

# HALDIA INSTITUTE OF TECHNOLOGY

INTERNAL QUALITY ASSURANCE CELL

Academic Audit 2020-2021

## Evaluation Sheet

Department Name: **Information Technology**

Programme Name: **B. Tech**

Academic Year: **2020-2021**

| I. PEO's, PO's and Curriculum |  |   |
|-------------------------------|--|---|
| Sl No                         | Criterion  | Observations  |
| 1                             | PEO's and PO's attainment                                    | The actual values of PO 2, PO3, PO 4, PO 5, PO 6 & PO 7 did not reach target values<br><br>All the PEOs have been attained.   |
| 2                             | Revision in curriculum and validation date (provide details) | The inputs of all the subject of B.TECH curriculum was submitted to BOS for revision/modification. Final validation of the curriculum has been done 24 <sup>th</sup> July, through BOS meeting. |
| 3                             | Extent of its satisfaction with curriculum revision          | The previous curriculums gaps are mitigated in large extend through the revised curriculum. More revision may be incorporated depending upon the feedback from stakeholders.                    |

| II. Faculty information and their contribution |                                       |                 |
|--|---------------------------------------|-----------------|
| Sl No  | Criterion                             | Observations    |
| 1  | Teacher-Student ratio                 | 18.5:1          |
| 2  | Faculty Cadre ratio                   | 1:2:8           |
| 3  | Faculty qualifications                | PhD:2, M.Tech:9 |
| 4  | Average experience of faculty         | 13 years        |
| 5  | Faculty contribution in writing Books |                 |

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|    | Chapters   | 4+2=6                        |
| 6  | Members in Editorial boards  | NIL                          |
| 7  | Faculty in professional organizations  | 3                            |
| 8  | Awards/ Rewards received   | NIL                          |
| 9  | Industry collaborative projects  | NIL                          |
| 10 | Faculty as resource persons in workshops/ training activities  | 11                           |
| 11 | National level events organized<br>Conference<br>Workshops/Seminars-<br>FDPs<br>International level events organized<br>Conferences-<br>Workshops Seminars | NIL<br>2<br>1<br>0<br>0<br>0 |
| 12 | Number of conferences /seminars workshops/ FDP's any exclusive programs attended for enrichment of teaching learning process                               | 35                           |

### III. Teaching-Learning Process and Evaluation

| SI No | Criterion   | Observations   |
|-------|---|--|
| 1     | Curricular aspect   | Under autonomous status the board of studies has been formulated and subsequently the curriculum and syllabus was framed and implemented   |
| 2     | Mechanism and activities for slow learners for their improvement outcomes | <p>(i) The actions is taken by the respective teacher to improve the quality of students by arranging special/ Remedial/Extra class for the weak students/slow learners, supply of study materials, repeated discussion, continuous assistance etc.</p> <p>(ii) Special assignment being given by the concerned subject teacher for improvement of his/her technical skill and knowledge.</p> <p>(iii) Individual academic counselling is done by concerned subject teacher and Head of the Department.</p> <p>(iv) Personal counselling is done through</p> |

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|   |   | <p>mentoring (Teacher guardian) scheme which takes care of the students mentors maintain the entire academic record of the student which is also conveyed to the parents time to time by the teacher guardian. Slow learners are counselled and motivated by the mentors.</p> <p>(v) The department arranges extra classes/remedial classes especially for the lateral entry students and identified weak students/slow learners. Other than that, most of the major subjects are having tutorial classes in course curriculum once in a week. The faculty members are mainly repeat the topics discussed on that particular week and try to bridge up the knowledge gap especially to the weak students.</p>   |
| 3 | Student counselling mentoring mechanism | <p>The student mentorship programme incorporates the support of faculty members as "Mentors" to all the students in the college. Each student shall be assigned a "Mentor" to overcome their hurdles to achieve the goals desired by them in their academic career.</p> <p>With the appointment of Active Student Advisors or Counsellors, one counselling class per week is taken from 2nd year to identify individual problem and to solve them by expert counsellor. They give special attention to the weaker students who are facing difficulties.</p> <p>The target of the Mentoring Programme is to identify fundamental mechanisms that will:</p> <ol style="list-style-type: none"> <li>1. Provide students with career and non-academic counselling.</li> <li>2. Provide students with information on preparatory courses such as skill courses, bridge courses, Soft skill training, brush-up course etc. for their academic prosperity.</li> <li>3. Focus and motivate students to achieve learning goals and thereby improve their academic performance.</li> <li>4. Guide, encourage, and advice the students about their upcoming student life, student health, mental and emotional well-being and listen to their issues with patience and help them solve their concerns with appropriate resources, support and referral available.</li> <li>5. Generate curiosity and interest in academics and other institutional activities amongst the students.</li> </ol> |



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| 4 | Tutorial classes  | <p>In tutorial classes, students undertake group discussion, problems faced in lectures room, quiz, class test, work exercise, in supervision of a faculty. These measures improve the knowledge in the subject and appropriate planning of any work for achieving the objective</p> <p>The department also arranges some workshops under the ACM HIT student Chapter for the same purpose</p>  |
| 5 | <p>Monitoring of teaching- leaning process</p> <p>(a) E-learning models:<br/>(b) Assessment of teaching process in classrooms<br/>(c) Innovative teaching process in presented if any<br/>(d) Verification of course files:</p> | <p>(a) Different types of assessment activities that are:</p> <ul style="list-style-type: none"> <li>• Ungraded activities and feedback built into study materials in the form of e-content which has been uploaded in the repository of the institute website</li> <li>• Self-assessment quizzes and tests that allow learners to check their own learning</li> <li>• Formal feedback on assignments from instructors, peers, or work place colleagues or mentors</li> <li>• Informal dialogue with instructors, peers or others</li> <li>• Ungraded tests that prepare learners for formal graded assessments</li> </ul> <p>(b) Assessment of teaching process in classrooms:</p> <p>The faculty practices diagnostic assessment, formative assessment, summative assessment and informal assessment in the classroom so that it can be used throughout the learning process, so that the students are able to explore and use a wide range of assessment methods to monitor their learners’.</p> <p>(d) Verification of course files is done at the end of semester.</p> |
| 6 | Training programs conducted for students  | Industrial vocational training and internship at various industries   |
| 7 | Students feedback & steps taken   | Online student’s feedback for faculty is conducted in the department and based on the comments by Head of the Department and Principal; faculties are guided and instructed accordingly.  |
| 8 | Scope for Self-learning Certified course Online courses   | Students are instructed for attending online courses through NPTEL, COURSERA etc.   |

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| 9  | Results Analysis   | Semester wise result analyses for individual subjects are carried out by the respective subject teachers.   |
| 10 | Parents meeting on evaluations of student's progress                 | Department organise parents meeting for each semester for analysing students progress.  |
| 11 | Student involvements in extra Curricular & Co-curricular activities: | <p>The college under takes wide spread cross-curricular enrichment activities through Community Development Committee, NSS, Cine Club and other forms of community development activities. During admission and orientation, the representatives of these units apprise students on the benefits and scope of the extension activities. The details of the program are displayed on the notice board, website and an interaction of students is organized with Community Development Committee and NSS unit.</p> <p>NSS activities &amp; Community Programme organized by the above mentioned committees are the followings::</p> <p>Blood Donation Camp, Campus Cleaning, Teachers' day and Plantation Program, Coastal area cleaning, Safe drive Save live in collaboration with Haldia Municipality, Poster preparation &amp; Presentation for the awareness, Education Day, Creating educational awareness among community</p> <p>Students participate in the institute's sports programme and cultural meet. There are three different clubs which are run by the students through faculty monitoring viz. technical club, sports club and cultural club. Alumni meet of the department is organised by the present as well as past students on regular basis.</p> |

| IV. Research, Consultancy and Extension |   |              |
|---|---|--------------|
| Sl No.                                  | Criterion                                     | Observations |
| 1                                       | Faculty publications in journals<br>National- | 0            |
|   | International-                                | 8            |
| 2                                       | Publications in conference<br>National-       |              |

|   |   |                  |
|---|---|------------------|
|   | international-  | 3(International) |
| 3 | PhDs- Registered  | 1                |
|   | Awarded   | 0                |
|   | Pursuing  | 6                |
| 4 | Funded R & D projects                                   |                  |
|   | Applied   | 1                |
|   | Sanctioned  |                  |
|   | Ongoing   | 0                |
|   | Completed   | 0                |
| 5 | Patent applied  | 0                |
|   | Patent awarded  | 0                |
| 6 | In-house R & D grants & projects                        | 2                |
| 7 | New research facilities/ laboratory facilities provided | NIL              |
| 8 | MOU's with industries/ R & D/ Premier institutes        | 1                |
| 9 | Research centers of excellence established              | NIL              |

#### V. Infrastructure and Learning Resources

| Sl No | Criterion  | Observations  |
|-------|--|---|
| 1     | Adequacy of infrastructural facilities to improve the teaching learning process<br>Class rooms:<br>Laboratories:<br>ICT/e-class rooms:<br>Seminar halls: | Smart class room -01& normal class rooms -02 Nos. available.<br>5(Five) laboratories available.<br>1(One) ICT class room. |
| 2     | Internet facilities for faculty & students   | Yes   |
| 3     | Modern/ new equipment added in laboratories  | Yes   |
| 4     | Details of computing facilities and improvement  | The Department of Information Technology ha 4 laboratories.<br>1. Multimedia Laboratory                                   |



|   |                                    |  |
|---|------------------------------------|--|
|   |                                    | 2. Computing Syatem Laboratory<br>3. Computer Organization and Architecture Laboratory<br>4. Project and Research Laboratory |
| 5 | Department level library resources | Yes  |

#### VI. Student information, Support and Progression


| Sl. No. | Criterion  | Observations   |
|---------|--|--|
| 1       | Department student clubs   | NEEDS, SAMARPAN  |
| 2       | Details of coaching provided for GATE/ GRE/ any other competitive exams for higher studies | Yes, coaching is provided to students for GATE.                        |
| 3       | Industrial visits and academic visits  | Training and placement cell organised industrial visit and internship. |

#### VII. SWOC Analysis of the Department

| Sl. No. | Criterion     | Observations   |
|---------|---------------|--|
| 1       | Strength:     | 1. Qualified and experienced faculty members.<br>2. Healthy team work.<br>3. Good Industry interaction through Internship and summer training programme.<br>4. Interdisciplinary interaction |
| 2       | Weakness:     | 1. Sponsored project, consultancy and entrepreneurship.<br>2. Industry sponsored laboratory<br>3. Student involvement in research activities.  |
| 3       | Opportunities | 1. Workshop ,Seminar, FDP, Internship and Industrial training on recent trend in Computing and Informatics   |

|   |                            |   |
|---|----------------------------|---|
|   |                            | <p>2. Aspiring students, faculty members.</p> <p>3. New industry demands on machine learning, AI, Data Science, Business Analytics, etc.</p>  |
| 4 | Best practice/ Innovative: | <p>1. Emphasis on Design based problem solving.</p> <p>2. Coverage beyond syllabus</p> <p>3. Student project exhibitions and connect with the course activities</p> <p>4. Systematic course mapping and use of course management tools both for faculty and students</p> <p>5. Well streamlined, transparent, centralized examination conducting activities like paper setting and evaluation.</p>  |
| 5 | Future plans:              | <p>1. Up gradation of departmental infrastructures (e.g. laboratory facilities and space, library and other academic infrastructures) to suit the pace of modernization and emerging technological upliftment.</p> <p>2. Upgrading skills of Faculty members to match rapid growth and technology advancements in industries</p> <p>3. Attracting more students with outstanding academic records towards engineering education and future prospects.</p> <p>4. Routine upgradation and improvement on curriculum.</p> <p>5. Training and development of English communication skills, technical skills, and other aspects of professional communication and team work in students from rural / semi-urban background</p> |

Departmental Coordinator:

  
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Prof. (Dr.) T. K. Jana

  
HOD

  
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Dean

  
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