

Department of Food Technology
School of Chemical Technology, HBTU, Kanpur

Minutes of the Meeting of the Board of Studies for B.Tech Chemical Technology (Food Technology) held on June 28, 2025

A meeting of the BOS members was held on June 28, 2025 at 11.00 A.M. for B. Tech. Chemical Technology (Food Technology) to finalize the syllabus of VII and VIII semesters of B. Tech. Food Technology as per the new course structure designed by the central committee of HBTU in view of National Education Policy (NEP-2020) and already approved in the previous BoS meeting held on 05.07.2024.

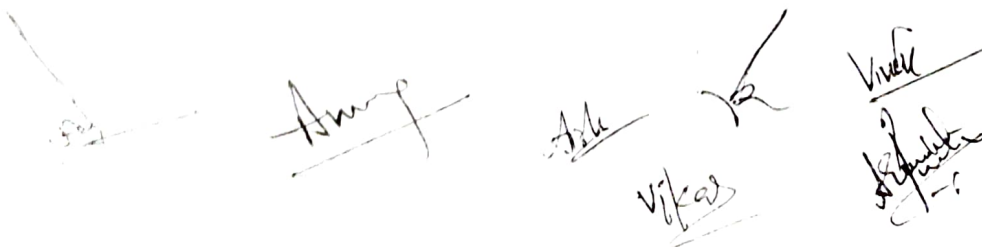
The following members were present during the meeting:

1.	Prof. Vivek Kumar, Professor & Head, Dept. of Food Technology, HBTU, Kanpur	Chairman
2.	Prof. Rekha S. Singhal, Professor & Head, Dept. of Food Engineering & Technology, ICT, Mumbai (online)	Member
3.	Prof. M.B. Bera, Retd. Professor, Department of Food Engineering & Technology, SLIET, Sangrur, Punjab (online)	Member
4.	Prof. Shiv Kumar, Professor, Institute of Food Technology, Bundelkhand University, Jhansi (online)	Member
5.	Dr. Dheeraj Mishra, Manager Operations, Mondelez Int. Formerly Cadbury India Ltd., Ludhiana, Punjab (online)	Member
6.	Mr. Arvind Tiwari, Country Head, Valency International, Ivory Coast, West Africa (online)	Member
7.	Prof. Alak Kumar Singh, Professor, Dept. of Food Technology, HBTU, Kanpur	Member
8.	Dr. Anurag Singh, Associate Professor, Dept. of Food Technology, HBTU, Kanpur	Member
9.	Mr. Vipul Kumar, Assistant Professor, Dept. of Food Technology, HBTU, Kanpur	Member
10.	Dr. Arunima Singh, Guest Faculty, Dept. of Food Technology, HBTU, Kanpur	Member
11.	Ms. Aisha Rahman, Guest Faculty, Dept. of Food Technology, HBTU, Kanpur	Member
12.	Mr. Vikas Yadav, Guest Faculty, Dept. of Food Technology, HBTU, Kanpur	Member

Chairman BoS, Prof. Vivek Kumar, welcomed all the members and invitees to the meeting and the following agenda was taken up and decisions were taken thereon:

1. Discussion and decision on syllabus of VII and VIII semesters of B.Tech-Chemical Technology (Food Technology):

The proposed syllabus of various subjects in the VII and VIII semesters of B. Tech – Chemical Technology (Food Technology) was thoroughly discussed subject-wise and approved by the committee with the following suggestions:



- a. **Nutraceuticals and Functional Foods (NFT-401):**
- Herbs should be added along with other food products and not as a separate module.
 - Bioavailability and Bio accessibility of various bioactive compounds should be added.
 - Advanced Bioactive Extraction Methods should be added in a module.
- b. **Innovative Techniques In Food Processing (NFT-402):**
- Supercritical fluid extraction must be separated from the module of extraction technology.
 - Innovative Techniques should be separated on the basis of thermal and non-thermal techniques.
 - Green extraction technology must be included.
- c. **Specialty Foods (NFT-403):**
- The syllabus should focus on disease-specific diets. Specialty food should also be based on special groups.
 - Topics like Space foods, designer foods, new product development should be added.
 - Calorific value calculation should be added.
- d. **Application of Computer in Food Processing (NFT-404):**
- AI/ML portion, MATLAB, R software etc. should be added.
- e. **Flavour Technology (NFT-405):**
- Role of primary and secondary metabolites in flavor generation in food should be added.
 - Effect of non-thermal technique on flavor in comparison to thermal techniques need to be incorporated.
 - Techniques like E-nose and E-tongue should be incorporated
- f. **Nanotechnology in Food Applications (NFT-406):**
- It was suggested to reduce to content in the proposed syllabus to make it possible to cover the course in time.
- g. **Food Processing Waste Management (NFT-407):**
- Concept of zero-waste and consequences of waste on global warming should be incorporated.
 - The heading of module 2 needs to be changed to *Upcycling of food processing waste and sustainability*. Concept of circular economy, EMF or ESG should be added.
 - Food Packaging waste must also be included.
- h. **Food Supply Chain Management (NFT-409):**
- Traceability and Blockchain technology should be added in module 4.
 - Concepts of RFIDs, TTIs etc. should be added.
- i. **Total Quality Management (NFT-411):**
- PERT chart and Fish-bone chart should be added in module 4
- j. **Food Traceability, Authenticity and Recall (NFT-415):**
- Block-chain should be removed from module 5 and added in module-1. Authenticity should be added in module-1.

k. Food Plant Design & Layout (NFT-417):

- Air/water requirement according to various food products should be discussed in module-1.
- Location/plant sizing and cost analysis concepts should be added in module 2.
- Process economics should be included in module 3.

General comments given by the experts are:

1. The CO-PO mapping should be done carefully for all the subjects.
2. The experts suggested focusing more on the application part of every syllabus.
3. It was suggested to give assignments on plant design/ equipment selection for developing critical thinking among students.
4. It was suggested to invite industry experts to deliver lectures on the Circular economy and Environmental, Social & Governance strategy (ESG).

The approved syllabus of the subjects proposed in the VII and VIII semesters of B.Tech Chemical Technology (Food Technology) after necessary changes is attached as Annexure-I.

There being no matter, Chairman BOS thanked all members and invitees for their important and useful inputs in improving the course structure.

The meeting ended with vote of thanks to the chair:

(online)
(Prof. M.B. Bera)

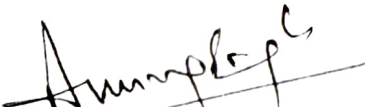
(online)
(Prof. Rekha S. Singhal)

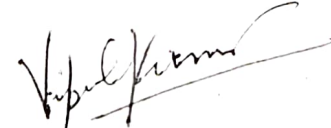
(online)
(Prof. Shiv Kumar Katiyar)

(online)
(Dr. Dheeraj Mishra)

(online)
(Mr. Arvind Tiwari)

(Prof. Alak Kumar Singh)


(Dr. Anurag Singh)


(Mr. Vipul Kumar)


(Dr. Arunima Singh)


(Ms. Aisha Rahman)


(Mr. Vikas Yadav)


(Prof. Vivek Kumar)