Proceedings of 13th Board of Studies Meeting of Department of Information Technology of Guru Nanak Dev Engineering College, Ludhiana held on February 02nd, 2026 at 10.30AM in the Committee Room of the GNDEC, Ludhiana

Following members were present:

1. Dr. Kulvinder Singh Mann, Professor and Head, IT Dept., GNDEC, Ludhiana (Chairperson, BOS)
2. Dr. Sandeep Kumar Singla, Assistant Professor, IT Dept., GNDEC, Ludhiana (Member, BOS)
3. Dr. Amit Kamra, Assistant Professor, IT Dept., GNDEC, Ludhiana (Member, BOS)
4. Dr. Pankaj Bhambri, Assistant Professor, IT Dept., GNDEC, Ludhiana (Member cum BoS Convener)
5. Dr. Kamaljit Kaur, Assistant Professor, IT Dept., GNDEC, Ludhiana (Member, BOS)
6. Dr. Jagdeep Singh, Assistant Professor, IT Dept., GNDEC, Ludhiana (Member, BOS)
7. Dr. Sarabjeet Singh, Professor, Department of Computer Science and Engineering, University Institute of Engineering and Technology, Panjab University, Chandigarh (Member, BOS; Subject Expert from outside the parent university)
8. Dr. Damanpreet Singh, Professor, Department of Computer Science and Engineering, Sant Longowal Institute of Engineering & Technology, Longowal (Member, BOS; Subject Expert from outside the parent university) (via online mode)
9. Dr. Jaswinder Singh, Professor, Department of Computer Science and Engineering, Punjabi University, Patiala (Member, BOS; Expert nominated by the Vice-Chancellor of IKG PTU) (via online mode)
10. Er. Ishant Kumar, Director, Auribises Technology Pvt. Ltd., Ludhiana (Special Invitee)
11. Er. Vikas Mahajan, Director of Engineering, Zscaler Inc., IT Park, Sector-67, Sahibzada Ajit Singh Nagar (Member, BOS; Member of the college alumni of department)
12. Dean (Academics) Nominee, Er. Daljit Singh (Member, BOS)
13. Dean Industrial Relationship, Dr. Jagdeep Singh (Member, BOS)
14. Controller of Examination Nominee, Er. Gurpreet Singh (Member, BOS)
15. Training & Placement Officer Nominee, Dr. Sachin Bagga (Member, BOS)
16. Mr. Jaspreet Singh, URN 2461617 (Member, BOS; M.Tech. (CSIT) 2nd Year Student)
17. Mr. Khushkaran Sharma, URN 2514970 (Member, BOS; M.Tech. (CSIT) 1st Year Student)
18. Mr. Brahamjot Singh, URN 2303081 (Member, BOS; B.Tech. (IT) 4th Year Student)
19. Ms. Palak, URN 2303032 (Member, BOS; B.Tech. (IT) 3rd Year Student)
20. Ms. Jasnoor Kaur, URN 2435562 (Member, BOS; B.Tech. (IT) 2nd Year Student)
21. Mr. Himanshu Priyadarshi, CRN 2521060 (Member, BOS; B.Tech. (IT) 1st Year Student)

Following members couldn't attend the meeting:

1. Dr. Akshay Girdhar, Professor, IT Dept., GNDEC, Ludhiana (Member, BOS)
2. Er. Ranjodh Kaur, Assistant Professor, IT Dept., GNDEC, Ludhiana (Member, BOS)

3. Er. Simran Sohanpal, Senior Software Engineer, Tech Mahindra, Rajiv Gandhi Chandigarh Technology Park, Chandigarh (Member, BOS; Representative from Industry/corporate sector/ allied area) (via online mode)

Item No. 13.01 **To confirm the minutes of 12th board of studies meeting**

Confirmed

Item No. 13.02 **Discussion on the proceedings and resolutions of previous departmental meetings related to the Study Scheme-2024**

Board of Studies Members appreciated the efforts of the department.

Item No. 13.03 **Approval of the Study Scheme-2024 (5th Semester onwards) and 3rd Year Syllabus under the B.Tech. (IT) program**

Approved

The panel suggested some revisions of the proposed scheme and syllabus as under:

a. A specialization track in "Python with Agentive AI" may be offered.
b. Machine Learning is to be designated as a core course.
c. The Cloud and IoT courses are to be merged. The revised structure will be as follows:
    I. Unit 1 of the Cloud course will cover Cloud Foundation and Security.
    II. Cloud Units 3 and 4 will be combined, with AWS content shared within this merged section.
d. An alternative placement for the Software Engineering course should be identified, for example, by integrating it with the DevOps course.
e. The Design Thinking course should be tailored to be branch-specific (e.g., specific to the IT branch).
f. Soft Skills & Corporate Communication course title may be revised to reflect topics such as Logical Thinking, Group Discussion, etc. The contents of Part-A and Part-B of the syllabus are to be swapped.
g. The Core ML course units should be restructured as follows:
    I. Unit 1 should cover fundamental concepts.
    II. Unit 2 should focus on Prompt Engineering / Saptron.
    III. The final unit should reflect the latest trends in Machine Learning.
h. The Business Intelligence elective course should be updated to correlate with AI tools and prompt-based approaches.
i. Total Quality Control (TQC) is to be introduced in Unit 1 of the Network Security elective course.

j. iOS is to replace Android in the Full Stack and Mobile Elective course content. Flutter and React are to be included in this specialization.

k. The practical component of the Blockchain and Fintech elective course is missing the required tools; these need to be added in the Blockchain and Fintech Electives specialization.

l. The Quantum course is irrelevant to the Blockchain specialization and should be removed or replaced.

Item No. 13.04 **Ratification/ Approval of the specializations for the B.Tech. (IT) Scheme - 2024**

Approved

The professional courses for the B.Tech. (IT) Specialization under Scheme 2024 shall be as follows:

1. Data Science and Big Data Analytics
   - 1a. Artificial Intelligence
   - 1b. Data Science
   - 1c. Big Data Analytics
2. Network Security and Threat Intelligence
   - 2a. Advanced Computer Networks
   - 2b. Network Security
   - 2c. Cyber Threat Intelligence
3. Full Stack Web and Mobile Application Development
   - 3a. Advanced Web Technologies
   - 3b. MERN: Full Stack Web Development
   - 3c. Mobile Application Development
4. Blockchain and Decentralized Technologies
   - 4a. Blockchain Architecture and its Applications
   - 4b. Blockchain for Financial Technologies
   - 4c. Enterprise Blockchain Corda, Solidity & Quorum
5. Enterprise Application Development using Data-Centric Programming Platforms
   - 5a. Advanced Java
   - 5b. R Programming
   - 5c. .NET Programming for Windows Applications
6. Software Engineering
   - 6a. Software Modeling and Analysis
   - 6b. Software Design and Testing
   - 6c. Software Process and Quality Assurance

7. Generative AI and Data Engineering
   7a. Business Intelligence and Data Analytics
   7b. Deep Learning
   7c. Generative AI and Intelligent Agentic Systems
8. Visual Computing and Immersive Systems
   8a. Digital Image Processing
   8b. Computer Vision
   8c. Augmented Reality and Virtual Reality
9. Advanced Computing Systems and Enterprise IT
   9a. Quantum Computing
   9b. Cloud Computing
   9c. Management Information System
10. Industry oriented courses

The list of elective courses for the Finishing School Course shall be as follows:

1. Career Competency and Campus Readiness
2. Problem Solving and Programming Skills
3. Core Computing Systems and Theory
4. Data Science & AI Foundations

Item No. 13.05 **Ratification and Approval of the offered courses/syllabus for the Minor/HONORS programs upto the session Jan-June 2026 (Study Scheme-2018)**

Approved

Item No. 13.06 **Ratification and Approval of the offered NPTEL courses for the Open Electives and Professional Elective (Study Scheme-2024)**

Approved

Item No. 13.07 **Discussion on the offering of Open Electives Courses to be opted for Classroom Teaching in the final year (Study Scheme-2024)**

Open Elective courses offered through classroom teaching in the final year (Study Scheme 2024) must be appropriately mapped to the corresponding NPTEL courses offered for the same courses.

Item No. 13.08 **Ratification/ Approval of the names of paper setters, internal and external examiners for UG and PG programs from July-Dec. 2025 Session onwards**

Approved. The panel of examiners can be decided by the BOS Chairperson as necessary.

Item No. 13.09 **Discussion on the result analysis and innovative teaching practices adopted in the department**

Board of Studies Members appreciated the efforts of the department and college.

Item No. 13.10 **Discussion on the practices adopted to improvise the quality of major and minor projects**

Board of Studies Members appreciated the efforts of the department.

Item No. 13.11 **Discussion of the various activities organized to improvise the training and placement of the students**

Board of Studies Members encouraged to improvise further training and placement activities.

Item No. 13.12 **Discussion on the feedback analysis for the availed feedbacks received from the stakeholders related to the curriculum**

Board of Studies Members appreciated the efforts of the department.

AGENDA

13th Board of Studies Meeting



on

February 02nd, 2026

at 10:30AM

Department of Information Technology

Guru Nanak Dev Engineering College, Ludhiana

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Agenda of 13th Board of Studies Meeting of Department of Information Technology of Guru Nanak Dev Engineering College, Ludhiana held on February 02nd, 2026 at 10.30AM in the Committee Room of the GNDEC, Ludhiana

Item No. 13.01 **To confirm the minutes of 12th board of studies meeting**

The 12th board of studies meeting was held on May 20, 2025 and the proceedings were circulated to all members of the board of studies for information and comments, if any (copy is enclosed in **Annexure-I**).

As no comments have been received, so, proceedings stand approved and placed herewith before the board of studies for confirmation please.

Item No. 13.02 **Discussion on the proceedings and resolutions of previous departmental meetings related to the Study Scheme-2024**

Since July 2025, the department has conducted multiple meetings to propose the 3rd year syllabus for the admission batch of B.Tech. (IT) program 2024. The faculty members—particularly those with prior experience in teaching the proposed syllabus domains—contributed valuable suggestions, aligning the curriculum with industry requirements, GATE syllabi, third-party certifications, enhanced training and placement opportunities, AICTE model curriculum, and the National Education Policy (NEP) 2020.

Under the supervision of the concerned module coordinators (who possess extensive experience in these domains), the faculty meticulously drafted the syllabus, including detailed credit distribution for each course in adherence to institutional and AICTE guidelines. These drafts were rigorously discussed, analyzed, and iteratively refined during departmental meetings to ensure academic rigor, workload balance, and compliance with the institute norms. The syllabus review meetings were held among all faculty members of the department (including the internal BOS members) under the chairmanship of HOD.

To further strengthen the curriculum, the syllabus of reputed national and international universities and institutes was benchmarked, with a focus on incorporating the latest technological trends and advancements.

The item is placed before the board of studies for discussion.

Item No. 13.03 **Approval of the Study Scheme-2024 (5th Semester onwards) and 3rd Year Syllabus under the B.Tech. (IT) program**

The proposed scheme 5th semester onwards and the proposed syllabus of 3rd year (Study Scheme-2024) are attached as per **Annexure-II.**

The item is placed before the board of studies for approval.

Item No. 13.04 **Ratification/ Approval of the specializations for the B.Tech. (IT) Scheme - 2024**

Following specializations domains are proposed for the B.Tech. (IT) Scheme -2024

a. Data Science and Big Data Analytics
b. Network Security and Threat Intelligence
c. Full Stack Web and Mobile Application Development
d. Blockchain and Decentralized Technologies
e. Enterprise Application Development using Data-Centric Programming Platforms
f. Software Engineering
g. Generative AI and Data Engineering
h. Visual Computing and Immersive Systems
i. Advanced Computing Systems and Enterprise IT
j. Industry Oriented Courses

The item is placed before the board of studies for approval.

Item No. 13.05 **Ratification and Approval of the offered courses/syllabus for the Minor/HONORS programs upto the session Jan-June 2026 (Study Scheme-2018)**

List of courses offered for the Minor/ HONORS programs in the Department of Information Technology, from the session July 2025 are attached as per **Annexure-III.**

The item is placed before the board of studies for approval.

Item No. 13.06 **Ratification and Approval of the offered NPTEL courses for the Open Electives and Professional Elective (Study Scheme-2024)**

List of NPTEL courses offered as Open Electives and Professional Elective (Study Scheme-2024) are attached as per **Annexure-IV.**

The item is placed before the board of studies for approval.

Item No. 13.07 **Discussion on the offering of Open Electives Courses to be opted for Classroom Teaching in the final year (Study Scheme-2024)**

Panel members are requested to propose the titles of courses which could be offered as open electives for the classroom teaching in final year (Study Scheme-2024).

The item is placed before the board of studies for discussions and suggestions.

Item No. 13.08 **Ratification/ Approval of the names of paper setters, internal and external examiners for UG and PG programs from July-Dec. 2025 Session onwards**

The list of the names of paper setters, internal and external examiners for UG and PG programs of Department of Information Technology is attached as per **Annexure-V.**

The item is placed before the board of studies for approval.

Item No. 13.09 **Discussion on the result analysis and innovative teaching practices adopted in the department**

Result analysis of the previous batches and the adopted practices to improvise the results is attached as per **Annexure-VI.**

The item is placed before the board of studies for discussion.

Item No. 13.10 **Discussion on the practices adopted to improvise the quality of major and minor projects**

Currently, students begin their minor projects in the 5th semester, which coincides with the offering of professional elective courses. To strengthen their expertise and improve placement opportunities, students are encouraged to align their minor project with their chosen professional elective. Furthermore, they are advised to continue in the same specialization domain for their major project and six-month training. The department/ college provides awards and grants to students working on innovative or real-time projects. Detailed procedures for project allocation, monitoring, revised rubrics for the evaluations etc. are outlined in **Annexure-VII**.

The item is placed before the board of studies for discussion.

Item No. 13.11 **Discussion of the various activities organized to improvise the training and placement of the students**

Detailed procedures for project allocation, monitoring, and evaluation etc. are outlined in **Annexure-VIII**.

The item is placed before the board of studies for discussion.

Item No. 13.12 **Discussion on the feedback analysis for the availed feedbacks received from the stakeholders related to the curriculum**

Feedback analysis for the received feedbacks from the stakeholders, related to the curriculum is attached as an **Annexure-IX.**

The item is placed before the board of studies for discussion.

Any other items with permission of the Chair.

Sd/-

Head of Department (IT) and Chairperson (BoS)

CC: Dept. BOS File

All BOS Members

Principal, GNDEC Ludhiana for Information, please

Dean Academics, GNDEC Ludhiana