

**Course Name: Basics of Food Biotechnology**  
**Course code: VAC BT 108**  
**Duration: 14.05.2018 – 19.05.2018**



**Course offered by:**  
**Department of Biotechnology**  
**VALUE ADDED COURSES**  
**SESSION 2017-18**



**Basics of Food Biotechnology**  
**Objectives :**  
  
The purpose of the course is to develop specialised knowledge of Food Biotechnology and the skills applicable in either industrial or university research environment

**Coordinator Name:** Dr Amit Kumar  
**Designation:** Assistant Professor  
**Department:** Biotechnology, KVSCOS SVSU, Meerut  
**Email ID:** amit.agbiotech1581@gmail.com  
**Ph No:** 8267010205

**VALUE ADDED COURSES Session 2017-18**  
**REGISTRATION FORM**

**REGISTRATION FORM**

**Name:**.....

**Enrolment No.**.....

**Program:**.....

**Sem. & Year**.....

**Contact No./Mobile:**.....

**E-mail:**.....

**Course Opted:**.....

**Course Code:**.....

**Signature with date:**.....

**Coordinator Name:** Dr Amit Kumar  
**Designation:** Assistant Professor  
**Department:** Biotechnology, KVSCOS, SVSU, Meerut  
**Email** ID: amit.agbiotech1581@gmail.com  
**Ph No:** 8267010205

**Course Schedule**  
**14.05.2018 – 19.05.2018**  
**8.30 am – 12.30 pm**  
**2.00 pm 4.00 pm**

Name of Value Added Course: **Basics of Food Biotechnology**

Course Code: **VAC-BT-108**

Time: **30hrs**

**Course Objectives:** The purpose of the course is to develop specialised knowledge of Food Biotechnology and the skills applicable in either industrial or university research environment.

**Course Contents:**

**UNIT I:**

Historical Background, Composition of Food, Improvement of food resources through Biotechnology ( e.g. Golden Rice, Potato etc.). Traditional fermented foods.

**UNIT II:**

Fermented milk, Cheese, Butter, Yoghurt Alcoholic beverages (Beer, Wine, Whisky), Sauerkraut, Pickles, Soy products, Tea, coffee etc.

**UNIT III:**

Food preservation and storage Food Processing, Value addition products like High Fructose Syrup, Invert Sugars etc. SCPs ( e.g. Spirulina, Yeast etc.) as food supplements.

**UNIT IV:**

Growth of microorganisms in food: Intrinsic and extrinsic factors, Food Spoilage (microbial and non-microbial), Control mechanisms of food spoilage: Physical and Chemical, Food and water borne diseases.

**Course Outcomes:** At the end of the course, a student would be able to –

- **Understand science** base in aspects of biotechnology relevant to the food sector – including molecular biology, bioprocess engineering and microbiological aspects of food biotechnology.
- **Perform** in a range of molecular biology techniques.
- **Explain** how the biological sciences and biochemical engineering are applied to produce novel food components and food processing systems.
- **Undertake** research in the area of food biotechnology

**Recommended Books:**

1. Food Sciences and Food biotechnology- **G.F.G. Lopez, G. Canaas, E.V.Nathan**
2. Genetically Modified Foods- **M.Ruse, D. Castle (Eds.)**
3. Biotechnology of Food Crops in Developing Countries- **T.Hohn and K.M. Leisinger (Eds.)**
4. Biotechnology and Food Process Engineering- **H.G. Schwartzberg, M.A. Rao (Eds.)**
5. Food Biotechnology- (Eds.) **R.Angold, G.A.Beech, J.Taggart.**
6. Food Biotechnology—Microorganisms-(Ed.) **Y.H. Hui et al.**

  
Registrar  
Swami Vivekanand  
Subharti University  
MEERUT

### List of Students attending Value added course

Sl. No	Name of the Students
1.	Aakhya Tyagi
2.	Amit Kumar
3.	Ankit Kumar
4.	Ankur
5.	Apurva Pandey
6.	Bindu Agarwal
7.	Charu Shridhar
8.	Fauzia Khan
9.	Karnika Rajmurti
10.	Km. Rasika
11.	Manjeet
12.	Nisha Chauhan
13.	Rahul Chaudhary
14.	Rinky Choudhary
15.	Shivani Tyagi
16.	Shreesh Sharma
17.	Tannu Chandra
18.	Vidushi Chaudhary
19.	Akash Verma
20.	Jahangir Khan
21.	Kanchan Pal
22.	Kirti Avinash
23.	Km. Minakshi Yadav
24.	Km. Preeti Saini
25.	Monika Tivari
26.	Mukarram
27.	Reetika Chaudhary
28.	Sanjana Chaudhary
29.	Shallu
30.	Shan Mohd
31.	Vanshika Tyagi
32.	Yashvi Chaudhary
33.	Akshay
34.	Annu
35.	Anushka
36.	Faisal Salmani
37.	Malsawmtluangi
38.	Rashmi
39.	Vivek Sagar
40.	Atul Kumar
41.	Deepa
42.	Keshav Tyagi
43.	Nidhi Yadav

44.	Pooja Sharma
45.	Simran Gulati
46.	Sorabh Kumar
47.	Teetu Chauhan

*Rekha Dixit*  
Dr. Rekha Dixit  
(HOD)

  
Registrar  
Swami Vivekanand  
Subharti University  
MEERUT

Sample Certificate



Swami Vivekanand Subharti University, Meerut

**CERTIFICATE OF COMPLETION**

Organized by  
Department of Biotechnology,  
Keral Verma Subharti College of Science

*This is to certify that..... Bindu Agarwal ..... Class..... B.Sc Biotechnology  
Department/College..... Biotechnology, KVSCOS ..... has successfully  
completed the Value Added Course entitled "Basics of Food Biotechnology" during,  
14.05.2018 to 19.05.2018.*

उत्तष्ठतः जाग्रतः प्राप्य वरान्निबोधत

*Rekha Dixit*

Dr. Rekha Dixit  
(HOD)

*Amit Kumar*

Dr. Amit Kumar  
(Coordinator)

*[Signature]*  
Registrar  
Swami Vivekanand  
Subharti University  
MEERUT