUNCH BREAK</b>					
13:30– 15:30				FPE 243 (P) KVV	FPT 242(P) SHA/SVA	NSS
	FPE 241(P) AKS	FPT 241(P) HP				
15:35 – 17:35			FPT 243 (P) AVR	FPE 242 (P) NVS	SRC Activities	
	PHE 241(P) AKS					

**Details of Courses and Course Teachers**

S. No.	Course No.	Title of the Course	Credits	Teacher's Name
1	FPE 241	Food Process Engineering-II	3(2+1)	Dr.A.K.Sharma
2	FPE 242	Material Science & Engineering	3(2+1)	Dr.H.G.Bhatt (T)/ Er.Nirav Shah (T&P)
3	FPE 243	Food Refrigeration & Air Conditioning	4(3+1)	Er.K.V.Vala
4	FPT 241	Food Processing Technology-II	3(2+1)	Er.H.Pandey
5	FPT 242	Processing Technology of Food Grains	4(3+1)	Dr.S.H.Akbari(T&P)/ Er.S.V.Anadani (P)
6	FPT 243	Design & Formulation of Foods	3(2+1)	Er.Amee Ravani
7	PHE 241	Engineering Properties of Biological Materials	3(2+1)	Dr.A.K.Sharma
8	NSS 241	NSS	1*(0+1)	Er.K.V.Vala
<b>Total</b>			<b>16+7</b>	<b><u>Venue:</u> Lecture Hall-I</b>

  
Principal

No. AAU/FPTBE/UGAcad/ 3383 /18

Date: 18/12/18

Copy f.w.r.s. to:

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Copy for information & necessary action to:

- 5 All concerned Teachers
- 6 Student's notice board
- 7 Academic (P.G.)/Exam Branch/T&P, FPTBE, AAU, Anand

**College of Food Processing Technology & Bio-Energy, AAU, Anand**  
**Tentative Class Schedule for Fourth Semester B.Tech.(FT) w.e.f.: 01/01/2019**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	FPT 242 RBM (L)	FPE 241 (L) AKS	FPE 241 (L) AKS	FPT 242 RBM (L)	FQA 241 (L) RD	FQA 241 (L) RD
10:00 – 11:00	FQA 242 (L) JKM	FPT 244 (L) AN	FPT 241 (L) HP	FPT 241 (L) HP	FPT 243 (L) SHA/HPS	
11:00 – 12:00	FPT 243 (L) SHA/HPS		FPT 244 (L) AN	FBM 241 (L) DP	FBM 241 (L) DP	
12:00 – 13:30	LUNCH BREAK					
13:30– 15:30	FQA 242 (P) I JKM	FQA 241 (P) I RD	FQA 241 (P) II RD			NSS
	FPT 243 (P) II SHA/HPS	FPE 241 (P) II AKS/RB	FPE 241 (P) I AKS/RB			
15:35 – 17:35	SRC Activities	FPT 242 RBM (P) I	FPT 244 (P) I AN/SVA	FPT 242 RBM (P) II	FQA 242 (P) II JKM	
		FPT 244 (P) II AN/SVA	FPT 241 (P) II HP	FPT 241 (P) I HP	FPT 243 (P) I SHA/HPS	

**Details of Courses and Course Teachers**

S. No.	Semester-IV		Credits	Name of course Teachers
1	FQA 241	Food Biotechnology	3 (2+1)	Sh. R.Dhingani
2	FQA 242	Food Plant Sanitation	2 (1+1)	Sh. J.K.Momin
3	FPE 241	Food Plant Utilities & Services	3 (2+1)	Dr. A.k.Sharma (T&P)/ Er. Rekit Barot(P)
4	FPT 241	Unit Operations in Food Processing	3 (2+1)	Er. H.Pandey
5	FPT 242	Processing Technology of Dairy Products	3 (2+1)	Er. R.B.Modi
6	FPT 243	Processing Technology of Legumes and Oilseeds	3 (2+1)	Dr. S.H.Akbari/ Er. Harsh Sharma
7	FPT 244	Processing of Spices and Plantation Crops	3 (2+1)	Dr. A.Nema (T&P)/ Ms. S.V.Anadani (P)
8	FBM 241	Business Management and Economics	2 (2+0)	Sh. Deval Patel
	PED 241	NCC/NSS/Physical Education	1 (0+1)*	Er. K.V.Vala
	Total		22 (15+7)	Venue: Lecture Hall-III

  
**Principal**

**No. AAU/FPTBE/UGAcad/3384 /18**

**Date: 18/12/18**

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**Copy for information & necessary action to:**

- 5 All concerned Teachers
- 6 Student's notice board
- 7 Academic (P.G.)/Exam Branch/T&P, FPTBE, AAU, Anand

**College of Food Processing Technology & BioEnergy, AAU, Anand**  
**Tentative Class Schedule for Sixth Semester B.Tech (FPT) w.e.f.: 01/01/2019**

Time / Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday (1 <sup>st</sup> , 3 <sup>rd</sup> & 5 <sup>th</sup> )
9:00 – 10:00	FPT 361 (L) HPS	FQA 361 (L) RVP	FPT 361 (L) HPS	FPT 361 (L) HPS	FQA 361 (L) RVP	FPT 362 (L) KVV
10:00 – 11:00	STAT361 (L) ANK	FPE 361(L) THB	STAT361 (L) ANK	FPE 361(L) THB	FPT 362 (L) KVV	
11:00 – 12:00	FBM 361 (L) SD/DP	FBM 361 (L) SD/DP	BE 361 (L) SSK	BE 361 (L) SSK	BE 361 (L) SSK	Visit to Central Library
12:00 – 13:30	<b>LUNCH BREAK</b>					
13:30 – 15:30	BE (P) II SSK	FQA 361 (P) I KSD	FQA 361 (P) II KSD	FPT 361 (P) I HPS	FPT 361 (P) II HPS	
	BE (P) I SSK	FPE 361 (P)II THB	FPE 361 (P)I THB	FBM 361 (P) II SD/DP	FBM 361 (P) I SD/DP	
15:35 – 17:35	STAT361 (P) I&II ANK	FPT 362 (P) I KVV	FPT 362 (P) II KVV		SRC Activities	

**Details of Courses and Course Teachers**

S. No	Course No.	Title of the Course	Credits	Teacher's Name
1	FQA 361	Food Regulations & Quality Assurance	(2+1)	Dr. R.V.Prasad(T) Sh. K.S.Damle(P)
2	FPE 361	Process Control in Food Industry	(2+1)	Er. T.H.Bhatt
3	FPT 361	Processing Technology of Meat, Fish & Poultry	(3+1)	Er. H.P.Sharma
4	FPT 362	Processing Technology of Spices and Plantation Crops	(2+1)	Er. K.V.Vala
5	BE 361	Bio energy	(3+1)	Dr. S. S. Kapdi
6	FBM 361	Project Management & Entrepreneurship Development	(2+1)	Dr. Samit Dutta/ Sh. Deval Patel
7	STAT 361	Statistics & Optimization	(2+1)	Dr. A.N.Khokhar
<b>Total</b>			<b>16+7</b>	<b>Venue:</b> <b>Lecture Hall-IV</b>

  
**Principal**

No. AAU/FPTBE/UGAcad/3356 /2018

Date: 15/12/18

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**Copy for information & necessary action to:**

- 4 All concerned Teachers
- 5 Student's notice board
- 6 Academic (P.G.)/Exam Branch/T&P, FPTBE, AAU, Anand

**Table 10 Year wise students passed out**

Year	Ph.D.	M.Tech.	B.Tech.	Total
2005	-	5	-	5
2006	-	1	-	1
2007	-	1	-	1
2008	-	2	-	2
2009	1	6	-	7
2010	-	5	-	5
2011	-	6	-	6
2012	-	7	-	7
2013	-	13	21	34
2014	1	13	25	39
2015	1	8	34	43
2016	-	9	32	41
2017	-	7	33	40
2018	9	10	34	53
Total	12	93	179	284

**Table 11 Semester- wise results of students of B.Tech/ M.Tech/ PhD (FPT)**

The semester wise results of students admitted in various years of B.Tech/ M.Tech/ Ph.D. (FPT) are given below:

Degree (Admission Year)	Semester	Dist.	First Class	Second Class	Pass Class	Fail	Total	Students Dropped
Ph.D. (2013-14)	I	-	1	1	-	-	02*	-
	II	-	-	2	-	-	02*	-
	III	-	2	-	-	-	02*	-
	IV	-	2	-	-	-	02*	-
	V	-	2	-	-	-	02*	-
	VI	-	2	-	-	-	02*	-
	VII	-	-	-	-	2	02*	-
	VIII	-	2	-	-	-	02*	-
	IX	-	-	-	-	2	02*	-
Ph.D. (2014-15)	I	2	2	-	-	-	04*	-
	II	1	3	-	-	-	04*	-
	III	1	3	-	-	-	04*	-

	IV	1	3	-	-	-	04*	-
	V	1	3	-	-	-	04*	-
	VI	2	2	-	-	-	04*	-
	VII	2	2	-	-	-	04*	-
Ph.D. (2015-16)	I	3	2	-	-	-	05*	-
	II	2	3	-	-	-	05*	-
	III	2	3	-	-	-	05*	-
	IV	2	2	-	-	-	04*	1
	V	2	1	-	-	1	04*	-
	VII	2	2	-	-	-	04*	-
	VIII	1	-	-	-	-	01*	
Ph.D. (2017-18)	I	2	-	-	-	-	02	-
	II	2	-	-	-	-	02	
	III	2	-	-	-	-	02	
M.Tech. (2013-14)	I	1	6	2	-	-	09	-
	II	1	5	3	-	-	09	-
	III	1	6	2	-	-	09	-
	IV	1	6	2	-	-	08	1
M.Tech. (2014-15)	I	2	7	-	-	1	10	-
	II	1	8	-	-	1	10	-
	III	1	8	-	-	-	09	1
	IV	1	8	-	-	-	09	-
M.Tech. (2015-16)	I	1	5	3	-	-	09*	-
	II	1	4	3	-	-	08*	1
	III	1	5	2	-	-	08*	-
	IV	1	5	2	-	-	08*	-
	V	-	1	-	-	-	01*	-
M. Tech. (2016-17)	I	1	6	1	-	1	09	-
	II	1	6	1	-	1	09	-
	III	0	8	1	-	-	09	-
	IV	0	8	1	-	-	08	-
M. Tech. (2017-18)	I	2	4	6	-	1	13	-
	II	1	8	4	-	-	13	-
	III	4	7	2	-	-	13	-

(\* Including In service)

B. Tech.(2009-10)	I	6	6	10	3	1	26	-
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	II	5	6	6	3	6	26	2
	III	5	8	5	2	4	24	1
	IV	4	9	6	3	1	23	-
	V	6	8	4	5	0	23	-
	VI	6	9	7	1	0	23	2
	VII	6	9	6	0	0	21	-
	VIII	21	0	0	0	0	21	-
B. Tech.(2010-11)	I	4	6	14	7	4	35	1
	II	0	8	6	11	11	36	6
	III	3	7	10	8	4	32	6
	IV	3	5	17	2	0	27	-
	V	3	11	12	1	0	27	-
	VI	6	8	9	1	0	25	1
	VII	2	11	08	4	1	26	1
	VIII	24	1	0	0	0	25	-
B. Tech.(2011-12)	I	6	7	5	4	7	29	6
	II	4	6	10	11	1	32	4
	III	4	6	14	6	6	36	3
	IV	3	10	11	4	4	32	1
	V	2	11	17	2	2	34	1
	VI	5	12	16	0	0	33	-
	VII	1	11	20	2	0	34	-
	VIII	32	2	-	-	-	34	-
B.Tech. (2012-13)	I	1	8	11	4	14	38	5
	II	3	9	6	6	13	37	11
	III	3	9	9	3	6	30	-
	IV	7	10	8	5	3	33	1
	V	3	10	10	5	3	31	-
	VI	5	10	16	1	0	32	-
	VII	8	11	11	1	1	32	-
	VIII	22	7	03	0	0	32	-
B.Tech. (2013-14)	I	7	8	11	13	5	44	3
	II	4	6	8	6	14	38	8
	III	7	6	14	4	7	38	4

	IV	11	14	9	0	0	34	-
	V	7	13	13	1	1	35	-
	VI	10	16	8	1	0	35	2
	VII	7	15	11	0	0	33	-
	VIII	8	12	13	0	0	33	-
B.Tech. (2014-15)	I	5	5	7	7	9	33	4
	II	5	11	4	6	4	30	-
	III	4	10	12	5	8	39	1
	IV	6	6	16	5	5	38	4
	V	9	15	10	0	2	36	2
	VI	11	17	3	1	0	32	-
	VII	8	15	7	3	1	34	-
	VIII	34	0	0	0	0	0	-
B. Tech.(2015-16)	I	7	8	5	8	6	34	3
	II	6	9	10	3	3	31	3
	III	5	16	12	0	1	34	-
	IV	2	11	8	16	2	39	-
	V	10	18	5	6	0	39	-
	VI	7	20	12	0	0	39	-
	VII	4	15	13	5	2	39	-
B.Tech. (2016-17)	I	8	12	13	1	5	39	4
	II	10	5	6	11	2	34	1
	III	10	6	10	10	2	38	1
	IV	11	12	13	1	0	37	-
	V	14	10	11	2	0	37	-
B.Tech. (2017-18)	I	0	0	0	2	0	2	-
	II	0	0	0	2	0	2	-
	III	0	0	0	3	0	3	-
B.Tech. F.T. (2017-18)	I	3	10	18	3	0	34	-
B.Tech. F.T. (2017-18)	II	2	9	15	8	1	35	-
B.Tech. F.T. (2017-18)	III	2	10	15	11	1	39	-
B.Tech. F.T. (2018-19)	I	3	7	17	13	7	47	0

## Students Strength

**Table 12(A) Category wise strength of UG students –Odd semester (2018-19)**

Category	First semester		Third semester		Fifth semester		Seventh semester		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
General	12	7	14	3	17	4	20	5	63	19
SC	4	0	1	1	4	0	3	0	12	1
ST	3	5	3	1	0	2	3	1	9	9
SEBC	9	6	10	4	8	2	4	3	31	15
ICAR	4	2	1	1	0	0	0	0	5	3
FOREIGN	1	1	1	2	0	0	0	0	2	3
Total	33	21	30	12	29	8	30	9	122	50
Total 172										

**Table 12(B) Category wise strength of UG students –Even semester (2018-19)**

Category	Second semester		Fourth semester		Sixth semester		Eighth semester		Total	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
General	10	7	14	3	17	4	20	5	61	19
SC	2	0	1	1	4	0	3	0	10	1
ST	3	3	3	0	0	2	3	1	9	6
SEBC	7	5	10	4	8	2	4	3	29	14
ICAR	4	2	1	1	0	0	0	0	5	3
FOREIGN	1	1	1	2	0	0	0	0	2	3
Total	27	18	30	11	29	8	30	9	116	46
Total 162										

**Table 13 Strength of Ph.D. and M.Tech. students (2018-19)**

Sr No.	Degree (Specialization)	No. of students registered			
		Fresh		In-service	
		Boys	Girls	Boys	Girls
1	Ph.D. (FPT-2)	-	-	2	-
2	M.Tech. (FPT-4), (FPE-2), (FSQA-2)				

**Table 14 Scholarship awarded to the students (2018-19)**

Sr. No.	Types of Scholarship/Financial Aids	Number of Recipient	Amount (Rs.)
1	National Talent Scholarship (2000/p.m./student)	06	114000/-
2	University Scholarship (UG) (500/p.m./student)	13	60000/-
3	AAU Fellowship (PG) (1500/p.m./student for MTech) 2000/p.m./student for PhD)	02	36000/-
4	SEBC Post Metric Scholarship (UG & PG)	30	DBTS
5	SC Post Metric Scholarship	09	
6	ST Post Metric Scholarship	10	

**Table 15 Post-graduate theses completed (2018-19)**

Sr. No.	Thesis Title	Degree	Name of Student	Major Guide
1	Supercritical fluid extraction of essential oil from cryoground Ajwain seed	M.Tech.(FPT)	Nilesh R. Sardar	Dr. R. F. Sutar
2	Evaluation of combine effect of gamma irradiation and edible coating on shelf life of sapota fruit	M.Tech.(FPT)	Amee J. Macwan	Dr. B. H. Joshi
3	Decontamination of pesticide residues from tomato and chilli and its shelf-life	M.Tech.(FPT)	Vaja Vidhi Girishkumar	Dr. S. H. Akbari
4	Effect of gamma radiation on storage of penut and sesame seeds	M.Tech.(FPT)	Tejani Nirav Devarajbhai	Dr. A. K. Sharma
5	Hot water treatment of unripe banana to extend the shel-life	M.Tech.(FPT)	Thakkar Bijal Miteshkumar	Dr. V. B. Bhalodiya
6	Technology of production of superior quality cinnamon bark powder and essential oil using cryogenic grinding and super critical fluid extraction	M.Tech.(FPT)	Monica R. Bhoi	Dr. R. F. Sutar
7	Technology of production of superior quality black pepper powder and essential oil using cryogenic grinding and super critical fluid extraction	M.Tech.(FPT)	Patel Utpalkumar B.	Dr. R. V. Prasad
8	Evaluation of trans fatty acids and acrylamide in selected Indian ethnic foods	M.Tech.(FPT)	Avanee Jitendra Macwan	Dr. Samit Datta
9	Effect of low frequency ohmic heating on carrot juice recovery and its shelf-life	M.Tech.(FPT)	Rana Kinjalben Prabhubhai	Dr. A. Nema
10	Development of technology for bottle gourd juice based carbonated beverage	M.Tech.(FPT)	Prajapati Vinodchandra Jayrambhai	Dr. R. R. Gajera
11	Design, Fabrication and testing of heat pump assisted drying system for selected perishable agro produce	Ph. D. (FPT)	Satyendrakumar Mishra	Dr. D. C. Joshi
12	Development of technology for production and preservation of Moringa olefera (Drumstick) fruit pulp and its utilization in selected food products	Ph. D. (FPT)	Ravani Ameeben Vijaykumar	Dr. R. V. Prasad
13	Effect of postharvest treatments on prolonging shelf-life and quality of lime fruits	Ph. D. (FPT)	Madan Aditya Sunilkumar	Dr. D. C. Joshi
14	Cold milling of flaxseed for omega-3 fatty acid rich oil and utilization of de-oiled meal for value added products	Ph. D. (FPT)	Bhatt Hetal Kiritkumar	Dr. R. V. Prasad
15	Production technologies for value added products from pumpkin seeds	Ph. D. (FPT)	Ningthoujam Manda Devi	Dr. R. V. Prasad
16	Technology for production and preservation of clarified juice from wood apple fruits	Ph. D. (FPT)	Harsh Prakash Sharma	Dr. D. C. Joshi

17	Technology for development of ready-to-rehydrate and eat type of rice and pulse products	Ph. D. (FPT)	Hridyesh Pandey	Dr. D. C. Joshi
18	Development of an automated multi chamber system for online assessment of rate of respiration and shelf-life study of selected fruits and vegetables	Ph. D. (FPT)	Bhaumik Bharatkumar Patel	Dr. R. F. Sutar
19	Design and development of two stage evaporative cooling system for transport of fruits and vegetables	Ph. D. (FPT)	Kanaksinh V. Vala	Dr. D. C. Joshi

**Table 16 Members of Board of Studies, Food Processing Technology & Bio-Energy**

(1) The Dean, Faculty of Food Processing Technology & Bio-Energy (Chairman)

(2) The Head of the Department in the Faculty (Member)

1. Dr. R. F. Sutar, Head, Dept. of Post-Harvest Engineering and Technology
2. Dr. S. S. Kapdi, Head, Dept. of Bio-Energy
3. Dr. R. V. Prasad, Head, Dept. of Food Quality Assurance
4. Dr. H. Pandey, Head, Dept. of Food Processing Technology
5. Dr. A. K. Sharma, Head, Dept. of Food Engineering
6. Dr. H. G. Bhatt, Head, Dept. of Food Safety and Testing
7. Dr. Samit Dutta, Dept. of Food Business Management

(3) The Director of Research and Dean, Post-graduate Studies, AAU, Anand (Member)

(4) The Director of Extension Education, AAU, Anand (Member)

(5) Principal, SMC College of Dairy Science, AAU, Anand (Member)

(6) Associate Professors and its equivalent from each department (Member)

1. Dr. S. H. Akbari, Agri. Process Engineering
2. Dr. B. H. Joshi, Bio-technology

(7) Assistant Professors and its equivalent from each department (Member)

1. Er. V. B. Bhalodia, Agri. Process Engineering
2. Dr. R. R. Gajera, Food Processing Technology
3. Mr. J. K. Momin, Dairy Microbiology

(8) The Assistant Registrar (Academic) (Secretary)



## IV. HIGHLIGHTS OF THE DEPARTMENTS

The teaching and research activities (university schemes) carried out by the different departments/sections of the college during the year 2018-19 are reported in this section. Also, the names and qualifications of the staff working in different departments as well as other schemes have been included here under.

### (A) Department of Post Harvest Engineering and Technology

The courses related to Post harvest Engineering, cereals, pulses, oilseeds, fruits and vegetables are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. Allied courses like engineering properties of biological materials are also covered. Research is undertaken in majority of the area of post-harvest and agro-processing technology, for use by farmers and industry.

**Table 17 Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes**

Sr. No.	Course No.	Subjects	UG / PG	Semester	Credits
1	PHE 231	Post Harvest Engineering	UG	Third	4 (3+1)
2	FPE 233	Food Process Engineering-I	UG	Third	3 (2+1)
3	FPT 242	Processing Technology of Food Grains	UG	Fourth	4 (3+1)
4	FPE 352	Bio Process Engineering	UG	Fifth	3 (2+1)
As per ICAR 5th Dean Committees' recommendations					
5	FPE 123	Post-Harvest Engineering	UG	Second	3 (2+1)
6	FPE 233	Fundamentals of Food Engineering	UG	Third	3 (2+1)
7	FPT 243	Processing Technology of Legumes and Oilseeds	UG	Fourth	3 (2+1)
8	FPT 244	Processing of Spices and Plantation Crops	UG	Fourth	3 (2+1)
9	FPE 512	Post-harvest Management and Storage Engineering	PG	First	3 (2+1)
10	FPE 504	Thermal Process Engineering	PG	First	3 (2+1)
11	FPE 506	Engineering, Textural & Rheological Characteristics of Food Materials	PG	Second	3 (2+1)

**Table 18 Research schemes undertaken**

Sr. No.	Title (B.H.)	Principal Investigator	Co Investigators	Period	
				From	To
Funding Agency: Govt. of Gujarat (Plan-Research)					
1	Post Harvest Management of some important crops of middle Gujarat, Anand (12960-00)	Dr. R.F. Sutar, HoD-PHET	Scientists and Research Staff, FPT&BE	April 2012	-continue-

**Table 19 Research projects/ out comes finalized/ approved in Agricultural Research Committees (AGRESCO-18)**

No. of recommendations finalized/approved		No. of new research projects/technical programme finalized/approved
For farmers / industry	For scientific community	
1	0	0

**Recommendations approved (2019):**

**1. Production of premium quality powder with maximum retention of essential oil using cryogenic grinding of carom (ajwain) and black pepper**

Entrepreneurs and agro-processing units involved in grinding of spices are advised to use the technology of cryogenic grinding developed by AAU for high quality ajwain and black pepper powder with higher retention of volatile oil content of 74.36 and 71.31 per cent respectively. For higher retention of volatile oil, the cryogenic grinding of ajwain seeds at temperature of -60°C, sieve size of 0.8 mm and feed rate of 8 kg/h and for black pepper at temperature of -60°C, sieve size of 1.5 mm and feed rate of 10 kg/h is recommended. The processing cost of the optimized operating conditions for cryogenic grinding of ajwain and black pepper is ₹ 33.00 and ₹ 25.00 per kg respectively.

**New Technical Programme/Project approved (2019):**

**1. Effect of different pretreatments on mature banana for increasing the shelf life**

**Table 20 Faculty and Staff in the department**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remark
1.	Dr. R. F. Sutar	Professor & Head	Ph.D.	Agricultural Processing & Food Engineering	PG Guide	
2.	Dr. S. H. Akbari	Associate Professor	Ph.D.	Agricultural Processing & Food Engineering	PG Guide	
3	Dr. A. Nema	Assistant Professor	Ph.D.	PHP & Food Engg.	P.G. Guide	Transferred From FE Dept. on May 01, 2018
4	Er. (Mrs) Swati Anadani	Senior Research Assistant	M. Tech.	Agril. Processing & Food Engineering		Transferred from FPT Dept. on May 01, 2018
6.	Er. Vishal D. Kukadiya	Research Associate	M.Tech	Process and Food Engineering		Since April 6, 2017
7.	Dr. Bhaumik B. Patel	Research Associate	Ph.D.	Food Processing Technology		Since February 21, 2019

## (B) Department of Food Processing Technology

The courses related to technology for food grains, fruits & vegetables, milk and milk products, bakery and confectionery, packaging etc are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. Allied courses like functional foods and nutraceuticals and design and formulation of foods are also covered. Research is undertaken in majority of the area of technology for use by industry.

**Table 21 Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes**

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits
1	FPT 231	Food Processing Technology - I	UG	Third	3 (2+1)
2	FPT 241	Food Processing Technology - II	UG	Fourth	3 (2+1)
3	FPT 243	Design & Formulation of Foods	UG	Fourth	3 (2+1)
4	FPT 351	Processing Technology of Fruits & Vegetables	UG	Fifth	4 (3+1)
5	FPT 352	Processing Technology of Milk and Milk Products	UG	Fifth	4 (3+1)
6	FPT 361	Processing Technology of Meat, Fish & Poultry	UG	Sixth	4 (3+1)
7	FPT 362	Processing Technology of Spices and Plantation Crops	UG	Sixth	3 (2+1)
8	FPT 471	Food Packaging Technology & Equipment	UG	Seventh	3 (2+1)
9	FPT 472	Bakery and Confectionery Products	UG	Seventh	4 (3+1)
10	FPT 473	Functional Foods & Nutraceuticals	UG	Seventh	4 (3+1)
11	FPE 473	Dairy Engineering	UG	Seventh	4 (3+1)
As per ICAR 5 <sup>th</sup> Dean Committees' recommendations					
12	FPT 121	Fundamental of Food Processing	UG	Second	3 (2+1)
13	FPT 231	Processing Technology of Liquid Milk	UG	Third	2 (1+1)
14	FPT 232	Processing Technology of Cereals	UG	Third	3 (2+1)
15	FPT 241	Unit Operations in Food Processing	UG	Fourth	3 (2+1)
16	FPT 242	Processing Technology of Dairy Products	UG	Fourth	3 (2+1)
17	FPT 243	Processing Technology of Legumes and Oilseeds	UG	Fourth	3 (2+1)
18	FPT 244	Processing of Spices and Plantation Crops	UG	Fourth	3 (2+1)
19	FPT 502	Advances in Food Processing Technology	PG	First	3(2+1)
20	FPT 513	Protein Technology	PG	First	3(3+0)
21	FPT 501	Advances in Food Packaging Technology	PG	Second	3(2+1)
22	FPT 510	Lipid Technology	PG	Second	3(3+0)
23	FPT 515	Technology for RTE/RTC Food Products	PG	Second	3(2+1)
24	FPT 517	Technology of Frozen Foods	PG	Second	2(2+0)
25	FPT 597/697	Special Problem	PG	Third / Fifth	2 (0+2)

**Table 22 Research schemes undertaken**

Sr. No.	Title (B.H.)	Principal Investigator	Co Investigators	Period	
				From	To
Funding Agency: Govt. of Gujarat (Plan-Education)					
1	Establishment of students training centre for food processing (12969-01)	Dr. H. Pandey, HoD-FPT	Scientists and Research Staff, FPT&BE	April 2012	-continue-
2	Establishment of instructional processing facilities for student. (2034)	Dr. H. Pandey, HoD-FPT	Scientists and Research Staff, FPT&BE	April 2017	-continue-

**Table 23 Research projects/ out comes finalized/ approved in Agricultural Research Committees (AGRESCO-19)**

No. of recommendations finalized/approved		No. of new research projects/technical programme finalized/approved
For farmers / industry	For scientific community	
4	-	2

**Recommendations approved (2019) :****1. To formulate and standardize the process of micronutrient rich powder for women**

The entrepreneurs and food processors interested in manufacture of nutraceutical food products are advised to adopt the production technology of Micronutrient rich malted food developed by AAU, Anand. The technology involves malting of mothbean and ragi grains for 48 h and 36 h respectively and sand roasting at 150°C and 160°C respectively for 60 seconds. The moth bean malt flour (22 per cent) and ragi malt flour (19.5 per cent) are mixed in skim milk (38.5 per cent) and barley malt extract (20 per cent) and cooked for 5 minutes. The mixture is then dried under vacuum and milled. This product provides 16.75 per cent protein, 5.7 mg/100g iron, 285.0 mg/100g calcium and 1.8 mg/100g zinc. The product can be stored for 6 months at ambient temperature. The cost of the product is about ₹122 per kg.

**2. Extension of shelf life of bread using suitable ingredients**

The entrepreneurs and bakery industry interested in manufacture of extended shelf life bread are advised to use the technology developed by Anand Agricultural University, Anand. It involves addition of 1.0 per cent xanthan gum, 1.0 per cent potato peel fiber and 7.0 per cent soy flour in the bread recipe and coating of the bread loaf at the rate of 4.35 mg natamycin/kg of bread. The bread duly packed in polyethylene package can be safely stored up to 7 days at ambient temperature.

**3. Development of functional low calorie muffins**

Bakery entrepreneurs interested in production of muffins are advised to use the technology developed by Anand Agricultural University, Anand. The technology involves incorporation of 15.0 per cent of erythritol and 7.5 per cent of orange peel powder in the formulation of muffins. The muffin packed in polypropylene bags had 21 days shelf life at ambient temperature. There is reduction in calorific value by 10.12 per cent as compared to traditional muffin.

**4. Technology for development of Ready-to-Rehydrate type of rice and pulses (Sub Technology for development of Ready-to-Rehydrate type of rice)**

The entrepreneurs and food processors interested in manufacture of ready-to-rehydrate rice (RTRR) are advised to adopt the technology developed by Anand Agricultural University, Anand. The technology involves various processing operations including soaking, cooking and dehydration under specific conditions. The

final product is a pre-cooked and dried rice, which can be easily rehydrated within 6 min with addition of hot (90°C) water (1:2.5 w/v, RTRR:Water).

#### New Technical Programme/Project approved (2019):

1. Process development of cereals based product enriched with garden cress for lactating women
2. Standardization of *moringa* pulping technique using brush type pulper

**Table 24 Faculty and Staff in the department**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1.	Dr. H. Pandey	Associate Professor & Head	M.Tech.	Agricultural Engineering (PFE)	PG Guide	PhD (In service) 2013 registration & completed in 2018
2.	Dr. (Mrs) Ameer Ravani	Assistant Professor	M.Tech.	Food Processing Technology	PG Guide	PhD (In service) 2014 registration & completed in 2018
3.	Dr. Harsh P. Sharma	Assistant Professor	M.Tech.	Agricultural Engineering (APFE)	PG Guide	PhD (In service) 2014 registration & completed in 2018
4.	Er. G.P. Tagalpallewar	Assistant Professor	M.Tech.	Food Processing Technology	PG Guide	PhD (In service) 2015 registration
5.	Er. R.B. Modi	Assistant Professor	M.Tech.	Dairy Technology	PG Guide	PhD (In service) 2015 registration
6.	Er. Nilesh R Sardar	Senior Research Assistant	B.Tech.	Agricultural Engineering	-	MTech (In service) 2015 registration & completed in 2018, PhD (In service) 2018 registration
7.	Er. (Mrs) Swati Anadani	Senior Research Assistant	Senior Research Assistant	Agril. Processing & Food Engineering	-	Transferred to PHET Dept. on May 01, 2018 PhD (In service) 2017 registration

#### (C) Department of Food Engineering

The courses related to engineering subjects such as food process engineering, mechanical engineering, electrical engineering, instrumentation and process control are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. Allied courses like plant design, utilities and services and food irradiation are also covered. Research is undertaken in majority of the area of process and food engineering for use by industry.



**Table 25 Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes**

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits
1	FPE 231	Fluid Mechanics	UG	Third	3 (2+1)
2	FPE 232	Engineering Drawing and Graphics	UG	Third	3 (1+2)
3	FPE 241	Food Process Engineering – II	UG	Fourth	3 (2+1)
4	FPE 242	Material Science and Engineering	UG	Fourth	3 (2+1)
5	FPE 243	Food Refrigeration and Air Conditioning	UG	Fourth	4 (3+1)
6	FPE 351	Process Equipment Design	UG	Fifth	3 (2+1)
7	FPT 362	Processing Technology of Spices and Plantation Crops	UG	Sixth	3 (2+1)
8	PHE 241	Engineering Properties of Biological Materials	UG	Fourth	3 (2+1)
9	PHE 351	Storage Structures & Environment Control	UG	Fifth	3 (2+1)
10	FPE 353	Food Plant Utilities & Services	UG	Fifth	3 (2+1)
11	FPE 361	Process Control in Food Industry	UG	Sixth	3 (2+1)
12	FPE 471	Food Plant Design and Layout	UG	Seven	3 (2+1)
As per ICAR 5 <sup>th</sup> Dean Committees' recommendations					
13	FPE 111	Basic Electrical Engineering	UG	First	3 (2+1)
14	FPE 112	Workshop Technology	UG	First	3 (1+2)
15	FPE 113	Engineering Drawing and Graphics	UG	First	3 (1+2)
16	FPE 121	Food Thermodynamics	UG	Second	3 (2+1)
17	FPE 122	Fluid Mechanics	UG	Second	3 (2+1)
18	FPE 124	Basic Electronics Engineering	UG	Second	3 (2+1)
19	FPE 231	Heat and Mass Transfer in Food Processing	UG	Third	3 (2+1)
20	FPE 232	Food Refrigeration and Cold Chain	UG	Third	3 (2+1)
21	FPE 241	Food Plant Utilities & Services	UG	Fourth	3 (2+1)
22	FPE 502	Advances in Food Process Engineering	PG	First	3 (2+1)
23	FPE 501	Computer Aided Design of Food Plant, Machinery and Equipment	PG	Second	3 (1+2)
24	PGS 506	Disaster Management	PG	Second	1 (1+0)
25	FPE 596/696	Special Problem	PG	Third / Fifth	2 (0+2)

**Table 26 Research schemes undertaken**

Sr. No.	Title (B.H.)	Principal Investigator	Co Investigators	Period	
				From	To
Funding Agency: Govt. of Gujarat (Plan-Research)					
1	Development of Irradiation Technology for Agricultural, Animal & Food Products (12969-00)	Dr. A.K. Sharma, HoD-FE	Scientists and Research Staff, FPT&BE	April 2012	-continue-

**Table 27 Research projects/ out comes finalized/ approved in Agricultural Research Committees (AGRESCO-19)**

No. of recommendations finalized/approved		No. of new research projects/technical programme finalized/approved
For farmers / industry	For scientific community	
2	-	4

**Recommendations approved (2019):**

**1. Study on energy assessment in selected food processing plants**

The units manufacturing food products are advised to carry out energy audit of their plants periodically to conserve electrical energy. Plant producing bakery (2800MT/year) and chocolates (12000MT/year) products showed average specific electrical energy consumption of 121 kWh/MT and 310 kWh/MT respectively. Energy conservation measures have shown potential in saving electrical energy by about 36.0 per cent.

**2. Development of irradiation technology for agricultural, animal, dairy and food products. (Sub-Effect of gamma radiation on peanut storage and its oil quality)**

Entrepreneurs and oilseed processors are advised to use gamma irradiation technology developed by Anand Agricultural University, Anand for microbial decontamination and insect disinfestation of peanut. The technology results in safe storage of packaged (polypropylene, 55 µm) and irradiated (2.5 kGy) peanut kernels in ambient condition for up to 6 months.

**New Technical Programme/Project approved (2019):**

1. Technology for continuous microwave drying of (Moringa) oliefera leaves
2. Study of air temperature and velocity distribution in the heat pump assisted dryer by computational fluid dynamics
3. Study on performance of grid connected 20 kW solar photo-voltaic system
4. Development of fuzzy logic controller for effective garden irrigation

**Table 28 Faculty and Staff in the department**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1.	Dr. A.K. Sharma	Professor & Head	Ph.D., CEA&M by NPC-BEE, GoI and RP/ RSO by AERB, GoI	Food Engg Tech & Energy Auditing	PG Guide	
2.	Er. N.V. Shah	Assistant Professor	M.E.	Civil Engineering	-	
3.	Er. M.A. Makwana	Assistant Professor	M.Tech.	CAD/CAM (Mechanical Engg)	-	

4.	Er. A.N. Nakiya	Assistant Professor	M.Tech.	PEMD (Electrical Engg)	-	
5.	Er. T.H. Bhatt	Assistant Professor	M.E.	Microprocessor System & Applications	-	
6.	Dr. A. Nema	Assistant Professor	Ph.D.	PHP&F Engg	PG Guide	Transferred on May 1,18 to PHET
7.	Dr. K.V. Vala	Assistant Professor	M.Tech.	Agricultural Processing & Food Engg	-	Transferred from Bioenergy Dept. on May 01, 2018 PhD (In service) 2014 registration & completed in 2018
8.	Er. J.P. Rathod	Senior Research Assistant	M.Tech.	Agil. Engg	-	Transferred to Bioenergy Dept. on May 01, 2018
9.	Mr. K.J. Gajjar	Assistant Instructor	I.T.I.	Machinist	-	Resigned and relieved on Jan 31, 2019
10.	Mr. A.P. Parmar	Mechanic	I.T.I.	Fitter	-	
11.	Mr. R. Barot	Craft teacher	Diploma	Electrical Engineering	-	-
12.	Er. P. B. Moradiya	Research Associate	M.Tech.	Process and Food Engineering	-	Since February 22, 2019

#### (D) Department of Food Quality Assurance

The courses related to food science and laboratory analysis for quality assurance are the major focus for teaching to the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy. A state of art Food Testing Laboratory also established for analysis of food products.

**Table 29 Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes**

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits
1	FQA 231	Food Biochemistry and Human Nutrition	UG	Third	3 (2+1)
2	FQA 351	Food Plant Sanitation	UG	Fifth	3 (2+1)
3	FQA 361	Food Regulations & Quality Assurance	UG	Sixth	3 (2+1)
As per ICAR 5 <sup>th</sup> Dean Committees' recommendations					
4	FQA 111	General Microbiology	UG	First	3 (2+1)
5	FQA 112	Food Chemistry of Macronutrients	UG	First	3 (2+1)

6	FQA 121	Food Microbiology	UG	Second	3 (2+1)
7	FQA 122	Food Chemistry of Micronutrients	UG	Second	3 (2+1)
8	FQA 231	Food Biochemistry and Nutrition	UG	Third	3(2+1)
9	FQA 241	Food Biotechnology	UG	Fourth	3 (2+1)
10	FQA 242	Food Plant Sanitation	UG	Fourth	2(1+1)
11	FQA 232	Industrial Microbiology	UG	Third	3(2+1)
12	FQA 511	Advances in Fermentation Technology	PG	First	4 (2+2)
13	FQA 504	Advances in Food Chemistry and Nutrition	PG	First	3 (2+1)
14	FQA 501	Advances in Analytical Techniques	PG	Second	3 (1+2)
15	FQA 503	Food Safety and Risk Analysis	PG	Second	3 (2+1)
16	FQA-516	Advances in Food Biotechnology	PG	Second	3(2+1)
17	FQA-512	Advances in Food Microbiology	PG	Third / Fifth	3(2+1)
18	FQA 597	Special Problem	PG	Third / Fifth	2 (0+2)

**Table 30 Research schemes undertaken**

Sr. No.	Title (B.H.)	Principal Investigator	Co Investigators	Period	
				From	To
Funding Agency: Govt. of Gujarat (Plan-Research)					
1	Development of food decontamination technology for safety and quality of fresh and minimally processed fruits and vegetables, Anand (12993-21)	Dr. R.V. Prasad, HoD-FQA	Dr. B.H. Joshi	April 2012	-continue-
Funding Agency: Govt. of Gujarat (Plan-Education)					
2	Establishment of department of food safety and testing (12987-11)	Dr. H.G. Bhatt	Dr. R.V. Prasad	May 2015	-continue-

**Table 31 Research projects/ out comes finalized/ approved in Agricultural Research Committees (AGRESCO-18)**

No. of recommendations finalized/approved		No. of new research projects/technical programme finalized/approved
For farmers / industry	For scientific community	
3	3	4

### **Recommendations approved (2018):**

#### **1. Super critical extraction of essential oil from Ajwain (Carom seed) and Black pepper**

Entrepreneurs and Agro-processing units involved in production of superior quality pepper essential oil are advised to use the supercritical fluid extraction technology developed by Anand Agricultural University, Anand. This technology involves use of carbon dioxide supercritical fluid extraction at controlled pressure of 245 bar and temperature of 470C which yields 5.6per cent pepper essential oil. The essential oil had 1.3 per cent piperine.

Entrepreneurs and Agro-processing units involved in production of superior quality ajwain essential oil are advised to use the supercritical fluid extraction technology developed by Anand Agricultural University, Anand. This technology involves use of carbon dioxide supercritical fluid extraction at controlled pressure of 300 bar and temperature of 35°C which yielded 3.9 per cent ajwain essential oil. The essential oil had 60.8 per cent thymol.

## **2. Production technologies for value added products from pumpkin seeds**

The entrepreneurs and food processors interested in manufacture of roasted salted pumpkin seed snacks are advised to adopt the production technology of roasting of pumpkin seed developed by Anand Agricultural University, Anand. The technology involves dehulling of whole pumpkin seed, conditioning to moisture content of 12.0 per cent using 20.0 per cent salt solution, roasting the pumpkin seed in halogen roaster at 190°C for 6 min. The product prepared was highly acceptable, possessing adequate hardness, fracturability and had reasonable (up to 90 days) keeping quality.

## **3. Evaluation of combined effect of gamma irradiation and edible coating on shelf-life of sapota fruit (Sub Evaluation of independent effect of gamma irradiation and edible coating on shelf-life of sapota fruit)**

I. Entrepreneurs interested in enhancement of shelf-life of sapota fruit cv. Kalipatti are advised to use the edible coating (blend of pectin, polyvinyl alcohol and glycerol) technology developed by Anand Agricultural University, Anand. The shelf life of coated sapota fruit was 11 days at ambient temperature, with minimal physiological weight loss (18.51 per cent) and retaining the firmness (0.16 N) of fruit.

II. Entrepreneurs interested in enhancement of shelf-life of sapota fruit cv. Kalipatti are advised to use gamma irradiation (0.3 kGy) technology developed by Anand Agricultural University, Anand. The shelf life of irradiated sapota fruit was 10 days with minimal physiological weight loss (15.60 per cent) and retaining the firmness (0.19 N) of fruit.

## **4. Study on decontamination of pesticides in selected Spices, vegetable and fruits using $\gamma$ -irradiation, UV radiation and Ozonation Techniques (Sub Title: Degradation of pesticide in red chili powder using gamma irradiation)**

Gamma irradiation of red chilly did not show any effect on the degradation of pesticides such as for chlorpyrifos, ethion, triazophos, trifloxystrobin, azoxystrobin, cypermethrin, acetamiprid, carbendazim, imidacloprid, thiacloprid, chlorantraniliprol, fipronil, fipronil-sulfone, profenophos and flubendamide.

## **5. Bio-chemical characterization of Moringa oleifera leaves and pods**

- Biochemical characterization of tender moringa leaves was evaluated in two seasons i.e. November – May and June – October. The biochemical characterization of tender moringa pod was evaluated in Nov-May.
- GCMS analysis of moringa leaves led to identification of four compounds viz., phytol acetate, 2,4-Di-tert-butylphenol, 1-Tetradecanol and Neophytadiene
- GCMSQTOF analysis of moringa pods showed presence of fifteen compounds viz., 2,4-Di-tert-butylphenol; 1-Undecanol; 1-Hexadecanol; 1-Hexadecanol; bis-4,4'-(1-methylethylidene) Phenol; Nonacos-1-ene; 2-Dodecylcyclohexanone; Glycidyl palmitate; (Z)-9,17-Octadecadienal; N-heptafluorobutyl-1,2,3,4-Tetrahydro-1-naphthylamine; L-Norvaline, N-decyloxycarbonyl-, undecyl ester; Dodecanoic acid, 2,4,6-trimethyl-, methyl ester; Glycidyl palmitate; Octadecanoic acid 2,3-dihydroxypropyl ester; Glycidyl oleate and Glycidyl palmitate
- LCMSQTOF analysis of moringa pods showed presence of thirty five compounds viz., (S)-Angelicin; trans-Zeatin; N-stearoyl tryptophan; Citpressine I; Trp-Ala-Pro; Trp-Ser-Pro; His-HoPhe-OH; His-Ser-



OH; His-TyrMe-OH; Lactococcin; 4-Fluoro-L-threonine; Cinnacsiol D4; Lys-Trp-OH; Avenanthramide 1s; PE-Cer(d14:1(4E)/21:0); 2-glyceryl-PGE2; Caohuoside D; Ambofuracin; Caohuoside D; Evasterioside D; TyrMe-Phe-OH; 15-Acetoxyscirpene-3,4-diol 4-O-a-D-glucopyranoside; D-Glucosaminide; (+)-Syringaresinol O-beta-D-glucoside; Trypanothione disulfide; Tyr-Gly-OH; Theobromine; Ile Asn-Phe; 4(Hydroxymethyl)benzenediazonium(1+); (+)-Mayurone; Asp-Asp-His; and 2E,6E-Octadialenal

#### 6. Evaluation of purity of silver foil used on sweets in rural area

- 50 silver foil coated sweet samples from unorganized sector were analyzed for silver and aluminum content. None of the sweet samples contained pure silver.
- Analysis of few samples for presence of heavy metals and other elements revealed that cadmium, cobalt, chromium, lead, nickel, iron, copper, manganese, phosphorus and zinc were present in sweet samples as undesirable elements.

#### New Technical Programme/Project approved (2019):

1. Technology for production of superior quality of cinnamon essential oil using super critical fluid extraction
2. Decontamination effect of Dielectric Barrier Discharge plasma and UV-C on selected microorganisms
3. Technology for Extraction of Carvone and Limonene rich Essential Oil from Dill Seed
4. Super Critical Fluid Extraction of Essential Oil from Fennel Seed

**Table 32 Faculty and Staff in the department**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1	Dr. R.V. Prasad	Professor & Head	Ph.D.	Dairy Microbiology	PG Guide	
2	Dr. H.G. Bhatt	Associate Professor	Ph.D.	Material Science	PG Guide	HoD –FST Dept
3	Dr. Bhavesh H. Joshi	Associate Professor	Ph.D.	Microbiology	PG Guide	PG Coordinator
4	Dr. Devesh H. Patel	Assistant Professor	Ph.D.	Dairy Chemistry	-	
5	Mr. Kedar S. Damle	Assistant Professor	M.Sc.	Organic Chemistry	-	
6	Er. Jafarali K. Momin	Assistant Professor	M.Sc.	Dairy Microbiology	-	
7	Mr. Rashmin Dhingani	Assistant Professor	M.Sc.	Biotechnology	-	
8	Er. Akashamrut M. Patel	Assistant Professor	M.Tech.	Dairy Chemistry	-	
9	Mr. Hitesh S. Christian	Laboratory Technician	M.Sc.	Biochemistry	-	
10	Mrs. Nimita P. Runajkar	Laboratory Technician	B.Sc.	Microbiology	-	
11	Dr. Hetal Bhatt	Research Associate	M.Tech.	Food Processing technology	-	Joined on Feb 21, 2019

### (E) Department of Food Business Management

The department mainly focuses on courses such as Project Management, Entrepreneurship Development, Marketing Management & International Trade, Operation Research, Computer Programming & Data Structures, IT Applications in Food Industry, Engineering Mathematics and Language & Communication Skills.

The department is also looking after the Training & Placement and Under Graduate academic activities of the college along with implementation of special projects as assigned by the college/university.

**Table 33 Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes**

Sr. No.	Course No	Subjects	UG / PG	Semester	Credits
1	FBM 361	Project Management & Entrepreneurship Development	UG	Sixth	3 (2+1)
2	FBM 471	Marketing Management & International Trade	UG	Seventh	3 (3+1)
3	FPE 472	IT Applications in Food Industry	UG	Seventh	1 (0+1)
4	STAT 361	Statistics & Optimization	UG	Sixth	3 (2+1)
As per ICAR 5 <sup>th</sup> Dean Committees' recommendations					
5	MATH 111	Engineering Mathematics-I	UG	First	2 (2+0)
6	MATH 121	Engineering Mathematics-II	UG	Second	2 (2+0)
7	ENG 111	English Language	UG	First	2 (1+1)
8	FBM 241	Business Management and Economics	UG	Sixth	2 (2+0)
9	FBM 111	Computer Programming and Data Structures	UG	First	2 (1+1)
10	FQA 509	Advances in Food Additives & Preservatives	PG	First	3 (2+1)
11	FPT 518	Traditional and Value-added Food Products	PG	First	3 (2+1)
12	FPT 999	Masters Seminar	PG	Forth	1 (1+0)
13	STAT 231	Statistical Methods and Numerical Analysis	UG	Third	2 (1+1)
14	PGS- 503	Intellectual Property and its management in Agriculture	PG	Second	1 (1+0)
15	PGS- 505	Agricultural Research, Research ethics and Rural Development Programs	PG	Second	1 (1+0)
16	FPT-982	Operational Research	PG	Third/ Fifth	3 (3+0)

**Table 34 Faculty and Staff in the department**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1.	Dr. S. Dutta	Associate Professor & Head	Ph.D.	Management	PG Guide	
2.	Mr. P.S. Parsania	Assistant Professor	M.Sc.	Information technology	-	
3.	Mr. N.M. Chavda	Assistant Professor	M.Phil.	English	-	
4.	Mr. D.B. Patel	Assistant Professor	MBA	Marketing	-	

**(F) Department of Bioenergy**

The department mainly focuses on Environmental, Bioengry, Solar energy, Wind energy and Non-conventional energy sources, system and management courses of the under-graduate & post-graduate academic programmes in the College of Food Processing Technology & Bio-Energy.

**Table 35 Semester wise distribution of Subjects in UG & PG Food Processing Technology/Food Technology programmes**

Sr. No.	Course No.	Subjects	UG / PG	Semester	Credits
1	Env 231	Environment Science	UG	Third	2 (1+1)
2	BE 361	Bio energy	UG	Sixth	4 (3+1)
As per ICAR 5th Dean Committees' recommendations					
3	ESD 111	Environmental Sciences & Disaster Management	UG	First	2 (1+1)

**Table 36 Faculty and Staff in the department**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1	Dr. S.S. Kapdi	Professor & Head	Ph.D.	Renewable Energy	PG Guide	
2	Dr. K.V. Vala	Assistant Professor	M.Tech.	Agricultural Processing & Food Engg	-	Transferred to FE Dept. on May 01, 2018 PhD (In service) 2014 registration & completed in 2018
3	Er. J.P. Rathod	Senior Research Assistant	M.Tech.	Agricultural Engineering	-	Transferred from FE Dept. on May 01, 2018

**(G) Department of Food Plant Operations**

The department mainly focuses on hands on experience through 10 experiential learning namely extrusion, frying, IQF, Juice processing, retort, fruits and vegetables handling, drying, oilseed processing and dhal milling.

**Table 37 Faculty and Staff in the department**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1	Dr. S. H. Akbari	Associate Professor	Ph.D.	Agricultural Processing & Food Engineering	PG Guide	Additional Charge of HOD, FPO Dept.

**Table 38 Administrative and Supporting Staff of the College**

Sr No.	Name	Designation	Qualification	Specialization	PG Recog.	Remarks
1.	Dr. D.C. Joshi	Principal	Ph.D.	Food Engg / Agril. Engg.	PG Guide	Retired on Aug 31, 2018
2.	Shri R.S. Darji	Head Clerk	Old SSC Pass	-----	-	Up to Feb 28, 18
3.	Shri G.Y. Damle	Senior Clerk	B.Com	-----	-	
4.	Shri S.B. Purohit	Senior Clerk	B.A.	-----	-	
5.	Shri M.J. Rana	Senior Clerk	M.Com	-----	-	Since July 01, 15
6.	Shri K.M. Kanzariya	Junior Clerk	B.A.	-----	-	
7.	Shri Ankit Patel	Junior Clerk	B.Com	-----	-	Transferred from Reg. office on Sept 30, 2017
8.	Ms. Sonal Makwana	Junior Clerk	M.Com, M.Ed	-----	-	Transferred from Account office on Feb 28, 2019
9.	Shri R. S. Vasava	Lab Attendant	7 <sup>th</sup> Pass	-----	-	
10.	Shri M. H. Chavda	Helper	7 <sup>th</sup> pass	-----	-	Since Apr 1, 2003
11.	Shri J. M. Solanki	Sweeper	3 <sup>rd</sup> Pass	-----	-	
12.	Shri R. S. Parmar	Lab boy	Old SSC Pass	-----	-	Since Jan 31, 2002
13.	Alpesh	Senior Clerk	B.Com	-----	-	Joined on March 1, 2019

## Extension Activities

**Table 39 Extension Activities carried out (2018-19)**

Sr. No.	Name of Centre / Training	No. of Participation
1	Training Program on Food Processing Technology (Certificate course)	22
2	Training cum coaching for ICAR National Eligibility Test (NET)	265

**Table 40 Extension Education Activities carried out under special training programs**

Sr. No.	Activity	Name of Training
		Food Processing Technology
1	Khedut Shibir	595
2	Group Discussions	-
3	Crop Demonstration/ Interactive Demonstration	-
4	Agri. Fairs / Exhibitions	40,000 visitors
5	Guidance to Farmers / visitors	1295
6	Radio/TV Talks	-
7	Farm Literature Published/Distributed	-
8	Guidance Through Letters/ Telephone/sms	-
9	Field Visit/ Crop Diagnostic Services	485 farmers
10	Farmer Scientists Interactions	-
11	Lectures Delivered for New Technology	-
12	Crop Seminars	-
13	Personality Development	-

**Note:** Figures in bracket indicate numbers of participants/beneficiaries



## V. SEMINAR, WORKSHOPS AND TRAININGS

**Table 41 Training/Workshop/Meeting/Seminar/Symposium/Conference/Convention organized by the college**

Title	Duration	Sponsoring Authority
National workshop on “Enhancement of Farmers Income through Post-Harvest Management”	August 28, 2018	Indian Society of Agricultural Engineers (ISAE), Anand Chapter and College of Food Processing Technology & Bio-energy, AAU, Anand

**Table 42 Training /Workshop/Meeting/Seminar/Symposium/Conference/Convention/Council Meeting/ QRT Meeting attended by the Faculty**

Sr. No.	Name of Teacher/ Scientist	Participated (detail Name of Event/Programe, Institute, Place)	Duration	
			From	To
1	Mr. Nischal Chavda	Soft and Entrepreneurial Skill Development for Agricultural Sciences	13.11.2018	03.12.2018
2	Dr. Samit Dutta	ICAR-NAARM Training Programme on “Developing Business Proposal for Farmer Producer Companies” at NAARM, Hyderabad	06.08.2018	10.08.2018
3	Dr. Samit Dutta	As a speaker in panel discussion on “Enterprises Development - Opportunities and Challenges” to share views on “Role of incubators for entrepreneurship Development”, organized as part of interactive seminar & roadshow for Vibrant Gujarat Start-up & Technology Summit 2018 at IRMA, Anand	24.08.2018	24.08.2018
4	Dr. Samit Dutta	Participated in Vibrant Gujarat Start-up & Technology Summit 2018, Gandhinagar	11.10.2018	11.10.2018
5	Dr. Samit Dutta	Facilitated two sessions on ‘Traditional Dairy Products and its Economic Importance’ of 48th Refresher Course: Development Economics organized by UGC-HRDC, S P University, V V Nagar	22.11.2018	22.11.2018
6	Dr. Samit Dutta	Facilitated one session on ‘Setting-up of a Farmer Producer Company’ of 5 days training programme on “Papaya Processing: Value Addition and Valorisation” for the entrepreneurs of Swadeshi Science Movement, Kerala, under DST funded i-STED project	23.11.201	23.11.201
7	Dr. Samit Dutta	As regional jury for National Entrepreneurship Awards (NEA) of the Ministry of Skill Development and Entrepreneurship (MSDE) to recognize and honor outstanding young first-generation entrepreneurs attended evaluation meeting at IRMA, Anand	03.12.2018	03.12.2018

8	Dr. Samit Dutta	Facilitated one session on ‘Domestic regulations & voluntary international standards (certificates)’ of STTP on “Food Processing Management” for students of PGDM ABM, URICM, Gandhinagar	05.02.2019	05.02.2019
9	Er.N.V.Shah	Education Division, ICAR, New Delhi Sponsored Winter School on “Solar photovoltaic and thermal applications for energy-water-food security in agriculture” at ICAR - Central Arid Zone Research Institute, Jodhpur – 342 003, Rajasthan, India	19.09.2018	09.10.2018
10	Dr. Ameer Ravani	Participated in ICAR sponsored winter school on “Significance of bioactive ingredients and supplements in health foods” at Department of Dairy and Food Chemistry, College of Dairy and Food Science Technology, Maharana Pratap University of Agriculture & Technology, Udaipur-313001, Rajasthan.	1.1.2019	21.1.2019
11	Er. A N Nakiya	Winter school on “Solar photovoltaic and thermal applications for energy-water-food security in agriculture” organized by ICAR-Central Arid Zone Research Institute, Jodhpur, Rajasthan	19.09.2018	9.10.2018

**Table 43 Dignitaries/Officers visited the College**

Sr. No.	Name	Date
1.	Dr. R. S. Gill, Former Head, Dept. of Entomology, PAU, Ludhiana	11.04.2018
2.	Dr. J. H. Kulkarni, Former V.C., VAS, Dharwad	11.04.2018
3.	Harshkumar Bhanwala, Chairman, NABARD	25.04.2018
4.	Prof. S. Anantha Ramakrishna, I.I.T. Kanpur	15.06.2018
5.	Kuldeep Shcoran, Horticulture Dept., Hisar (Hariyana)	20.06.2018
6.	Prof. A. K. Gahlot, Former V.C., Rajasthan Uni. Of Veterinary and Animal Sciences, Bikaner, Rajasthan	28.07.2018
7.	Dr. Chindi Vasudevappa, V.C., NIFTEM	01.09.2018
8.	Dr. N. K. Jain, Prof. & HOD, CDFST, Udaipur	28.09.2018
9.	Dr. N. Yadav, ICAR – CIPHET, Ludhiana	12.10.2018
10.	Prof. V. B. Singh, Former V.C., MPUAT, Udaipur	15.10.2018
11.	Dr. A. L. Phaeade, Dean FIA, MPKV, Rahuri	17.12.2018
12.	Prof. Vishnu Sharma, V.C. RAJUVAS, Bikaner	05.02.2019
13.	Dr. p. S. Pandey, ADG(Edr), ICAR	05.02.2019
14.	S. K. Chaudhary, ADG (Swm), ICAR	05.02.2019
15.	Dr. S. P. Yadav, Director, CAZRI, Jodhpur	05.02.2019
16.	Dr. Ravindrakumar, Former V.C. Meerut	29.03.2019

## VI. PUBLICATIONS / ACHIEVEMENT BY FACULTY

This section includes the publications made by the staff during the year 2018-19. The research papers published and presented have been listed hereunder.

### Research paper published during year 2018-19 (Category Wise)

#### (i) International journal

1. Joshi, B. H., Dhingani, R. M. and Prasad, R. V. (2018). Selection and identification of a novel thermotolerant *Kluyveromyces marxianus* strain for valorization of lactose waste into ethanol. *Journal of Experimental Biology and Agricultural Sciences*, 6(3):482 – 489. (ISSN No. 2320 – 8694) (NAAS Score: 5.07) (UGC Approved).
2. Macwan, A., Joshi B. H. and Macwan, A. (2018). Edible coating and irradiation of sapota fruit: A concise review, *Int. J. Chem. Stud.*, 2018; 6(3): 1908-1910. PRINT ISSN: 2349-8528, IMPACT FACTOR: GIF: 0.565, (NAAS Score: 5.31)
3. Patel, S. and Dutta, S. (2018). Development and Quality Evaluation of Galactagogue Product Enriched with Garden Cress for Lactating Women. *International Journal of Current Microbiology and Applied Sciences*, ISSN 2319-7706, 7 (11): 1841-1848 (NAAS Score: 5.38)
4. Patel, S. and Dutta, S. (2018). Effect of Soaking and Germination on Anti-Nutritional Factors of Garden Cress, Wheat and Finger Millet. *International Journal of Pure & Applied Bioscience*, ISSN 2320 – 7051, 6 (5): 1076-1081 (NAAS Score: 4.74)
5. Dutta, S. and Patel, D. (2018). Assessing the knowledge and adopted practices of street food vendors in the city of Anand – Vidhyanagar regarding food hygiene and safety. *International Journal of Research in Applied, Natural and Social Sciences*, ISSN 2347-4572, 6 (11): 7-16 (NAAS Score: 3.00)
6. Dutta, S. and Patel, D. (2018). Green marketing: awareness and preference among faculty members of agricultural university. *International Journal of Research in Applied, Natural and Social Sciences*, ISSN 2347-4580, 6 (11): 1-8 (NAAS Score: 3.00)
7. Macwan, A. J., Dutta, S. and Macwan, A. J. (2018) Application of Electrospray Atomization (EA) – A Review Article. *Chemical Science Review and Letters*, ISSN 2278-6783, 7 (27): 745-750 (NAAS Score: 5.21)
8. Sardar, N. R., Prasad, R. V., Sharma, H. P., Bhatt, H. G., Tagalpallewar, G. P., & Fenn, B. N. (2018). Supercritical fluid extraction of essential oil from cryo ground ajwain seed. *International Journal of Chemical Studies*, 6(6), 27-31. (NAAS Score: 5.31)
9. Ravani A., Prasad R. V., Damle K. and Joshi D. C. (2018). Profiling of polyphenols, antioxidants potential, nutrients and flavor compounds of *Moringa oleifera* pods (var. PKM - 1), *International journal of chemical studies*, 6(5): 1571-1575 (NAAS rating: 5.31)
10. Bhatt H. K. and Prasad R. V. (2018). Engineering properties and quality characteristics of flaxseed. *International Journal of Chemical Studies*, 6(4): 926-930 (NAAS rating: 5.31).

#### (ii) National journal

1. Modi R. B., Patel K. N. (2018) Fruit Pulp and Beverage Industry of Gujarat: A Technical Case Study. *AMC Indian J. of Entrepreneurship*. 1(3). 7-14.
1. Ravani A., Joshi B. H., Prasad R. V. and Joshi D. C. (2018). Agro food wastes as substrates for the production of enzymes, 2018, *Beverage and Food World*, 45(8): 21-24 (ISSN number: 0970-6194).
2. Anadani S. V., Vyas D. M., Akbari S. H. Ravani A. and Gondaliya J. (2018), Studies on Quality of Freeze Dried Aloe vera Fillets in Different Packaging Materials, *Agricultural Engineering Today*, 42(3): 19-25 (NAAS rating: 5.30) .
3. Ravani A. V., Anadani S. V., Pandey H. Sardar N. and Joshi D. V. (2019), Canning preservation of mango slices, *Agriculture Engineering Today*, Vol. 43(1), 2019 (NAAS rating: 5.30).

### **Research paper presented at Seminar / symposia etc. in 2018-19 (Category Wise)**

#### **(i) International level**

1. Kapdi, S. S., Sagarika, N., Sutar, R. F., Patil, G. B. (2019). Drying characteristic of date palm fruits in a greenhouse dryer. Presented in 53<sup>rd</sup> Annual convention of Indian Society of Agricultural Engineers (ISAE) and International Symposium on “*Engineering Technologies for Precision and Climate Smart Agriculture*” held at BHU, Varanasi during January 28-30, 2019.
2. Kapdi S.S., Dave K.D., Sutar R.F., Vala K. V. (2019). Applications of solar energy in refrigeration: a review. Presented in 53<sup>rd</sup> Annual convention of Indian Society of Agricultural Engineers (ISAE) and International Symposium on “*Engineering Technologies for Precision and Climate Smart Agriculture*” held at BHU, Varanasi during January 28-30, 2019.
3. M. B. Patel\*, R. V. Prasad, B. H. Joshi and R. M. Dhingani “Decontamination of Bacteria from Cumin Seeds using Atmospheric Cold Plasma’ in iCRAFPT’18 International Conference on Recent Advances in Food Processing Technology; Theme: Doubling Farmers’ Income Through Food Processing organized by IIFPT, Thanjavur, during August 17-19th, 2018. (Awarded First Prize)

#### **(ii) National level**

1. Gajera R. R., Ravani A. and Patel A. M. (2019). Storage characteristics of whey based fruit beverage. Presented in 53<sup>rd</sup> Annual convention of Indian Society of Agricultural Engineers (ISAE) and international symposium on “*Engineering Technologies for Precision and Climate Smart Agriculture*” held at Institute of Agricultural Sciences, Banaras Hindu University, Varansi, U.P., India during January 28-30, 2019.

### **Books/Chapter or article published in books during year 2018-19 (Category Wise)**

#### **(i) Books published**

#### **(ii) Book chapter/article published**

1. Kapdi S.S. (2018). **Design consideration of biogas plant**. In: D.K. Vyas, J. Sravan Kumar and J.J. Chavda (eds.). Green Energy Initiatives in Agriculture to Combat Climate Change, Technical Compendium of Model Training Course. College of Agricultural Engineering & Technology, AAU, Godhra, EDU: 4:16:2018:40. pp 15-21.

2. Kapdi S.S. (2018). **Development of biogas purification and bottling techniques towards production of green and low cost fuel.** In: D.K. Vyas, J. Sravan Kumar and J.J. Chavda (eds.). Green Energy Initiatives in Agriculture to Combat Climate Change, Technical Compendium of Model Training Course. College of Agricultural Engineering & Technology, AAU, Godhra, EDU: 4:16:2018:40. pp 22-29.
3. Kapdi S.S. (2018). **Energy auditing management in small scale agro processing industries.** In: D.K. Vyas, J. Sravan Kumar and J.J. Chavda (eds.). Green Energy Initiatives in Agriculture to Combat Climate Change, Technical Compendium of Model Training Course. College of Agricultural Engineering & Technology, AAU, Godhra, EDU: 4:16:2018:40. pp 30-35.
4. Kapdi S.S. (2018). **Solar energy applications in storage of agricultural products.** In: Priyabrata Santra, Surendra Poonia and R.K. Singh (eds.). Solar Photovoltaic and Thermal Applications for Energy-Water- Food Security in Agriculture, Technical Compendium of ICAR Winter School. ICAR- CAZRI, Jodhpur, pp 349-357.
5. Kapdi S.S. (2018). **Role of biogas for energy security and mitigation of climate change in agriculture.** In: Priyabrata Santra, Surendra Poonia and R.K. Singh (eds.). Solar Photovoltaic and Thermal Applications for Energy-Water- Food Security in Agriculture, Technical Compendium of ICAR Winter School. ICAR- CAZRI, Jodhpur, pp 367-375.



## VII. STUDENTS' WELFARE ACTIVITIES

The brief details about the students' amenities, NSS and co-curricular activities carried out during the year have been reported in this section

### Hostel Facility

Separate well-equipped boys and girls hostels to accommodate U.G. and PG boys and girls students exist on the campus, which provide residential facilities to the students. During the reporting period 29 boys students (UG & PG) were accommodated in the Visvesvaraya boys hostel and 18 girls students (UG & PG) were accommodated in the Maitreyee girl's hostel. Each hostel is facilitated with a T.V., Guest and Reading room, gym and sports facilities, R.O. with Water Cooler, solar / gas water heating system and vehicle parking facilities. University primary health centre is offering the health services to the students and staff. During the reporting period Dr. A. K. Sharma (Professor), Er. A. N. Nakiya (Assistant Professor) and Mrs. Amee Ravani, (Assistant Professor) worked as Rector and Assistant Rectors Boys and Girls, respectively.

**Table 44 Hostel Facility of the College**

Sr No.	Hostel Name	Floor	Room	Student Capacity	Actual Student Accommodated
1	Visveshvaraya	Ground	09	27	26
		1 <sup>st</sup>	12	36	35
		2 <sup>nd</sup>	12	36	35
2	Maitreyee	Ground	07	14	8
		1 <sup>st</sup>	10	20	16
		2 <sup>nd</sup>	10	20	14

### Mess management

During the reporting period in all the hostels messes were run by the private contractor. Each hostel provided with all the required items like dinning furniture, kitchen vessels, fridges, cooking gas connections, etc for running the messes. For smooth running of mess and to provide nutritious and delicious food to the students, a weekly menu was prepared by the mutual understanding of students in the presence of college authority. A canteen facility through private contractor appointed by the university is available in the vicinity of hostel area. Similarly another canteen and an Amul Parlour are situated on the campus near university bhavan for providing refreshment to the students on payment basis during the working hours.

**Table 45 Activities carried out under NSS**

S.No.	Activity	Date/Month	Place
1	International Yoga Day	21/06/2018	University Bhavan, AAU, Anand
2	Campus Ambassador	July-2018	Two Students Selected
3	Participation in Youth Parliament	Aug-2018	Two Students Participated
4	Food Loss Awareness Lecture	06/09/2018	Seminar Room, FPTBE, AAU, Anand
5	State Pre Republic Day Parade Participation	22-24/09/2018	Gohil Harpalsinh Bharatsinh participated

6	Tree Plantation	27/07/2018	FPTBE, AAU, Anand
7	Swachhata Pakhwada	13-14/08/2018	Boys & Girls Hostel of FPTBE, AAU, Anand
8	Celebration of Anti-Addiction Week	02/10/2018	Auditorium Hall, FPTBE, AAU, Anand
9	Blood Donation Camp	05/10/2018	FPTBE, AAU, Anand
10	Thalassemia Screening Test and Counselling Camp	10/07/2018	Seminar Room, FPTBE, AAU, Anand
11	NSS Special Camp (7 days)	14/03/2018 to 20/03/2018	Village Agas, Taluka- Petlad & District- Anand

### Education tour

As part of the curriculum, an Educational Tour of 8th Semester B.Tech. (FPT) students for the academic year 2018-19 was conducted by department of Food Business Management of the college. Mr. Rashmin Dhingani, Assistant Professor and Mr. Kedar S. Damle, Assistant professor planned and commenced the tour on December 17, 2017 (14 days) from Anand. The tour includes 20 boys and 14 girls including 2 staff members. The main objective of the tour was to visit as many technically important places related to food processing technology discipline and thereby exposing the students to the current and latest development in the field, industries and at institute-level. The efforts were made to visit industries related to packaging, meat and meat products, milk and milk products, fruits and vegetable, spices, oil, chocolate and beverages products and related raw materials and machineries.

Total 12 food companies/ institutes were visited and students gained knowledge about different aspects of the food products, food packaging, food engineering and their marketing. About 3250 km distance was covered during the entire tour mainly covering four states viz Gujarat, Mahashtra and Goa.

### Prevention of Ragging in the College

The anti-ragging committee has been formed for prohibition of ragging in the college. The anti-ragging committee works as per the norms and directives of Hon'ble Supreme court. During the reporting period, no incident of ragging was observed in the college.

### Table 46 Anti-Ragging Committee

Prof. R.F. Sutar, Professor & Head, Dept. of Post Harvest Engg. & Technology	Chairman
Prof. R.V. Prasad, Professor & Head, Dept. of Food Quality Assurance	Member
Prof. S.S. Kapdi, Professor & Head, Dept. of Bio energy	Member
Mr. Govind P. Tagalpallewar, Assistant Professor & Chairman Students' Representative Council	Member
Dr. Bhavesh Joshi, Associate Professor & Hostel Rector	Member
Mr. R.B. Modi, Assistant Professor & Assistant Rector (Boys)	Member
Mrs. Ameer Ravani, Assistant Professor	Member
Mr. N.M. Chavda, Assistant Professor & Coordinator (UG Academics)	Member
Dr. Anurag Nema, Assistant Professor & NSS Programme officers	Member
Mr. Nirav Tejani, Student (M.Tech., FPT & BE, III Semester)	Member
Ms. Vidhi Vaja, Student (M.Tech., FPT & BE, III Semester)	Member

**Table 47 Committee members of the Women Cell**

1	Smt. H.H. Chavda	Associate Professor	Chairperson
2	Smt. Ameer Ravani	Assistant Professor	Member
3	Ku. Priti Thakar	Balwadi Teacher	Member
4	Smt. Sonal Makwana	Jr. Clerk	Member

**Computer cell**

A well-equipped computer cell having internet connectivity has been established in the college. The practical classes of U.G. & P.G. students for computer applications are conducted. Besides this, the facilities are also utilized by the students for their research data analysis, reviewing research articles, preparation of presentations, etc. Presently, the cell is having 26 computers with licensed operating system softwares like Office, Turbo C compilers, etc.

**VIII. TRAINING AND PLACEMENT**

The details about the In-plant trainings given to the students by different food processing and related organisations as well as the placement of outgoing students through campus interviews are given in this section. Also, the details about the year wise graduates passed out and their placements since the inception of the college are given hereunder. Dr. S. Dutta, Associate Professor, Department of Food Business Management worked as the In-charge, Training and Placement Cell. Mr. D.B. Patel assisted him in the activities.

**Table 47 Details of In-plant trainings of 8<sup>th</sup> semester U.G. students during 2018-19**

Sr. No.	Name of Organization	No. of Students
		U.G.
1	Banaskantha District Co-operative Milk Producers' Union Ltd., Banaskantha	1
2	CALF Laboratory-NDDB, ANAD	2
3	Chhajer Foods Pvt. Ltd., Ahmedabad	3
4	Flourish Pure Foods Ltd., Ahmedabad	2
5	General Mills, Hyderabad	3
6	Havmor Icecream Pvt. Ltd., Ahmedabad	1
7	Iscon Balaji, Kheda	2
8	Jayant Snacks and beverages, Rajkot	1
9	Kings Dehydrated Foods Pvt.Ltd., Mahuva	2
10	Maharaja dehydration pvt. Ltd., Mahuva	1
11	Mondelez India Foods Pvt. Ltd., Baddi	2
12	Parle Products Pvt. Ltd., Bhuj	2
13	Rich Gravis Pds. Pvt. Ltd., HP	2
14	Schmitt - Rajhans Nutriment Pvt. Ltd., Kosamba	1
15	Supreme Nutri Grain Pvt. Ltd., Rajkot	2

16	Vadilal Industries Limited, Gandhinagar	9
17	Vitagreen Products Pvt. Ltd., Rajkot	3
18	Banaskantha District Co-operative Milk Producers' Union Ltd., Banaskantha	1

**Table 48 Number of students recruited through campus interviews (2018)**

Sr. No.	Name of Organization	No. of Candidates offered Job	
		U.G.	P.G.
1	Iscon Balaji Foods, Kheda	1	3
2	Flourish Pure Foods Ltd., Ahmedabad	1	-
3	Austin Foods & Beverages Pvt.Ltd., Anand	-	1
4	Sachchade Foods, Ahmedabad	1	-
5	Deep Kiran Foods, Ahmedabad	3	-
6	Jubilant Food Works Ltd., Ahmedabad	1	-
7	Geo-fresh Organic, Sidhpur, Mehsana	3	1
8	Azafran Innovation, Ahmedabad	1	-
9	Ice Make Refrigeration Limited, Gandhinagar	1	-
10	Oceanic Foods Ltd., Jamnagar	1	-
11	Sumul, Surat	2	-
12	Jivraj Tea Ltd., Surat	1	-
13	Madhur Dairy, Gandhinagar	1	-
14	Print-N-Pack Pvt. Ltd., Ahmedabad	1	-
15	Tirupati Oil, Kalol	1	-
16	Grainspan Nutrients Private Ltd. , Ahmedabad	1	-

**Table 49 Year wise placement of graduates and post-graduates**

Year	No. of graduates / post graduates passed	Placement				Higher studies
		Private firm	SAU	Bank / Semi Govt. / NGO	Self Employed	
2010	5	2	-	-	-	2
2011	6	4	2	-	-	-
2012	7	5	-	-	-	-
2013	34	15	-	-	1	17
2014	38	28	-	-	1	6
2015	42	26	-	-	3	6
2016	41	28	-	-	2	7
2017	40	19	-	-	2	15
2018	43	25	-	-	2	11

## IX. PASSED OUT STUDENTS

**Table 50 Passed out Under Graduate Students (2018)**

SR. No.	Uni Reg. No	Name of the student
1	07-0176-2014	Barad Ravinaben Raysinhbhai
2	07-0177-2014	Bhakhar Tanviben Amrutlal
3	07-0178-2014	Bhambhani Namrata Gopalbhai
4	07-0179-2014	Bhargav Thakar
5	07-0181-2014	Gaikwad Tejashri Tanaji
6	07-0183-2014	Jaiswal Ankit Shirishkumar
7	07-0184-2014	Kanani Savan Bhagvanjibhai
8	07-0185-2014	Kathiriya Hardikkumar Hasmukhbhai
9	07-0186-2014	Nakum Rahul Babubhai
10	07-0187-2014	Nandaniya Dharaben Maldebhai
11	07-0188-2014	Parmar Abhishekkumar Prakashbhai
12	07-0189-2014	Parmar Ajaykumar Prakashchandra
13	07-0191-2014	Patel Maltiben Dineshbhai
14	07-0192-2014	Patel Niraliben Kamleshbhai
15	07-0193-2014	Patel Preksha Jigneshbhai
16	07-0194-2014	Patel Priyakumari Bharatbhai
17	07-0196-2014	Patel Ronakkumar Rameshbhai
18	07-0197-2014	Patel Saharsh Mukeshbhai
19	07-0198-2014	Patel Vaniben Kalpeshkumar
20	07-0199-2014	Sadhu Kandarp Jitendrakumar
21	07-0200-2014	Saini Yesha Bhanwarlal
22	07-0202-2014	Sumedha Manda
23	07-0205-2014	Trivedi Milankumar Dineshkumar
24	D7-0206-2015	Chudasama Kinjalben Arajانبhai
25	D7-0207-2015	Chudasama Mehul Hirabhai
26	D7-0208-2015	Dharmik Shukla
27	D7-0209-2015	Karmur Shailesh Batukbhai
28	D7-0210-2015	Sorathiya Prashant Bhikhubhai
29	D7-0212-2015	Zankat Kishankumar Merubhai
30	07-0141-2013	Gandhi Bhavyaben Nikeshkumar
31	07-0108-2012	Ka Patel Atit Prakashkumar
32	07-0117-2012	Patel Keval Bhaskarbhai
33	07-0120-2012	Patel Sumankumar Devabhai
34	07-0077-2011	Parmar Rikin Jonbhai



**Table 51 Passed out Post Graduate (M. Tech.) Students (2018)**

Seat No.	Uni Reg. No	PG program	Name of the student
1	04-2995-2016	M. Tech. (FPT)	Bhoi Monikaben Ravjibhai
2	04-2996-2016	M. Tech. (FPT)	Macwan Amee Jitendra
3	04-2997-2016	M. Tech. (FPT)	Macwan Avanee Jitendra
4	04-2998-2016	M. Tech. (FPT)	Patel Utpal Kumar Bhaveshbhai
5	04-2999-2016	M. Tech. (FPT)	Prajapati Vinodchandra Jayrabhai
6	04-3000-2016	M. Tech. (FPT)	Rana Kinjalben Prabhubhai
7	04-3001-2016	M. Tech. (FPT)	Tejani Nirav Devarajbhai
8	04-3002-2016	M. Tech. (FPT)	Thakkar Bijal Miteshkumar
9	04-3003-2016	M. Tech. (FPT)	Vaja Vidhi Girishchandra
10	04-2819-2015	M. Tech. (FPT)*	Sardar Nilesh Rajendra

\* Indicates – In service candidates.

**Table 52 Passed out post graduate (Ph. D.) students (2018)**

1	04-2757-2015	Ph.D.(FPT)	Madan Aditya Sunilkumar
2	04-2759-2015	Ph.D.(FPT)	Ningthoujam Manda Devi
3	04-2764-2015	Ph.D.(FPT)	Satyendra Kumar Misra
4	04-2503-2014	Ph.D.(FPT)	Bhatt Hetal Kiritkumar
5	04-2508-2014	Ph.D.(FPT)	Bhaumik Bharatkumar Patel
6	04-2557-2014	Ph.D.(FPT)*	Ravani Aameebaen Vijaykumar
7	04-2556-2014	Ph.D.(FPT)*	Sharma Harsh Prakash
8	04-2322-2013	Ph.D.(FPT)*	Hridyesh Pandey
9	04-2323-2013	Ph.D.(FPT)*	Vala Kanaksinh Virabhai

\* Indicates – In service candidates.



ગુજરાત સરકાર Government of Gujarat  
FORM C



Food And Drugs Control Administration, Gujarat State  
પરચનો / License

(નિયમન 2.1.4(6)) / [See Regulation 2.1.4(6)]  
પાલ સુરક્ષા અને ધોરણો અધિનિયમ 2006 Food Safety and Standards Act, 2006

પરચનો ક્રમાંક / License Number : 10717004000460

1. પરચનોદાર નુ. નામ અને નોંધાયેલ કચેરી નુ. સરનામું  
Name & Registered office Address of Licensee COLLEGE OF FOOD PROCESSING TECHNOLOGY & BIO-ENERGY / DR. D. C. JOSHI  
2. અધિકૃત જગ્યાનું સરનામું  
Address of Authorized premises ANAND AGRICULTURAL UNIVERSITY, ANAND, ANAND, (GUJARAT) - 388001  
3. બિઝનેસ પ્રકાર / Kind of Business Manufacturer, Retailer, Wholesaler  
4. દૈનિકી વ્યાપાર ની વિગત / Dairy Business Details No  
5. પરચનો નુ. શ્રેણી / Category of License: State

ખોરાકની સલામતી અને ધોરણો અધિનિયમ, 2006 ની જોડાણકાંઈ જે આ લાયસન્સ હેઠળ આપવામાં આવે છે તે તથા નુ. લાયસન્સ સાથે પાલના કન્ટેનરોમાં જ રાખવામાં આવે.  
This license is granted under and is subject to the provisions of FSS Act, 2006 all of which must be complied with by the licensee.

સ્ટામ્પ / Place: Anand  
તારીખ / Date: 13/12/2017  
ડિસ્ટ્રિક્ટ અધિકારી ની સહી અને સ્ટામ્પ / Stamp & Sign. of Designated officer  
ખોરાક અને ધોરણો નિયંત્રણ નુ. 3 / Food and Drug Control Administration, G.S.

પાનનાત આપવી અને નવિર્ધારણ / Validation And Renewal

License Issue / Renewal Date નિર્ધારિત તારીખ	Period of validity / સરનામું તારીખ	License fee Paid / પાલના ક્રમાંક	Items of Food products authorized to Manufacture / Re-pack / Re-label	Inspected harding Capacity	Signature of Designated officer ડિસ્ટ્રિક્ટ અધિકારી ની સહી
13/12/2017	12/12/2022	Rs. 15000	Please refer to annexure for details.	Please refer to annexure for details.	



ગુજરાત સરકાર Government of Gujarat  
FORM C



Food And Drugs Control Administration, Gujarat State  
પરચનો / License

(નિયમન 2.1.4(6)) / [See Regulation 2.1.4(6)]  
પાલ સુરક્ષા અને ધોરણો અધિનિયમ 2006 Food Safety and Standards Act, 2006

License Number: 10717004000460

Items of Food products with capacities installed authorized to Manufacture / Re-pack / Re-label

Other Food processing units

Sl. No.	Product Description	Quantity ( MT/Day)	Kind of Business
1	Cakes, Cookies, Biscuit 07.2.1	0.2	Manufacturer
2	Bread type Products 07.1.4	0.2	Manufacturer
3	Hard Candy 05.2.1	0.2	Manufacturer
4	Fruit Vegetable Juices 14.1.2	0.1	Manufacturer
5	Canned Fruits/Vegetables 04.2.2.4	0.1	Manufacturer
6	Ready to Eat Food Products 15.1	0.1	Manufacturer

Kind of Business : Food Business Operator

Wholesaler

Sl. No.	Food Product Category
1	04 - Fruits and Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds
2	05 - Confectionery
3	07 - Bakery products
4	14 - Beverages, excluding dairy products
5	15 - Ready - to - eat savouries

Retailer

Sl. No.	Food Product Category
1	04 - Fruits and Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds
2	05 - Confectionery
3	14 - Beverages, excluding dairy products
4	15 - Ready - to - eat savouries
5	07 - Bakery products

ડિસ્ટ્રિક્ટ અધિકારી ની સહી અને સ્ટામ્પ / Stamp & Sign. of  
Designated Officer  
ખોરાક અને ધોરણો નિયંત્રણ નુ. 3 / Food and Drug Control  
Administration, G.S.



**NABL**

**National Accreditation Board for  
Testing and Calibration Laboratories**

(An Autonomous Body under Department of Science & Technology, Govt. of India)

**CERTIFICATE OF ACCREDITATION**

**FOOD QUALITY TESTING LABORATORY, ANAND AGRICULTURAL UNIVERSITY**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2005**

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

College of Food Processing Technology and Bio-Energy, Anand, Gujarat

in the discipline of

**CHEMICAL TESTING**

(To see the scope of accreditation of this laboratory, you may also visit NABL website: www.nabl-india.org)

Certificate Number T-4100

Issue Date 06/09/2016



Valid Until 05/09/2018

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the additional requirements of NABL.

Signed for and on behalf of NABL

N. Venkateswaran  
Program Manager

Anil Relia  
Director

Prof. S. K. Joshi  
Chairman



**UG PASSED OUT BATCH 2018**



**PG PASSED OUT BATCH 2018**