Criterion II – Teaching-Learning and Evaluation

Metric No.	Key Indicator - 2.1 Student Enrolment and Profile
2.1.1 **Q_nM**	**Enrolment of Students** 2.1.1.1: Number of students admitted (year-wise) during the year:

Year	2023-24
Number	**1461**

2.1.1.2: Number of sanctioned seats (year-wise) during the year:

Year	2023-24
Number	**1554**

File Description:

Upload the data template:

- Any additional information

Data Template: 2.1.1

2.1.2 **Q_nM**	*Number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per the reservation policy during the year* **(exclusive of supernumerary seats):**

Year	2023-24
Number	**874**

File Description:

Upload the data template

- Any additional information

Data Template: 2.1.2

Metric No.	Key Indicator - 2.2 Catering to Student Diversity
2.2.1 **Q_lM**	*The institution assesses students' learning levels and organises special programmes for both slow and advanced learners:* **Present a write-up within a maximum of 200 words.** **File Description:** - Upload any additional information - Paste link for additional information

Response:

The differential learning needs of students due to diverse social, economic and cultural background, difference in knowledge and skill level are assessed and categorized as either slow or advanced learners.

The assessment criteria depends upon individual class performance, faculty observations, class tests, quizzes, and exercises. It also include CGPA and GATE qualification for PG programs. These criteria establish a baseline for addressing the learning gap between slow and advanced learners.

The advanced learners are encouraged to actively participate in events such as Ideathon, Hackathon etc to demonstrate their skills and talents. These students are encouraged to enroll for MOOCs courses like NPTEL or participate in conferences, seminars, symposiums, colloquiums, and workshops. They are also encouraged to write competitive exams for pursuing higher studies and work on mini projects. Further, these students are provided details of additional references, books, e-resources and journals, and new tools/ software.

From the perspective of 'Slow Learners': Remedial Classes are conducted to improve the academic performance of the slow learners. This helps the struggling learners to improve subject knowledge and helps them catch up to their peers. Group study system is also encouraged with the help of the advanced learners. Academic and personal counseling are given to the slow learners by the tutor, mentor and the counseling cell. Bilingual explanations and discussions are imparted for better understanding in addition to regular lecture sessions.

File Description	Document
Upload any additional information	**Link**
Provide Link for Additional Information	**View Document**

2.2.2	*Student – Teacher (full-time) ratio:*	
Q$_n$M	**Year**	**2023-24**
	Number of Students	**4361**
	Number of teachers	**245**

Data Requirement:

● Total number of students in the institution

● Total number of full-time teachers in the institution

Formula: Students: Teacher

File Description:

● Upload any additional information

Note: Data template is not applicable to this metric.

Upload any additional information	**Link Students List** (1.1)
Provide Link for Additional Information	**Link Faculty List**

Metric No.	Key Indicator - 2.3 Teaching - Learning Process
2.3.1 Q_lM	*Student-centric methods such as experiential learning, participative learning and problem-solving methodologies are used for enhancing learning experiences:* **Present a write-up within a maximum of 200 words.** **File Description:** ● Upload any additional information ● Link for additional Information
	Response: The student-centric methods such as experiential and participative learning, complemented by problem-solving methodologies are used to enrich the overall learning experience. The participative learning methods such as flipped classrooms, group exercises, debates etc., are employed which create interactive teaching learning environments. Brief videos showcasing fundamental principles, technological know-how, core competencies, recent advancements, best practices, and managerial implications in industry operations relevant to program subjects are shown during classes. These visuals enhance learning effectiveness. Mandatory industrial training and internships provide students with invaluable hands-on experience and practical skills in their respective fields. Students are required to present a seminar before faculty members and peers, fostering the development of teamwork, communication, and presentation skills. The Dissertation work during the final year integrates theoretical knowledge with practical skills. This develops deeper understanding and proficiency in their chosen fields and helps in bridging the gap between theoretical knowledge and real-world application. Further industrial visits and field work relevant to course work also included to provide practical exposure. Students are encouraged to associate with the chapters of globally recognized professional bodies working in their respective domains and participate in the events like case competitions, symposiums, seminars, and lecture series etc organized by these bodies.

File Description	
Upload any additional information	**Experiential Learning**
Provide Link for Additional Information	**Participative Learning:** **CIDI Lab** **Idea Lab**

2.3.2	*Teachers use ICT-enabled tools including online resources for effective teaching and learning:*
Q₁M	**Present a write-up within a maximum of 200 words.**
	Provide link to the webpage describing ICT-enabled tools including online resources that are used for effective teaching and learning
	File Description:
	● Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process
	● Upload any additional information

Response:

Teachers use ICT-enabled tools like Moodle, Google classroom, etc. for enhancing teaching effectiveness. The institute has its Moodle server contributing to a dynamic and engaging educational environment.

Brief videos showcasing fundamental principles, technological know-how, core competencies, recent advancements, best practices, and managerial implications in industry operations relevant to program subjects are shown during classes. These visuals enhance learning effectiveness. Multimedia tools, including videos, animations, and simulations, make complex concepts easier to understand by catering to diverse learning needs. Online whiteboards and software are used for teaching learning and assessment.

The institute central library has a good collection of electronic resources. All electronic resources (e-books, journals and NPTEL Video lectures, etc.) available in the Institute are provided on the Campus Wide Network (CWN) through NAS-server. Beside the CDs, Library also purchases approx.15500 on-line journals covering the field of Engineering, Sciences, Technology and Social sciences. These are also available on Campus Wide Network (CWN) through IP based access. Library also provides access to more than 135000 e-books under the UGC-INFLIBNET-NLIST programme and other Library membership

These digital libraries, e-books, and educational websites provide access to a vast repository of knowledge, enabling self-paced learning and fostering research skills

File Description	
Upload any additional information	
Provide Link for Additional Information	**Link**

2.3.3	*Ratio of students to mentor for academic and other related issues:*
	2.3.3.1: Number of mentors:
QₙM	Number of students assigned to each mentor:

Year	2023-24
Number of mentors	**170**

    Formula: Mentor: Mentee

File Description ● Upload year-wise number of students enrolled and full-time teachers on roll ● Circulars with regard to assigning mentors to mentees **Note: Data template is not applicable to this metric.**	
File Description	
Upload any additional information	**Link**
Provide Link for Additional Information	

2.3.4 **Q₁M**	*Preparation and adherence to Academic Calendar and Teaching Plans by the institution:* Describe the preparation of and adherence to the Academic Calendar and Teaching Plans by the institution. **Present a write-up within a maximum of 200 words.** Upload relevant supporting document **File Description:** Upload the Academic Calendar and Teaching Plans during the year
	A comprehensive academic calendar, outlining all curriculum-related activities for students and faculty, is meticulously prepared in advance. **Preparation and Adherence of Academic Calendar:** The academic calendar consists of dates-wise listing of academic activities like registration details, beginning and end of teaching, assessment schedule (MST, end sem, practical exam etc.), internship periods, seminars, conferences, guest lectures, technical workshops, industrial visits, vacation dates, annual technical and cultural fests, academic body (DPAQIC, IQAC, BOS, Academic council) etc. meeting schedule. The academic calendar is share on the institute's website and displayed on the notice board at the time of commencement of the academic session. Department prepare timetable for various programs as per institute academic calendar and strictly adhere to it. **Preparation and Adherence of Teaching Plan:** The course faculty prepare teaching (lecture/ lesson) plans for their respective courses as per credit and contact hour requirement. These credit proportional hours are distributed among class room teaching, tutorials, lab sessions and academic assessments as per the respective course requirements. The teaching plan includes contact hours required for each topic and assessment procedures. These plans are prepared in advance and serve as guide for conducting sessions. Strictly adhering to the academic calendar, internal and other assessment tests are conducted as per standrd procedure.
File Description	
Upload any additional information	**Link**

Provide Link for Additional Information	

Metric No.	Key Indicator - 2.4 Teacher Profile and Quality
2.4.1 **Q_nM**	*Number of full-time teachers against sanctioned posts during the year:* | Year	2023-24
Number	**245** | Data Requirement: ● Number of full-time teachers ● Number of sanctioned posts **File Description:** Upload the data template: ● Year-wise full-time teachers and sanctioned posts for the year ● List of the faculty members authenticated by the Head of HEI ● Any additional information
	Data Template: 2.4.1

2.4.2 **Q_nM**	*Number of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt during the year:* | Year	2023-24
Number	77 | Data Requirement: ● List of full-time teachers with PhD/ D.M. / M.Ch. / D.N.B Super-Specialty / DSc / DLitt. **File Description:** Upload the data template: ● List of number of full-time teachers with PhD./ D.M. / M.Ch. / D.N.B Super-Specialty / D.Sc. / D.Litt. and number of full-time teachers for 5 years ● Any additional information

File Description	
Upload any additional information	**Link**
Provide Link for Additional Information	

2.4.3 **QₙM**	*Total teaching experience of full-time teachers in the same institution:* *(Full-time teachers' total teaching experience in the current institution)*

Year	2023-24
Number	**2813**

Data Requirement:

● Name and number of full-time teachers and their years of teaching experience in the institution

File Description:

Upload the data template:

● List of teachers including their PAN, designation, Department and details of their experience

● Any additional information

File Description	
Upload any additional information	**Link**
Provide Link for Additional Information	

Metric No.	**Key Indicator - 2.5 Evaluation Process and Reforms**
2.5.1 **QₙM**	*Number of days from the date of last semester-end/ year- end examination till the declaration of results during the year* Number of days from the date of last semester-end / year-end examination till the declaration of results year-wise during the year:

Year	2023-24
Number	**26.92**

Data Requirement:

● Semester-wise/ year-wise

● Date of the last semester-end / year-end (for non-semester) examinations

● Date of declaration of results of semester-end/ year-end examinations

● Number of days taken for declaration of results for semester-end/ year-end examinations

File Description:

Upload the data template:

● List of Programmes and the date of last semester-end / year-end examinations and the date of declaration of result

● Any additional information

	Data Template: 2.5.1

2.5.2 **Q_nM**	*Number of students' complaints/grievances against evaluation against the total number who appeared in the examinations during the year:*

Year	2023-24
Number	**167**

File Description:

●   Upload the number of complaints and total number of students who appeared for exams during the year

●   Upload any additional information

Note: Data template is not applicable to this metric.

File Description	
Upload any additional information	**Link**
Provide Link for Additional Information	

2.5.3 **Q_lM**	*IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in the Examination Management System (EMS) of the Institution:* Describe the examination reforms with reference to the following within a minimum of 200 words ● Examination procedures ● Processes/Procedures integrating IT ● Continuous Internal Assessment System **File Description:** ● Upload any additional information ● Paste link for additional Information
	Response: The integration of information technologies has significantly enhanced various examination procedures such as registration, grading, collection of marks from faculty, result processing etc. Student portal is used for exam registration, view result, marksheet and academic history. It also serves as a platform for students to submit the feedback. This automation further reduces manual errors, saves time, and improves overall efficiency.

In CIA, performance is evaluated through internal examinations. In addition, continuous assessment is done through assignments, quizzes, MST, viva-voce, etc. with appropriate weightage.

The institute has used online systems such as Moodle, Google Classroom, etc., for both teaching and assessment. These practices for CIA or Formative Assessment, have brought about significant improvements in the EMS of the institute.

The examinations are conducted as per academic calendar. Question papers are set in accordance with Bloom's Taxonomy, indicating course outcomes and performance indicator mapping as per the reform policy of AICTE. COs and POs attainment are computed to improve teaching-learning.

The valued answer scripts of MST and end semester exam are showed to concerned students. They can review their responses and their queries can be addressed which maintain transparency and build confidence. The grievances of the student are properly addressed, and there is a provision to appeal against the result.

File Description	
Upload any additional information	**Link- Student Portal**
Provide Link for Additional Information	**1. Link1 Sample Quiz** **2. Link2 Moodle** **3. Link3 Exam Portal**

Metric No.	Key Indicator - 2.6 Student Performance and Learning Outcomes
2.6.1 Q_lM	*Programme Outcomes and Course Outcomes for all Programmes offered by the institution are stated and displayed on the website and communicated to teachers and students:* Describe Course Outcomes (COs) for all courses and the mechanism of communication to teachers and students within a maximum of 200 words. ● Upload COs for all Courses (you may refer to the exemplars in the Glossary) **File Description** ● Upload COs for all courses (exemplars from the Glossary) ● Upload any additional information ● Link for additional Information
	The institute is committed to outcome-based education, placing emphasis on well-defined visions and missions. All the UG and PF programs have well defined Program Educational

Objectives (PEOs), which are aligned with the respective department's vision and mission, ensuring a cohesive and purpose-driven educational framework.

Undergraduate (UG) courses are designed to align with program outcomes (POs) specified by the NBA, while each program is further characterized by its unique Program Specific Outcomes (PSOs). In-depth Course Outcomes (COs) are crafted for individual subjects, aligning with both POs and PSOs. These crucial educational outcomes—POs, PEOs, and COs—are effectively communicated across various channels, including classrooms, laboratories, faculty cabins, etc., ensuring widespread and thorough dissemination. These outcomes are also accessible on the institute's website, specifically on the relevant departmental page.

Question papers for mid-semester and end semester exams, as well as assignments, explicitly indicate their alignment with COs and Performance Indicators (PIs) for accurate measurement. This systematic approach allows for the measurement and analysis of COs and POs. Critical analysis of Program Outcome (PO) attainments is undertaken to identify gaps and enhance the teaching-learning process.

File Description	
Upload any additional information	**Link**
Provide Link for Additional Information	**Link**

2.6.2 Q₁M	*Attainment of Programme Outcomes and Course Outcomes as evaluated by the institution:*
	Describe the method of measuring the attainment of POs, PSOs and COs and the level of attainment of POs , PSOs and COs in not more than 200 words.
	File Description
	● Upload any additional information
	● Paste link for additional Information
	The attainment of Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs) is evaluated for each of the program offered in the institute.
	The COs is measured using a combination of direct and indirect methods. Direct methods include assessments like assignments, MST, end-semester exams, projects, and practical, which are aligned with the learning objectives of the courses. Indirect methods involve exit survey from students, faculty, and employers. The performance of students in these assessments provides quantitative data to measure the extent to which POs, PSOs, and COs are achieved.
	To evaluate the level of attainment, a three-level scale is used, typically ranging from "low" to "high" based on the percentage of students meeting the expected benchmarks. A threshold target level is set for each outcome, and the results are reviewed regularly by the DPAQIC to identify areas for improvement. This data-driven approach helps in continuously improving the curriculum and teaching methods to ensure alignment with POs, PSOs, and COs.

This systematic approach allows for the measurement and analysis of COs and POs. Critical analysis of Program Outcome (PO) attainments is undertaken to identify gaps and enhance the teaching-learning process. Through an annual gap analysis, the institute systematically improves program outcomes, ensuring a continual refinement of educational approaches.

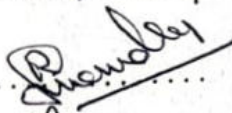| File Description	
Upload any additional information	**Link**
Provide Link for Additional Information	**Link**

2.6.3

QₙM
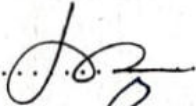
Pass Percentage of students:

2.6.3.1: Total number of final year students who passed in the examinations conducted by Institution:

Year	2023-24
Number	**1046**

2.6.3.2: Total number of final year students who appeared for the examinations

Year	2023-24
Number	**982**

Data Requirement:
- Programme Code
- Name of the Programme
- Number of students who appeared
- Number of students who passed
- Pass percentage

File Description

Upload the data template:

- Upload list of Programmes and number of students appear for and passed in the final year examinations
- Upload any additional information
- Paste link for the annual report

Data Template: 2.6.3

Shri G S Institute of Technology & Science Indore

Declaration by the Criteria Committee

We certify that the data included in this Criteria # 02 report of 2023-24 assessment year are correct to the best of our knowledge.

Name and Signature of members of Criteria Committee

1. J. T. Andrews

2. Vinod Pare

3. R. S. Mandloi

4. Priyanka Bamne