

ACTION TAKEN: 1

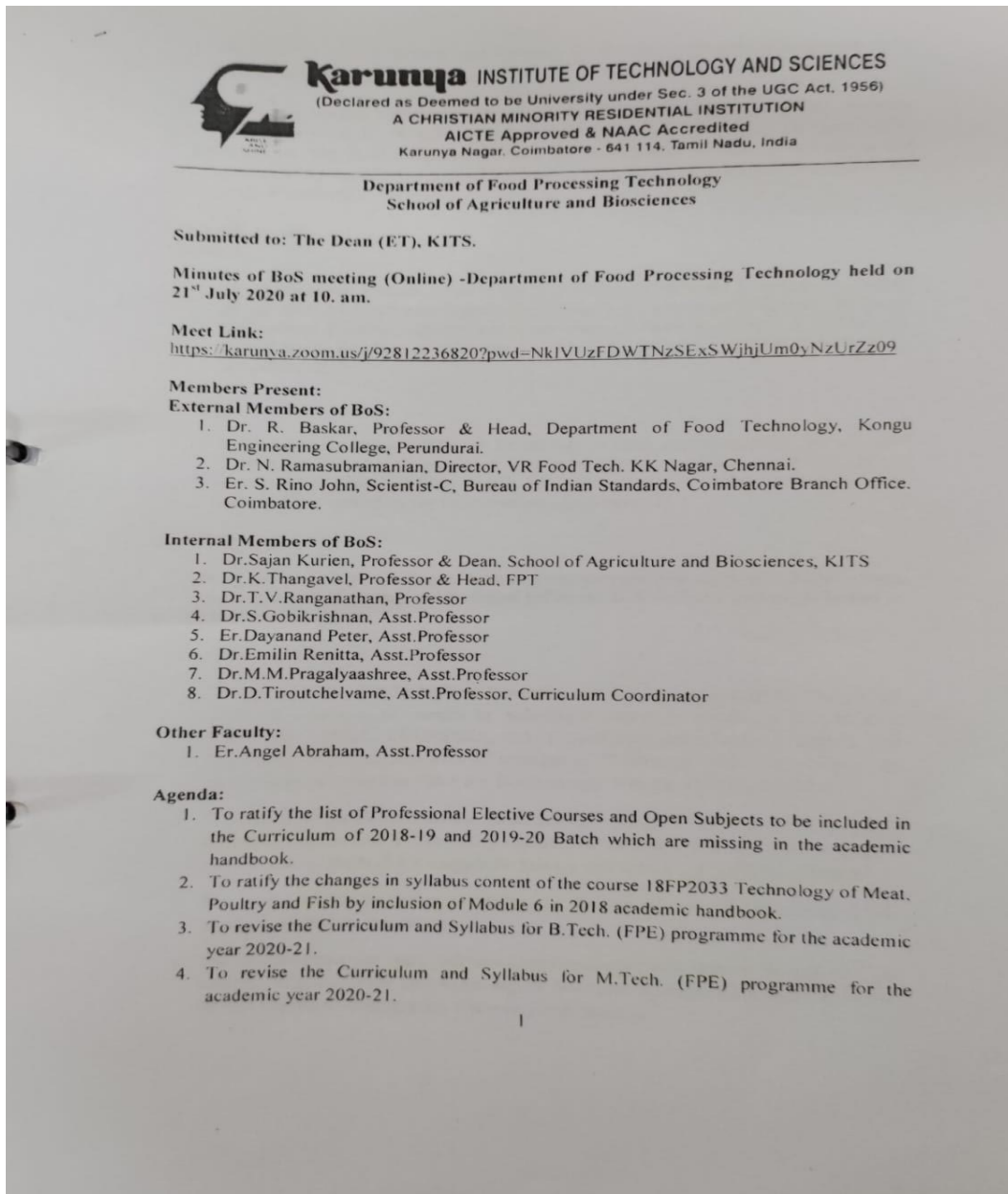
Introduction of lab component (2 credits) in the following mathematical courses (2:0:2)

18MA1005 – BASICS OF CALCULUS AND LINEAR ALGEBRA

18MA1009- TRANSFORMS AND DIFFERENTIAL EQUATIONS

18MA2007- BASICS OF PROBABILITY AND STATISTICS

18MA2008- STATISTICAL DATA ANALYSIS AND REALIBILITY ENGINEERING



5. The Mathematics courses (4 Nos.) are offered to the students from 1st semester to 4th semester. In the earlier curriculum, the content of the courses (18MA1005- Basics of Calculus and Linear Algebra ; 18MA1009- Transforms and Differential Equations ; 18MA2007- Basics of Probability and Statistics ; 18MA2008 Statistical Data Analysis and Reliability Engineering) were having only theory and tutorial component(3:1:0). 4 Credits). In the revised content, theory and lab have been integrated with credit load of 2:0:2, (2 Credits) and will be introduced to enable the students to understand the latest mathematical tools that can be applied to solve the problems in food processing.
6. The theory course 18CH1006- Applied Chemistry was renamed as 20CH1XXX- Applied Chemistry for Food Processing Technology(2:0:0). (2 credits) and the lab course 18CH1002- Applied Chemistry lab was renamed as 20CH1XXX- Applied Chemistry Laboratory for Food Processing Technology(0:0:3). (1.5 credits).
7. The external Experts of BoS suggested renaming the theory and lab courses offered by the Physics Department. It was suggested that the theory course 18PH1009- Applied Physics and Properties of Matter may be renamed as 20PH1XXX-Applied Physics for Food Process Operations (2:0:0 - 2 credits) and the lab course 18PH1010- Applied Physics and Properties of Matter Lab as 20PH1XXX-Applied Physics for Food Process Operations Lab(0:0:3 - 1.5 credits).
8. The concerned departments (Mathematics, Chemistry and Physics) will be intimated to reframe the course content accordingly.
9. The syllabus and course contents in the Engineering sciences component were revised. A new integrated course 20EE10XX Basic Electrical and Computer Engineering (3:0:2 - 4 credits) was introduced. The courses from mechanical engineering (Engineering Drawing; Engineering Graphics (AutoCAD); Workshop/ Manufacturing Practices Laboratory) and Computer Science (Programming for Problem Solving; Programming for Problem Solving Lab) were retained realizing the need of the courses for the skill development of Food process engineers. The course 18FP2009- Applied Thermodynamics for Food Engineers was renamed as 20FP2XXX-Process Engineering Thermodynamics and the course 20FP2XXX- Material Science for Food Engineers was added under this category.
10. The courses under the Professional core and Professional electives were discussed in detail. New course names and code numbers were allotted for the subjects where major modification in syllabus was carried out. New course on Basics of Microbiology and General Microbiology Lab are also introduced in the curriculum and this will be offered during the 2nd semester.
11. The courses under the Open subjects-Electives were reframed which includes courses from E&I(20EI2XXX- Process Control for Food Engineers ; 20EI2XXX- Process Control for Food Engineers Lab), Computer Science (19CS2013-Internet of Things for Food Technology ; 19CS2014- Python Programming for Food Engineers ; 19CS2015-

Action Taken: 2

An integrated English course was introduced under the humanity and social science category. The credits for the course were increased to 3 combining the theory and lab component.



Karunya INSTITUTE OF TECHNOLOGY AND SCIENCES
(Declared as Deemed to be University under Sec. 3 of the UGC Act. 1956)
A CHRISTIAN MINORITY RESIDENTIAL INSTITUTION
AICTE Approved & NAAC Accredited
Karunya Nagar, Coimbatore - 641 114, Tamil Nadu, India

Department of Food Processing Technology
School of Agriculture and Biosciences

Submitted to: The Dean (ET), KITS.

Minutes of BoS meeting (Online) -Department of Food Processing Technology held on 21st July 2020 at 10. am.

Meet Link:

<https://karunya.zoom.us/j/92812236820?pwd=Nk1VUzFDWTNzSExSWjhjUm0yNzUrZz09>

Members Present:

External Members of BoS:

1. Dr. R. Baskar, Professor & Head, Department of Food Technology, Kongu Engineering College, Perundurai.
2. Dr. N. Ramasubramanian, Director, VR Food Tech. KK Nagar, Chennai.
3. Er. S. Rino John, Scientist-C, Bureau of Indian Standards, Coimbatore Branch Office, Coimbatore.

Internal Members of BoS:

1. Dr.Sajan Kurien, Professor & Dean, School of Agriculture and Biosciences, KITS
2. Dr.K.Thangavel, Professor & Head, FPT
3. Dr.T.V.Ranganathan, Professor
4. Dr.S.Gobikrishnan, Asst.Professor
5. Er.Dayanand Peter, Asst.Professor
6. Dr.Emilin Renitta, Asst.Professor
7. Dr.M.M.Pragalyaashree, Asst.Professor
8. Dr.D.Tiroutchelvame, Asst.Professor, Curriculum Coordinator

Other Faculty:

1. Er.Angel Abraham, Asst.Professor

Agenda:

1. To ratify the list of Professional Elective Courses and Open Subjects to be included in the Curriculum of 2018-19 and 2019-20 Batch which are missing in the academic handbook.
2. To ratify the changes in syllabus content of the course 18FP2033 Technology of Meat, Poultry and Fish by inclusion of Module 6 in 2018 academic handbook.
3. To revise the Curriculum and Syllabus for B.Tech. (FPE) programme for the academic year 2020-21.
4. To revise the Curriculum and Syllabus for M.Tech. (FPE) programme for the academic year 2020-21.

5. To approve the Curriculum and Syllabus for the new post graduate program M.Sc. (Food Science and Technology).

The BoS meeting started with an opening prayer by Dr. Emilin Renitta, Assistant professor, welcome address by HoD, Dr.K.Thangavel and an introductory remark by the Dean(SAB), Dr.Sajan Kurien. The HoD explained the need for revision and updation of curriculum and then the curriculum coordinator Dr.D.Tirouchelvame presented the proposed revisions for discussion and approval.

Points Discussed:

Agenda 1

1. The Professional Elective Courses and Open Subjects list in the Curriculum of 2018-19 and 2019-20 Batch were found to be missing in the academic handbook. The list of Professional Elective Courses and Open Subjects were presented, discussed and ratified by the members of BOS. The list of courses ratified by the BOS is enclosed in **Annexure -1**.

Agenda 2

1. In the course content of 18FP2033-Technology of Meat, Poultry and Fish, the modules 5 and 6 were found in the combined form in the 2018-19 academic hand book. Hence, module 6 was separated from module 5 by bifurcating the content. This change was approved and ratified by the BoS members (**Annexure -2**).


Agenda 3

The revised curriculum structure, components and semester wise courses for B.Tech. Food Processing and Engineering was presented before the BoS members and are discussed in detail.

Points discussed

1. The total credits of B.Tech.(Food Processing and Engineering) program was revised from 160 credits to 165 credits by including 5 credits for online courses (MOOC, SWAYAM, NPTEL, COURSERA, etc), 1 credit each per semester guided by the Department faculty/mentor from 3rd semester to 7th semester (total 5 Nos). Thus, the total credit was revised as $160 + 5 = 165$ to comply with the AICTE guidelines.
2. The courses in the Humanities and Social Sciences category were revised by including **integrated English course**. The theory and lab were combined and new syllabus framed with the name: **20EN1XXX English for Science and Technology (2:0:2) - 3 credits**.
3. The course **18FP1001-Basics of Biology for Food Engineers (2:0:0)** offered in the previous curriculum was dropped.
4. The courses under the **Basic sciences component** were also revised by including the contents required for the food technologists. New code numbers were provided for the revised courses in Mathematics, Chemistry and Physics.







Courses (other than syllabus) need to be offered to inculcate news skills in students.



KARUNYA INSTITUTE OF TECHNOLOGY & SCIENCES
SCHOOL OF AGRICULTURE AND BIOSCIENCES
DEPARTMENT OF FOOD PROCESSING TECHNOLOGY


ONLINE VALUE ADDED COURSE
FOOD SAFETY SUPERVISOR TRAINING IN MANUFACTURING
10.06.2020 to 30.06.2020

Course Content


-  **Need for Food Safety**
-  **Personal & Facility Hygiene**
-  **Location, layout & facilities**
-  **Food Plant Operation & Controls**
-  **Audit, Documentation & Records**
-  **Food Safety Management System Plan**

Registration


<https://forms.gle/DruZTSPqgHr5SjEg06>




Resource Persons



Ms. Reny Susan Philip
(Food Safety Trainer),
Pulseberry Health Consulting, UAE




Er. Angel Abraham
Asst. Professor
Dept. of FPT, KITS



Er. Dayanand Peter
Asst. Professor
Dept. of FPT, KITS

Mode of Conduct

-  **All Sessions will be conducted through online mode via google classroom**
- Course content based on FOSTAC guidelines (FSSA, 2006)**
- Food Technology/Food Science Students are eligible**
- EVALUATION - ONLINE QUIZ AND ASSIGNMENT**
- FLEXI - TIMING OF COURSE (05:00PM - 07:00PM) 45 MINUTES SESSIONS**

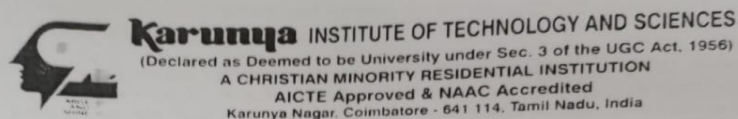
For Queries Contact : Dayanand Peter (+91 9952 447 442) or at dayanandpeter@gmail.com

Action Taken: 3

Introduction of new course

20FP1001 - BASICS OF MICROBIOLOGY

20FP1002-GENERAL MICROBIOLOGY LAB



Department of Food Processing Technology
School of Agriculture and Biosciences

Submitted to: The Dean (ET), KITS.

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Action Taken: 4

Online courses were introduced as a mandatory component.

Academic Information Hand Book 2020 Food Processing Technology

**Professional Elective and Open Elective Courses for the 2018-19 and 2019-20 Batch
B.Tech. students**

Professional Elective Courses						
S. No.	Course Code	Students to register 18 credits from the following courses	Teaching Scheme-hr/Week			Credits
		Course Title				
1	18FP2017	Refrigeration, Air conditioning and Cold Storage	3	0	0	3
2	18FP2018	Mechanical Systems for Food Processing	3	0	0	3
3	18FP2020	Bakery, Beverages and Confectionery Technology	3	0	0	3
4	18FP2026	Food Engineering and Packaging Lab	0	0	3	1.5
5	18FP2030	Food Additives	3	0	0	3
6	18FP2031	Plantation and Spices Product Technology	3	0	0	3
7	18FP2032	Fat and Oil Processing Technology	3	0	0	3
8	18FP2033	Technology of Meat, Poultry and Fish	3	0	0	3
9	18FP2034	Drying Technology	3	0	0	3
10	18FP2035	Food Packaging Technology	3	0	0	3
11	18FP2038	Food Additives Lab	0	0	3	1.5
12	18EI2007	Process Control for Food Engineers	3	0	0	3
13	18EI2008	Process Control for Food Engineers Lab	0	0	3	1.5
		Total				18/(34.5)

Open Subject - Electives from other Technical and/or emerging subjects						
S. No.	Course Code	Students to register 18 credits from the following courses	Teaching Scheme-hr/Week			Credits
		Course Title				
	18FP2027	Food Process Equipment Design	3	0	0	3
	18FP2029	Computer Aided Food Process Equipment Design Lab	0	0	3	1.5
	18FP2036	Storage Engineering	3	0	0	3
	18FP2037	Process Economics and Plant Layout Design	3	0	0	3
	18FP2040	Material Science for Food Engineers	3	0	0	3
	19CS2013	Internet of Things for Food Technology	3	0	0	3
	19CS2014	Python Programming for Food Engineers	3	0	0	3
	19CS2015	Artificial Intelligence for Food Engineering	3	0	0	3
		Free elective-1 (Other Department Course)	3	0	0	3
		Free elective-2 (Other Department Course)	3	0	0	3
		Total				18/(28.5)

**B. Tech. (Food Processing and Engineering) – 2020 Batch
PROGRAMME STRUCTURE**

No.	Category	Credits
	Humanities and Social Sciences including Management courses	5
	Entrepreneurship	9
	Basic Science Courses	20
	Engineering Science courses including workshop, drawing, basics of electrical/mechanical/computer etc.	18.5
	Professional Core Courses	66.5
	Professional Elective courses relevant to chosen specialization/branch	18/24
	Open courses – Electives from other technical and /or emerging Courses	9
	Online Courses	5*
	Project work, seminar and internship in industry or appropriate work place/academic and research institutions in India/abroad	14 [#] / 8 ^{**}
	Mandatory Courses [Environmental Studies, Induction Program, Indian	

ya Institute of Technology and Sciences 849

4	18EI2007	Process Control for Food Engineers	3:0:0:3
5	18EI2008	Process Control for Food Engineers Lab	0:0:3:1.5
6	19CS2013	Internet of Things for Food Technology	3:0:0:3
7	19CS2014	Python Programming for Food Engineers	3:0:0:3
Total			9/18

**Category 8:
Online Courses
Courses**

**Credit
5**

S.No.

1 The students shall earn 5 credits through online courses between 2nd and 7th semester (both inclusive)

Category 9:

**Internships, Projects, Patent and Products
Course Title**

S.No.	Course Code	Course Title	Credit
1	MP2911 / ITP2911/ SIP2911/ ISP2911/	Mini Project / Industrial Training/ Summer Internship Programme / Internship	2
2	20FP2998	Part Semester Project	6
3	20FP2999	Full Semester Project I	12
Total			14*/8**

* Full Semester Project

** Part Semester Project

**Category 10:
Mandatory Courses
Course Title**

S.No.	Course Title	Credit
1	Value Education	0
2	Environmental Science	0
3	Induction Program	0
4	Constitution of India	0

**SEMESTERWISE CURRICULUM
SEMESTER 1**

S. No.	Course Code	Course Title	Teaching Hours/Wk			Credits
			L	T	P	
✓ 1	20MA1017	Basics of Calculus and Linear Algebra	3	0	1	4
✓ 2	20PH1018	Applied Physics for Food Process Operations	2	0	0	2
✓ 3	20PH1019	Applied Physics for Food Process Operations Lab	0	0	3	1.5
✓ 4	20EE1001	Basic Electrical and Computer Engineering	3	0	0	3
✓ 5	20EE1002	Basic Electrical and Computer Engineering Laboratory	0	0	2	1
✓ 6	18ME1001	Engineering Drawing	0	0	4	2
✓ 7	18MS2008	Basics of Industrial Economics	3	0	0	3
✓ 8		Technical Communication	2	0	0	2
✓ 9		Mandatory Course-I - Environmental Studies				0
Total						18.5

SEMESTER 2

S. No.	Course Code	Course Title	Teaching Hours/Wk			Credits
			L	T	P	
✓ 1	20MA1018	Transforms and Differential Equations	2	0	2	3
✓ 2	20CH1003	Applied Chemistry for Food Processing Technology	2	0	0	2



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MoE, UGC & AICTE Approved

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ACTION TAKEN REPORT 2019-20

The stakeholders have appraised the updated course contents, knowledge of the students, willingness towards continuous learning, communication skills, satisfactory level of response from the Institution, etc. The action taken report on the following feedback is mentioned here.

Sl. No.	Feedback	Action taken
1	Recruiters suggested that students should improve their mathematical skills.	The basic sciences component with mathematics courses 18MA1005 – Basics of calculus and linear algebra, 18MA1009- transforms and differential equations and 18MA2007- basics of probability and statistics, 18MA2008- statistical data analysis and reliability engineering were having only theory and tutorial component 3:1:0, 4 credit. In the revised content theory and lab was integrated with 2:0:2 (2 credits) to enable the students to understand the latest mathematical tool that can be applied to solve the problems in food processing.
2	Parents suggested to improve the communication skills by increasing the credits for English course. Courses (other than syllabus) need to be offered to inculcate news skills in students.	An integrated English course was introduced under the humanity and social science category. The credits for the course were increased to 3 combining the theory and lab component. Online value added courses were conducted on Food safety supervisor training on manufacturing.

3	Students suggested to have basic knowledge on microbiology.	Introduction of new course 20FP1001 - Basics of microbiology 20FP1002-General microbiology lab
4	Alumnus suggested that the curriculum should be enriched with courses related to current trends in food industry and computer programming to enhance the employability with industrial relevance.	Online courses were introduced as a mandatory component.