



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

**SHRI G. S. INSTITUTE OF TECHNOLOGY AND
SCIENCE, INDORE**

SHRI G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, 23, SIR M.
VISVESVARAYA MARG (PARK ROAD), INDORE-452003 (M.P.)

452003

www.sgsits.ac.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

May 2024

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Shri Govindram Seksaria Institute of Technology and Science (SGSITS), Indore (M. P.), India was established in 1952. SGSITS has been recognized as a leading institute in the state of Madhya Pradesh and the central region consistently during its glorious journey of seventy two years. It has been ranked in National Institutional Ranking Framework (NIRF) at national level (which includes IITs and NITs) by MHRD. Further looking to its credentials, University Grant Commission (UGC), New Delhi, had declared the institute as autonomous way back in 1989. Under the autonomous state, the institute is affiliated to the Rajiv Gandhi Prodyogiki Vishwavidhyalaya, for Engineering, Pharmacy and Technology programs. Presently, the institute offers eleven UG courses (Regular) and twenty five PG courses with specializations in various disciplines under the emerging areas of Engineering, Technology, Applied Sciences, Computer Applications, Management and Pharmacy. Furthermore, the institute offers Ph.D. programs across its Engineering, Applied Science and Pharmacy departments.

Apart from spacious modern classrooms and well equipped laboratories, the campus of the institute encompasses four boys hostels, three girls hostels, one transit hostel, accommodation for non-teaching staff and 44 faculty quarters. Institute has central library having vast collection of books, reference library and a large number of subscribed online and print journals. In addition, institute also houses various amenities such as Playground, Gymnasium, Indoor Sports Complex, Guest House, a branch of Punjab National Bank, Xerox Centre, co-operative Store, Canteen, Dining Hall, Indoor and outdoor Auditorium, Ladies Common Rooms, Dispensary and offices of SGSITS Alumni Association and Institution of Engineers.

The institute is renowned for its academic excellence, innovative research, and industry-oriented approach to education. SGSITS puts strong emphasis on providing students with practical exposure through internships, industrial visits, and collaborative projects with industries. It has state-of-the-art infrastructure, well-equipped laboratories, and a dedicated faculty comprising experienced professors and researchers.

SGSITS also actively promotes extracurricular activities and encourages students to participate in sports, cultural events, and various clubs and societies. The institute has a vibrant campus life, cultivating holistic development and nurturing future leaders in the field of engineering and technology.

Vision

"A front-line institute in science and technology making significant contributions to human resource development envisaging dynamic needs of the society."

The Institute has consistently aimed to establish itself as a premier institution in science and technology, making substantial contributions to human resource development while proactively addressing the evolving needs of society. To achieve this objective, the institute has invested in modern classrooms, state-of-the-art laboratories, and facilities developed over time to enhance teaching and learning experiences. The institute's

dedication in realizing its vision is evident from the success of its graduates, who secure opportunities to work in reputable companies and serve well in government sectors.

The institute consistently prioritizes quality education, research and innovation, industry partnerships, skill development, infrastructure and facilities, and continuous improvement in accordance with its vision statement.

Mission

“To generate experts in science and technology akin to society for its accelerated socioeconomic growth in professional and challenging environment imparting human values.”

The institute places significant emphasis on providing quality education and instilling human values in the students. To achieve this, students engage in subjects such as human values, the Indian knowledge system, and the Constitution of India etc. Additionally, they actively participate in various activities such as NSS and NCC, fostering a holistic understanding and appreciation of ethical principles and civic responsibilities. Moreover, cultural activities and sports events are organized throughout the year to help students develop their talents, foster teamwork, and promote a healthy work-life balance.

Within the institute, an ecosystem has been cultivated to provide students with opportunities to translate their ideas into reality through concept development, validation, and prototype testing. Students are also informed about funding opportunities available to help them transform their developed products into viable start-ups.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

The institute has many strengths in terms of its infrastructure, environment and its stakeholders as listed below:

- **The most Preferred Institute:** SGSITS was established in the year 1952 & is one of the most preferred institute for admission in its undergraduate B.Tech. Programs.
- **Location Advantage:** Situated in the heart of the city, the institute has a good connectivity with Airport, Railway Station & Bus station.
- **Faculty Strength & Student' Quality:** The institute has well qualified faculty members with PhD degree from IIT'S and reputed universities. The quality of students, in terms of knowledge and innovation, surpasses that of surrounding colleges and universities.
- **Strong Alumni Base:** The vast alumni base of the institute helps to enrich the academic environment of the institute for curricular delivery, industrial connect and student's handholding & motivation.
- **Excellent Academic Environment:** The institute has a good academic environment in terms of innovation, design & incubation.
- **Academic Autonomy:** The institute has its academic autonomy since year 1989.
- **Strong Industrial Belt of M.P.:** Indore being the commercial capital of M.P, the surrounding strong industrial belt of Pithampur & Sanwer road is conducive for the industry institute interaction.
- **Practicing Outcome Based Education Successfully:** The success of OBE in the institute is evident from the fact that more than 50 percent of programs have been accredited since last 10 years.

Institutional Weakness

To identify areas for improvement, the following weaknesses have been identified within the institute:

- **Financial Status:** Over time, the institute has received support in the form of a very small block grant from the government of Madhya Pradesh, which is highly insufficient for development purposes
- **Available Land:** Situated in the heart of the city, possibility for horizontal expansion of the institute is not possible, only vertical expansion is possible which has its own limitation due to the non-availability of grants & funds.
- **Partial Residential Facilities:** The institute has only few residential units. For fully residential campus a strong grant & fund is required from M.P government.
- **Old Infrastructure:** The institute has a very old infrastructure which requires renovation & periodic maintenance.
- **Lack of Corpus Fund:** As per the balance sheet of the institute, SGSITS has a lack of corpus fund which needs to be raised by funding and by various grants.

Institutional Opportunity

To explore potential avenues for growth and development, the following opportunities have been identified:

- **Industrial Collaboration:** The institute aspires to enhance its industrial collaboration, leading to joint research opportunities and further innovation in new products.
- **NABL Laboratories:** The institute aims to develop more NABL laboratories in near & far future.
- **Alumni Support:** SGSITS has a vast alumni base, and we seek more active support from alumni to develop additional funding opportunities.
- Exploration of external funding opportunities for sustainability is in process
- **University Status:** The institute aims to process all the necessary requirements to obtain university status.
- **Collaboration with Universities and R&D Institutions:** MOU with different universities & institutions are in pipeline and few have been signed.
- **Centre of Excellence:** The institute also aims to secure funding for establishing new centers of excellence in emerging areas.
- More effective utilization of CIDI, IDEA Lab, and IIC for Start-ups and Entrepreneurship

Institutional Challenge

In pursuing its path toward progress, the institute faces several challenges, as mentioned below, that need attention and strategic resolution

- Competition with Private & other universities at Indore and within the state
- Non-availability of Development Fund
- Financial Obligations due to Govt. Policies

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Empowered with the UGC Autonomy status, Shri G. S. Institute of Technology and Science, Indore designs its own curricula to meet the needs of the local, national, and global communities. UG and PG programs aim to equip students with practical skills alongside theoretical knowledge to address real-world challenges. SGSITS emphasizes outcome-based education, ensuring that each program aligns with specific educational objectives. Regular reviews by committees ensure that the curriculum stays relevant to societal and industry needs.

In addition to academic rigor, the institute focuses on employability, entrepreneurship, and skill development. The institute regularly updates its programs to match industry demands. Expert-led lectures, mandatory training, and internships prepare students for the job market. Partnerships with industries and government departments provide further training opportunities. New courses are regularly added to different programs to stay updated with the latest technological advancements.

The institute integrates cross-cutting issues like ethics, gender, and sustainability into its curriculum. Subjects such as Professional Ethics and the Constitution of India promote ethical awareness and gender equality. Participation in activities like the NCC and NSS instills discipline and social responsibility. Furthermore, students are encouraged to register for value-added online MOOCs courses such as NPTEL. Various programs offer field projects, research projects, industrial training, and internships to ensure practical exposure to the students. Feedback from stakeholders helps in revision of the curricula.

Overall, SGSITS aligns with the Sustainable Development Goals and the National Education Policy, striving to produce well-rounded individuals equipped for the challenges of the 21st century.

Teaching-learning and Evaluation

The institute assesses students' learning levels upon entry, recognizing diverse backgrounds and needs. An orientation program familiarizes students with academic procedures, facilities, and extra-curricular activities. Students' learning capabilities are categorized based on performance and qualifications.

For advanced learners, opportunities like Ideathons, Hackathons, and MOOC courses are provided. They are encouraged to participate in conferences and seminars, showcasing their knowledge. Slow learners receive remedial classes, counseling, and bilingual explanations. Additionally, simplified lecture notes are circulated. Student-centric teaching methods like experiential learning and problem-solving techniques are employed, aided by ICT tools. Interactive sessions, case discussions, and practical training enhance learning effectiveness. Industrial internships and projects bridge theory and practice, preparing students for real-world challenges.

A Mentor-Mentee system ensures personalized support and guidance for students. Mentors assist in academic and personal matters, aiming for holistic development. Comprehensive academic calendars outline activities, ensuring timely completion of curriculum and assessments. Teaching plans detail topics and assessment procedures, promoting effective classroom management.

IT integration streamlines examination procedures, reducing errors and enhancing transparency. Continuous Internal Assessment (CIA) methods like tests, quizzes, viva-voce and assignments monitor student's progress. Outcome-based education is emphasized, with clear learning outcomes communicated and evaluated regularly.

The NBA's accreditation of institute's multiple programs highlights its commitment to quality and excellence. This dedication is further shown by its continuous efforts to meet accreditation standards.

The institute has a skilled faculty, comprising dedicated and experienced members. The majority of full-time teachers hold doctoral degrees, ensuring a high standard of education and expertise within the faculty.

Research, Innovations and Extension

The institute prioritizes research through a clear policy given on its website. Faculty members engage with industries to address relevant issues in their fields and are supported to draft projects aligning with industry needs. Research facilities, including specialized labs and NABL accreditation, demonstrate ongoing improvements. The faculty members have secured substantial funding for research and development from multiple agencies. They are actively supervising PhD research scholars and have produced a significant number of research publications in reputable journals and conference proceedings.

The institute fosters innovation and entrepreneurship through a range of initiatives. The SGSITS-Institute Innovation Council (IIC) adheres to Ministry of Education (MoE) guidelines, nurturing young innovators. A startup policy encourages entrepreneurship, intellectual property rights (IPR) ownership, and technology licensing. Start-up and E-cell provide mentorship and organize workshops to support budding entrepreneurs. Additionally, the Centre for Innovation, Design, and Incubation (CIDI) and IDEA Lab facilitate innovation, design, and incubation activities, fostering collaboration with industries. Integration of the Indian Knowledge System includes conduction of lectures and Memorandums of Understanding (MOUs), with reputed related organizations promoting traditional knowledge.

The IPR Cell safeguards and promotes intellectual property generated by the institute. Extension activities, led by clubs like the National Cadet Corps (NCC) and National Service Scheme (NSS), sensitize students to social issues. Annual Techfest AAYAM showcases student talent while promoting holistic development. Moreover, the Nature Club is dedicated to environmental conservation and has recently been honored with the Green Campus Award by the Indore Municipal Corporation.

Infrastructure and Learning Resources

The institution boasts adequate infrastructure and facilities to support teaching, learning, and various extracurricular activities. Classrooms, lecture theatres, and seminar rooms equipped with modern teaching aids facilitate undergraduate, postgraduate, and PhD programs. Each department has program-specific laboratories, while interdisciplinary subjects utilize relevant departments' facilities. Central facilities like the Computer Center, Central Workshop, and Centre of Innovation, Design & Incubation (CIDI) cater to the needs of every department. The Computer Center provides state-of-the-art computing facilities and internet access, supporting practical programming work and online tests for students.

Physical recreation is encouraged through ample sports facilities for indoor and outdoor games, including an annual Sports Meet and a well-equipped gymnasium for aerobics and weight lifting. Cultural activities are accommodated in closed air theater (like SILVERIA 91) and at the open air theatre (Student Activity Centre), while student clubs operate at both central and departmental levels. The library, automated with an Integrated Library Management System (ILMS), offers an extensive collection of learning resources, including e-resources accessible through high-speed internet connectivity. Moreover, the institution maintains its IT

facilities through the Campus Wide Network (CWN), providing WiFi connectivity through NKN (1GBps) as well as Tikona (100MBps) and surveillance for security.

Established systems and procedures ensure the effective maintenance and utilization of physical and academic support facilities, including classrooms, laboratories, libraries, sports complexes, and computers. Standardized processes for inventory management, maintenance, and utilization ensure efficient operations across various facilities, contributing to a conducive learning and development environment for students and faculty members alike.

Student Support and Progression

In the past five years, SGSITS Indore has dedicated itself to enhancing students' career prospects through comprehensive career counselling initiatives, including counselling and guidance for competitive examinations. The institution's efforts span various areas such as skill development, placement, internships, higher education, research, corporate ethics, and life-skills. Through proactive measures like placement and internship coordination, the institution organizes numerous drives within the campus, inviting reputed companies for recruitment processes. Career counselling and planning are integrated into the curriculum, offering insights into corporate expectations and PAN India competitions. Continuous learning opportunities, including online courses and certifications, ensure students stay updated with industry-relevant skills.

Regarding student representation, Institute encourages active participation in academic and administrative committees, fostering a conducive academic environment. Student representatives contribute to various committees, ensuring their opinions are heard and considered in decision-making processes. The Academic Council, Board of Studies, and committees dealing with academic matters involve student members to provide diverse perspectives. Student clubs, training and placement cell, and other bodies also feature student representations, enhancing student engagement and leadership opportunities. Additionally, student representation extends to hostel management committees, ensuring quality facilities and services for residents.

Furthermore, the SGSITS Alumni Association plays a pivotal role in the institution's development by providing financial and other support services. Over the past five years, alumni have contributed significantly to infrastructure development, academic facilities, energy-saving initiatives, and innovative projects. The association's active involvement underscores its commitment to fostering a mutually beneficial relationship between the institute and its alumni, contributing to the institution's growth and success.

Governance, Leadership and Management

The institution's governance and leadership align with its vision and mission, as evidenced by practices such as NEP implementation, sustained growth, and decentralization. It aims to excel in technology and science, contributing skilled human resources to industries. Stakeholders actively engage in academic and administrative activities, overseen by the finance committee and governing body.

Established in 1952 as SGS Kala Bhawan, initially offering degrees in core branches only, the institute has since expanded to offer 11 undergraduate and 25 postgraduate programs, including Ph.D., and is now a Grant-in-Aid Autonomous institute. Funding sources beyond fees and grants include testing, government funds, sponsorships, and alumni donations. Institute follows its perspective plan and functions as per administrative set-up, policies and procedures as approved by the governing body. It has an annual performance appraisal and

welfare system for its faculty and staff members, which are in line with AICTE rules and state government norms

The IQAC conducts its quarterly meetings and proposes recommendations for quality assurance across various programs. IQAC works have ensured various procedures as necessary of NEP-2020. The DPAQIC reviews teaching-learning processes, aligning with the academic calendar. OBE principles guide curriculum development, evaluated through DPAQIC meetings and feedback. Two best IQAC initiatives are Outcome-Based Education (OBE) and the Idea Development Evaluation and Application (IDEA) Lab, fostering innovation and hands-on learning.

In summary, the institution's governance, leadership, and management reflect its commitment to quality education, innovation, and continuous improvement, evident across its operations and initiatives.

Institutional Values and Best Practices

The institute is deeply rooted in its values and consistently endeavors to implement best practices for the holistic development of its students and the broader society, with a strong focus on sustainability. Gender equity and sensitization initiatives demonstrate its dedication to an inclusive campus environment. To ensure the safety and well-being of women on campus, a range of facilities such as CCTV surveillance, trained female wardens, and diligent security personnel at entry points are provided. Additionally, the Internal Complaints Committee (ICC) maintains regular communication with female students, promptly addressing any concerns they may raise.

The institute maintains strong connections with its alumni, who play a crucial role in supporting current students by providing essential equipment for hostel residents. Furthermore, common rooms, health centers, and sanitary napkin dispensers are among the facilities provided to ensure student comfort and hygiene.

In line with its dedication to maintaining a clean and green campus, SGSITS implements various eco-friendly initiatives aligned with its motto of 'Let's go green and keep our campus clean.' Measures such as automobile restrictions to promote bicycles and battery-operated vehicles, along with the annual donation of 20,000 seed balls for tree planting, contribute to environmental conservation efforts. The campus is landscaped with thousands of plants, and a Miyawaki forest initiative enhances biodiversity.

Infrastructure improvements, including separate paths and student-designed waste collection vehicles, reflect the institute's commitment to sustainability. Renovated buildings are repurposed for eco-friendly activities, while accessible features such as lifts, ramps, and assistive technologies cater to individuals with disabilities.

Academic programs emphasize responsible citizenship through mandatory courses on the Constitution and professional ethics. NCC and NSS units actively engage students in societal issues, bringing civic responsibility through various awareness campaigns and events. One-day and seven-day camps provide practical exposure to rural life and social work, contributing to holistic education and instilling values of social responsibility and citizenship.

In summary, SGSITS is dedicated to creating a safe, inclusive, and environmentally sustainable campus while promoting gender equity, social responsibility, and academic excellence.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	SHRI G. S. INSTITUTE OF TECHNOLOGY AND SCIENCE, INDORE
Address	Shri G. S. Institute of Technology and Science, 23, Sir M. Visvesvaraya Marg (Park Road), Indore-452003 (M.P.)
City	Indore
State	Madhya Pradesh
Pin	452003
Website	www.sgsits.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	Rakesh Saxena	0731-2582111	9425903487	-	director@sgsits.ac.in
IQAC / CIQA coordinator	R. K. Khare	0731-2582112	9425053428	-	rakeshkhare@hotmail.com

Status of the Institution	
Institution Status	Government and Grant-in-aid

Type of Institution	
By Gender	Co-education
By Shift	Regular Day

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details

Date of Establishment, Prior to the Grant of 'Autonomy'	01-01-1952
Date of grant of 'Autonomy' to the College by UGC	01-12-1989

University to which the college is affiliated

State	University name	Document
Madhya Pradesh	Devi Ahilya Vishwavidyalaya	View Document
Madhya Pradesh	Rajiv Gandhi Proudयोगiki Vishwavidyalaya	View Document

Details of UGC recognition

Under Section	Date	View Document
2f of UGC	01-12-1989	View Document
12B of UGC	01-12-1989	View Document

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	02-06-2023	12	
PCI	View Document	09-05-2023	36	

Recognitions

Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	NBA and NIRF
Date of recognition	12-12-2022

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Shri G. S. Institute of Technology and Science, 23, Sir M. Visvesvaraya Marg (Park Road), Indore-452003 (M.P.)	Urban	29.6	85000

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Mechanical Engineering,Mechanical engineering	48	Higher Secondary	English	90	116
UG	BTech,Biomedical Engineering,Biomedical engineering Indian language course	48	Higher Secondary	Hindi	30	9
UG	BTech,Biomedical Engineering,Biomedical engineering	48	Higher Secondary	English	60	78
UG	BTech,Civil Engineering And Applied Mechanics,Civil engineering	48	Higher Secondary	English	90	117
UG	BTech,Comp	48	Higher	English	120	165

	uter Engineer ing,Compute r science and engineering		Secondary			
UG	BTech,Electr ical Engineer ing,Electrical engineering	48	Higher Secondary	English	90	119
UG	BTech,Electr onics And In strumentation Engineering, Electronics and instrume ntation engineering	48	Higher Secondary	English	90	90
UG	BTech,Electr onics And Te lecommunica tion Engineer ing,Electroni cs and teleco mmunication engineering	48	Higher Secondary	English	90	116
UG	BTech,Indust rial And Production E ngineering,In dustrial and production engineering	48	Higher Secondary	English	90	115
UG	BTech,Infor mation Tech nology,Infor mation technology	48	Higher Secondary	English	120	156
UG	BPharm,Phar macy,Pharma cy	48	Higher Secondary	English	60	69
PG	Mtech,Mech anical Engine ering,Mecha nical	24	Under Graduate	English	18	2

	engineering design					
PG	Mtech,Mechanical Engineering,CAD CAM CAE	24	Under Graduate	English	18	0
PG	Mtech,Mechanical Engineering,Thermal Engineering	24	Under Graduate	English	18	2
PG	Mtech,Biomedical Engineering,Biomedical signal processing and instrumentation	24	Under Graduate	English	12	0
PG	Mtech,Civil Engineering And Applied Mechanics,Transportation Engineering	24	Under Graduate	English	18	21
PG	Mtech,Civil Engineering And Applied Mechanics, Water resource and environmental engineering	24	Under Graduate	English	12	1
PG	Mtech,Civil Engineering And Applied Mechanics,Structural Engineering	24	Under Graduate	English	12	5
PG	Mtech,Civil Engineering And Applied Mechanics,Environment Engineering	24	Under Graduate	English	12	7

PG	Mtech,Computer Engineering,Computer engineering	24	Under Graduate	English	18	20
PG	Mtech,Electrical Engineering,Power electronics	24	Under Graduate	English	12	1
PG	Mtech,Electrical Engineering,Power system and control	24	Under Graduate	English	12	3
PG	Mtech,Electronics And Instrumentation Engineering, Micro electronics and VLSI design	24	Under Graduate	English	18	3
PG	Mtech,Electronics And Telecommunication Engineering,Electronics and communication engineering	24	Under Graduate	English	12	2
PG	Mtech,Industrial And Production Engineering,Manufacturing engineering	24	Under Graduate	English	18	3
PG	Mtech,Industrial And Production Engineering,Industrial engineering and management	24	Under Graduate	English	18	0

PG	Mtech,Information Technology,Information technology	24	Under Graduate	English	12	7
PG	MCA,Information Technology,	24	Under Graduate	English	120	156
PG	MPharm,Pharmacy,Pharmaceutical chemistry	24	Under Graduate	English	15	14
PG	MPharm,Pharmacy,Industrial pharmacy	24	Under Graduate	English	15	16
PG	MSc,Applied Mathematics And Computational Science,Applied Mathematics	24	Under Graduate	English	13	4
PG	MSc,Applied Chemistry And Chemical Technology,Applied Chemistry	24	Under Graduate	English	13	2
PG	Mtech,Applied Physics And Optoelectronics,Quantum computing	24	Under Graduate	English	12	0
PG	MSc,Applied Physics And Optoelectronics,Applied Physics	24	Under Graduate	English	13	1
PG	MBA,Management	24	Under Graduate	English	30	6

	Studies Mba,Hospital administratio n					
PG	MBA,Manag ement Studies Mba,Full time	24	Under Graduate	English	60	69
Doctoral (Ph.D)	PhD or DPhil ,Mechanical Engineering,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil ,Biomedical Engineering,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering And Applied Mechanics,	60	Post Graduate	English	2	0
Doctoral (Ph.D)	PhD or DPhil ,Computer Engineering,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil ,Electrical Engineering,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Instrum entation Engineering,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil ,Electronics And Telecom munication Engineering,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil ,Industrial And Production Engineering,	60	Post Graduate	English	1	0

Doctoral (Ph.D)	PhD or DPhil ,Information Technology,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil ,Pharmacy,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil, Applied Mathematics And Computational Science,	60	Post Graduate	English	1	1
Doctoral (Ph.D)	PhD or DPhil, Applied Chemistry And Chemical Technology,	60	Post Graduate	English	1	0
Doctoral (Ph.D)	PhD or DPhil, Applied Physics And Optoelectronics,	60	Post Graduate	English	1	0

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	34				67				119			
Recruited	25	9	0	34	30	9	0	39	28	15	0	43
Yet to Recruit	0				28				76			
Sanctioned by the Management/Society or Other Authorized Bodies	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				207
Recruited	142	24	0	166
Yet to Recruit				41
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				88
Recruited	64	9	0	73
Yet to Recruit				15
Sanctioned by the Management/Society or Other Authorized Bodies				15
Recruited	5	1	0	6
Yet to Recruit				9

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	35	12	0	9	2	0	11	6	0	75
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	1	0	14	2	0	17	10	0	44
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/ LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	6	12	0	18
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	33	47	0	80
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	5	8	0	13	

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	871	25	0	0	896
	Female	278	3	0	0	281
	Others	0	0	0	0	0
PG	Male	201	7	0	0	208
	Female	133	7	0	0	140
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	3	0	0	0	3
	Female	8	0	0	0	8
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years					
Category		Year 1	Year 2	Year 3	Year 4
SC	Male	135	128	144	165
	Female	49	44	61	55
	Others	0	0	0	0
ST	Male	111	103	95	118
	Female	39	38	35	57
	Others	0	0	0	0
OBC	Male	154	179	143	138
	Female	70	103	82	91
	Others	0	0	0	0
General	Male	555	442	384	475
	Female	208	201	178	228
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		1321	1238	1122	1327

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Applied Chemistry And Chemical Technology	View Document
Applied Mathematics And Computational Science	View Document
Applied Physics And Optoelectronics	View Document
Biomedical Engineering	View Document
Civil Engineering And Applied Mechanics	View Document
Computer Engineering	View Document
Electrical Engineering	View Document
Electronics And Instrumentation Engineering	View Document
Electronics And Telecommunication Engineering	View Document
Industrial And Production Engineering	View Document
Information Technology	View Document
Management Studies Mba	View Document
Mechanical Engineering	View Document
Pharmacy	View Document

Institutional preparedness for NEP

<p>1. Multidisciplinary/interdisciplinary:</p>	<ul style="list-style-type: none"> • The institute offers quality education to develop human resources as per the demand for the national as well as global requirements, in line with NEP 2020. • Being a technical institution, STEM (Science, Engineering, Technology and Mathematics) is integrated into all programs. The institute runs programs in Engineering, Technology, Pharmacy, Applied Sciences, Computer Technology and Management. Interdisciplinary and Multidisciplinary courses are offered to students through these departments. • The Board of Studies (BoS) of each program meets twice in a year and its recommendations are placed in Academic council. Choice-based credits courses are offered to the students in all the programs. Courses like Artificial Intelligence (AI), Internet of Things (IoT) and interdisciplinary subjects are offered to the students of various programs along with the core courses as per guidelines of AICTE. Courses on humanities, social sciences, applied sciences and value-based
--	---

	<p>education are also offered to the students. • Exit policy is implemented in the Institute as per ordinance no. 4(d) of RGPV, Bhopal. • The first IDEA lab in Central India was awarded in 2021. Since then, it has been dedicated to training students to develop their ideas into products using state-of-the-art facilities.</p>
2. Academic bank of credits (ABC):	<ul style="list-style-type: none"> • SGSITS has been an official member of National Academic Depository (NAD) since the year 2020. (Reg. No. NAD011446). • SGSITS has also registered successfully with the Academic Bank of Credits (ABC) in line with the requirements of NEP-2020. A mechanism for the transfer of students from other institutes and vice versa is in place.
3. Skill development:	<ul style="list-style-type: none"> • In line with national trend, the National Innovation and Start-up Policy (NISP) is approved in 2020. Adopting the idea of National Skill Qualification Framework (NSQF), the institute has been conducting various skill development courses under PMKVY, MMKVS and Suryamitra of MNRE. Courses for computer literacy for underprivileged under MMKVY scheme have also been conducted in the past. Moreover, vocational education (internship) components are added to UG as well as PG programs. • The Centre for Innovation Design and Incubation (CIDI) is one of its kind in the country. CIDI encourages participation of students and faculty to design and develop the ideas into a product. It also helps students to incubate their product to a brand.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	<ul style="list-style-type: none"> • A professional degree (B.Tech.) in regional language (Hindi) in Biomedical Engineering is offered for the first time in M.P. since year 2022. • Indian Knowledge System (IKS) is introduced in the curriculum of all UG Programmes along with the course on Universal Human Values by appropriately trained teachers. Regular events such as invited lectures, group discussions, and panel discussions are organized to enlighten them. Heritage values are fed to students via induction program, Republic Day, Independence Day, Yoga Diwas, Environment Day, Constitution Day, Voters' Day, traffic awareness week, tree plantation drive etc. apart from the Annual Social Gathering Function.
5. Focus on Outcome based education (OBE):	<ul style="list-style-type: none"> • Outcome-based education is being followed since 2015 in accordance with National Board of

	Accreditation by all UG and PG programs. Blooms taxonomy based cognitive abilities are incorporated in all courses. The OBE analysis is done for all programs running in the institute. The institute's focus on Outcome-Based Education (OBE) is reflected in the NBA accreditation of many of its programs.
6. Distance education/online education:	<ul style="list-style-type: none"> • Credits earned by the students on successful completion of online courses through NPTEL, SWAYAM, Spoken Tutorials platform etc. are considered and the credits are accommodated in the regular UG Programs. A policy to transfer the credits through ABC is in pipeline.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, the institute has maintained an active Electoral Literacy Club for more than 7 years. The Electoral Literacy Club was established in the year 2018 (Letter No. 1730 dated. 23/01/2018) with one Nodal Officer, one Campus Coordinator & Ambassador, and 20 students/volunteers to promote voting awareness.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes, the student coordinators and coordinating faculty members are appointed by the institute. The ELC is functional and it is also revised from time to time. In the year 2020, the names of the members of the ELC were revised (Letter No. 1936 dated. 06/01/2020). There was one Campus Nodal Officer, one Campus Coordinator/Ambassador, and 22 students/volunteers. In June 2022 (Letter No. 440 dated. 14/06/2022), four students were appointed as Campus Ambassadors to promote voting awareness activities on the Institute campus. In the year 2023, the names of the members of the ELC were revised (Letter No. 2023/604 dated. 25/07/2023). There was one Campus Nodal Officer, one faculty Campus Coordinator, one Student Campus Coordinator, and 25 students/volunteers as members of the Election Literacy Club (ELC) working on voter awareness in the Institute and nearby areas." The composition of ELC, its members and time to time revision of the committee shows that it is representative in character.

<p>3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.</p>	<p>An Electoral Literacy Club acts as a platform to engage students through interesting activities and hands-on experience to sensitize them on their electoral rights and familiarize them with the electoral process of registration to get a voter ID Card and perform the voting in the Local, Assembly (State) and Parliament (National) Elections. ELC works to stimulate and motivate students and provoking them to think and ask questions about the importance of Voting, its process and various instruments involve in the election in India (Bharat). The ELC also fulfills the aims of the Election Commission of India, to strengthening the culture of electoral participation among young and future voters. Many activities are conducted by the club. Some of the innovative programs conducted by the ELC are listed below: 1. To provide pledge to vote without any fear, influence and prejudice. 2. Voter's awareness Nukkad Natak</p>
<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>The objective of ELC is to encourage the students to enroll them for voting. ELC has conducted many activities to spread awareness about importance of voting. Few of the activities are listed below: 1. Voters awareness Rally 2. Voters awareness Seminars 3. Essay writing on voting awareness etc.</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>At the time of UG admissions, many newly admitted students are either below 18 or have just completed 18 years of age. These students are encouraged to enroll them in the electoral roll. In this regard special programs/drives are conducted under the title “Assistance to students for registration for Voter Card”.</p>

Extended Profile

1 Students

1.1

Number of students on rolls year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
4106	4065	4057	3933	3900
File Description		Document		
Institutional data in the prescribed format (data		View Document		

1.2

Number of final year outgoing students year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1209	1040	1131	1029	1120
File Description		Document		
Institutional data in the prescribed format (data		View Document		

2 Teachers

2.1

Number of full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
216	214	218	220	218
File Description		Document		
Institutional data in the prescribed format		View Document		
Certified list of full time teachers		View Document		

2.2

Total number of full time teachers worked/working in the institution (without repeat count) during last five years:

Response: 320

File Description	Document
Institutional data in the prescribed format	View Document

3 Institution

3.1

Total expenditure excluding salary year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
401.10	377.89	313.89	327.19	261.78
File Description		Document		
Provide Links for any other relevant document		View Document		
Other Upload Files				
1		View Document		

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1

Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs) and Course Outcomes(COs) of the Programmes offered by the institution

Response:

Shri G. S. Institute of Technology and Science, Indore, takes immense pride in its commitment to developing and implementing curricula that are not only academically rigorous but also profoundly relevant to the dynamic needs of the local, regional, national, and global communities it serves. The curricula are designed to equip students with not only theoretical knowledge but also the practical skills and problem-solving abilities that are essential in addressing real-world challenges. The educational programs encompass variety of subject areas, such as Basic Science Courses (BSC), Engineering Science Courses (ESC), Humanities, Social Sciences, and Management Courses (HSMC), along with Professional Core Courses (PCC), Professional Elective Courses (PESC), Open Elective Courses, mandatory courses, laboratory work, summer internships, and project work, ensuring a well-rounded and comprehensive learning experience.

SGSITS places a strong emphasis on outcome-based education across its diverse range of programs. This approach involves defining clear Program Educational Objectives (PEOs), Program Outcomes (POs), and Program Specific Outcomes (PSOs) for each academic program. The institution's curricula are meticulously designed to align with these POs and PSOs, ensuring that students acquire the knowledge, skills, and competencies necessary to meet the desired educational objectives. To achieve this, course outcomes of every subject is carefully mapped to the relevant POs and PSOs, resulting in a comprehensive course articulation matrix. This mapping ensures that the content and objectives of each course directly contribute to the broader educational goals of the program. By implementing this outcome-based education framework, SGSITS aims to provide students with a holistic and practical learning experience that equips them with the skills and knowledge required to excel in their chosen fields and contribute meaningfully to society and industry.

The Departmental Program Assessment and Quality Improvement Committee (DPAQIC) periodically reviews attainment of program outcomes. The recommendations are shared with the respective Board of Studies (BOS) in order to align curriculum with societal and industry needs. Internal Quality Assurance Cell (IQAC) meets quarterly to address the outside needs and ensure quality education across the departments.

Laboratory work is integral to developing practical skills, enabling students to apply theoretical knowledge. The curriculum includes industrial training and internships, offering insights into industry-specific practices. Encouraging outreach activities instills social responsibility, and sustainability principles are woven into teaching, fostering environmental awareness. Major projects address pressing

societal and industrial needs, bridging academia and real-world applications. Graduates are thus well-prepared to contribute meaningfully and tackle modern challenges effectively.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.1.2

The programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements

Response:

The institution places a strong emphasis on equipping its students with the skills needed for employability, entrepreneurship, and personal development. To achieve this, each academic program undergo regular and comprehensive updates to ensure alignment with current industry demands and contemporary requirements. Boards of Studies (BOS) across various academic departments ensure that their programs develop skills and attributes essential for employment and entrepreneurship. The BOS includes subject experts from both academia and industry, playing a pivotal role in the continuous review and refinement of the curriculum to stay in synchronization with evolving trends in education and industry. The BOS meeting is convened as required, but at least biannually to discuss curricula, with a primary focus on enhancing employability and fostering entrepreneurship skills.

The discussions are further forwarded to the academic council for approval, which includes student representation and other key stakeholders. This diversity of input ensures that the curriculum remains adaptable to the ever-changing needs of both, society and the job market. As a result, students get an education that is not only academically rigorous but also directly relevant to the practical demands of the real world. This approach equips graduates with the knowledge, skills, and competencies necessary for professional success and meaningful contributions to society and industry. It reinforces the institution's commitment to fostering employability, entrepreneurship, and skill development.

Expert lectures delivered by academic and industry professionals nurture student engagement and skill development. Mandatory training and internships within the curriculum inculcates employability and entrepreneurship skills among students. The institute also signs Memorandums of Understanding (MOUs) with prominent industries and government departments to facilitate students with the required training. Further partnerships of this nature are expected to ensure sustained opportunities for progress.

The Institution Innovation Council offers a platform for nurturing new ideas and fostering innovation to address current needs, ensuring that students are not only well-versed in their chosen fields but also empowered to make meaningful, inventive contributions to society. The IDEA Lab and CIDI (Centre of Innovation, Design, and Incubation) offer resources and guidance for incubating start-ups and innovative ventures. Students regularly visit these facilities, either as part of their practical coursework or

independently, enabling them to apply their classroom learning in real-world entrepreneurial contexts.

The Entrepreneurship Cell empowers students through activities like boot camps and workshops. These initiatives provide practical skills, mentorship, and networking opportunities, equipping students with the tools needed to transform their innovative ideas into viable businesses. It nurtures an entrepreneurial mindset, fostering self-reliance and economic growth.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Percentage of new courses introduced out of the total number of courses across all programmes offered during the last five years

Response: 33.76

1.2.1.1 Number of new courses introduced during the last five years:

Response: 314

1.2.1.2 Consolidated number of courses offered by the institution across all Programmes (without repeat count) during the last five years :

Response: 930

File Description	Document
Subsequent Academic Council meeting extracts endorsing the decision of BOS	View Document
Minutes of Board of Studies meeting clearly specifying the syllabus approval of new courses	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum

Response:

SGSITS, Indore integrates cross-cutting issues such as Professional Ethics, Gender, Human Values, Environment and Sustainability into the curriculum. This helps to have an overall holistic development of the students, who could contribute responsibly and meaningfully to society. This integration aligns with the Sustainable Development Goals (SDGs) and the National Education Policy (NEP) 2020, which emphasize the development of well-rounded, ethically conscious, and environmentally responsible citizens.

First and foremost, the inclusion of Values, Humanities and Professional Ethics in the curriculum is instrumental in preparing students for the real world. It cultivates values like honesty, integrity, and accountability, which are crucial for success in any profession. Moreover, it assists students in handling challenging moral dilemmas and making ethical choices in their professions.

A compulsory subject on "Constitution of India" plays a significant role in promoting gender equality. Through this curriculum, students learn about the legal framework and principles that uphold and safeguard the rights and equality of all genders in the country.

The Essence of Indian Traditional Knowledge also helps students appreciate ancient wisdom, cultural heritage, and holistic approaches to life. It fosters a deeper understanding of traditional practices, encouraging mindfulness, sustainability, and a profound connection with India's rich cultural heritage.

The presence of both NCC (National Cadet Corps) and NSS (National Service Scheme) in the institute plays a pivotal role in nurturing well-rounded and socially responsible individuals. NCC instills discipline, leadership, and a sense of patriotism, while fostering physical fitness and teamwork. NSS, on the other hand, engages students in community service and social outreach, promoting empathy and a sense of duty towards society. Together, NCC and NSS help students develop into responsible, compassionate, and committed citizens who are ready to contribute positively to their communities and the nation.

An induction program is conducted for all first-year students, covering institutional policies, processes, and practices. The program also imparts knowledge about universal human values through expert talks. The sports section organizes regular activities and competitions, contributing to the overall development of students. Students actively participate in a range of extracurricular and co-curricular activities by joining clubs such as the Robotics Club, Nature Club, OJASWA, KSHITIJ, etc. The annual cultural fest, AAYAM, serves as a platform for them to showcase their talents through various events and competitions.

The institute's adoption of the National Education Policy - 2020 into the curriculum is instrumental in promoting holistic and innovative education. It aids in fostering well-rounded individuals equipped with 21st-century skills, promoting research and critical thinking, and aligning with global educational standards, thereby preparing students for future challenges.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.3.2

Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years.

Response: 81

File Description	Document
List of students and the attendance sheet for the above mentioned programs	View Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format (data template)	View Document
Evidence of course completion, like course completion certificate etc	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3.3

Percentage of programmes that have components of field projects / research projects / internships during the last five years.

Response: 100

1.3.3.1 Total Number of programmes that have components of field projects / research projects / internships (without repeat count) during the last five years

Response: 34

1.3.3.2 Total Number of programmes offered (without repeat count) during the last five years

Response: 34

File Description	Document
Sample Internship completion letter provided by host institutions	View Document
Sample Evaluated project report/field work report submitted by the students	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Program and course contents having element of field projects / research projects / internships as approved by BOS	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.4 Feedback System

<p>1.4.1</p> <p>Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc., and Feedback processes of the institution may be classified as follows:</p> <p>Response: A. Feedback collected, analysed, action taken & communicated to the relevant bodies and feedback hosted on the institutional website</p>	
File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 91.76

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
1328	1137	1212	1161	1144

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1335	1227	1365	1296	1296

File Description

Document

Institutional data in the prescribed format (data template)

[View Document](#)

Final admission list as published by the HEI and endorsed by the competent authority

[View Document](#)

Document relating to sanction of intake as approved by competent authority

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 87.59

2.1.2.1 Number of actual students admitted from the reserved categories in the first year of the programme year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
624	540	578	558	509

2.1.2.2 Number of seats earmarked for reserved category as per GoI/State Govt. rule year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
665	611	658	637	636

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of the letter issued by the State govt. or Central Government Indicating the reserved categories(SC, ST, OBC, Divyangjan, etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.2 Catering to Student Diversity

2.2.1

The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student

Response:

The students admitted into the institution come from diverse social, economic, and cultural backgrounds, with disparate levels of knowledge and skills; hence their learning needs are different. The Institute conducts an orientation/induction program for first-year students of both UG and PG to make students familiar with various procedures. The Head of the Institution along with Dean (Academic), Dean (R&D) and Dean (Training and Placement), all Department Heads and Controller of Examinations address them about the facilities, infrastructures, curriculum, credits to be earned, regulations, sports, extracurricular

and co-curricular activities, Departmental club SAE/BAJA/Efficycle/YAN etc. show their presentations to the students during the induction program to encourage them for participation. Additionally, lectures on human values as prescribed by AICTE, career counseling by the Training and Placement Officer (TPO), yoga, meditation, and proficiency modules are arranged.

The learning capabilities of students are assessed and categorized as either fast or slow learners, determined by individual class performance, faculty observations, class tests, course quizzes, and exercises. Additionally, assessment criteria include UG-level CGPA, GATE qualification for PG programs. These criteria establish a baseline for addressing the learning gap between slow and advanced learners.

From the perspective of ‘Advanced Learners’:

- Advanced learners are encouraged to actively participate in events such as Ideathon, Hackathon, and IIC activities to demonstrate their skills and talents.
- Advanced learners are encouraged to enroll in MOOC Courses like NPTEetc as per the relevance of their programs.
- Moreover, these students are encouraged to actively participate and present their knowledge (for UG students) or research (for PG students) in various conferences, seminars, symposiums, colloquiums, and workshops at both national and international levels, organized by reputable institutions such as IITs, IISc, IIMs etc.
- They are also encouraged to write competitive exams for pursuing higher studies. Further, these students are provided details of advanced books to be referred, e-resources and journals, new tool/software, and are encouraged to take additional mini-projects

From the perspective of ‘Slow Learners’:

- Remedial Classes are conducted with an aim to improve the academic performance of the slow learners. This practice helps the struggling learners to improve subject knowledge and helps them catch up 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 explanation and discussions are imparted to the slow learners for better understanding apart from the regular lecture sessions.
- In addition to all these, there is the provision for circulating simple, understandable and standard lecture notes/course materials.

File Description	Document
Upload Any additional information	View Document
Provide link for additional information	View Document

2.2.2**Student - Full time teacher ratio (Data for the latest completed academic year)****Response:** 19.01

File Description	Document
List showing the number of students in each of the programs for the latest completed academic year across all semesters	View Document
Certified list of full time teachers along with the departmental affiliation in the latest completed academic year.	View Document
Certified list of full time teachers along with the departmental affiliation in the latest completed academic year.	View Document

2.3 Teaching- Learning Process**2.3.1**

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

The institute adopts student-centric methods such as experiential and participative learning, complemented by problem-solving methodologies, to enrich the overall learning experience. Teachers use ICT-enabled tools like Moodle and Google Classroom, enhancing teaching effectiveness. The institute has its Moodle server contributing to a dynamic and engaging educational environment.

In regular classes, encompassing lectures, practicals, and tutorials, participative learning methods such as flipped classrooms, group exercises, debates etc., are employed, cultivating an interactive teaching learning environment. Additionally, case discussions from various sources or e-Resources further enrich the interactive and learning experience.

Brief videos showcasing fundamental principles, technological know-how, core competencies, recent advancements, best practices, and managerial implications in product and service industry operations relevant to program subjects are shown during classes. These visuals enhance learning effectiveness and innovation, providing interactive lessons grounded in real-world scenarios.

Mandatory industrial training and internships provide students with invaluable hands-on experience and practical skills in their respective fields. Upon completing the training, students are expected to present a

seminar before faculty members and peers, fostering the development of teamwork, communication, and presentation skills. This experiential learning opportunity enhances their expertise, bridging the gap between theoretical knowledge and real-world application.

Dissertation work offered in the final year of the program, integrates theoretical knowledge with practical skills. This ensures a comprehensive application of their learning, leading to a deeper understanding and proficiency in their chosen fields of study. Both UG as well as PG students are inspired to associate and connect themselves with the chapters of globally recognized professional bodies working in their respective domains. Students are encouraged to enthusiastically participate in the various events like case competitions, symposiums, seminars and lecture series organized by these professional bodies. Audio-visual methodology, Google classroom, industrial visits, field work and projects are some of the approaches incorporated to impart experiential and participative learning addressing the applicability and role of ICT-enabled techniques.

The Institute offer facilities such as CIDI (Centre for Innovation, Design, and Incubation) and IDEA Laboratory, facilitating the transformation of students' ideas into reality. Emphasizing hands-on experience, students are encouraged to dedicate ample time to laboratories. Faculty members organize industrial visits/tours aligned with students' interests and relevance to their coursework.

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

2.3.2

The institution adopts effective Mentor-Mentee Schemes to address academics and student-psychological issues

Response:

Mentor-Mentee system of Teacher-Student is established during induction program of first year so as to have personalized support structure with every student. This model aims to strengthen better and more effective relationships between students and teachers. The system ensures continuous monitoring, counseling, and guidance for students in both educational and personal matters. Mentoring students remains an ongoing process throughout their academic journey in the institute.

The **Objectives** of mentorship are:

1. To enhance teacher–student relationship.
2. To enhance student’s academic performance and attendance.
3. To identify students needing counselor service

4. To reduce depression and provide psychological support
5. To minimize student's dropout ratio.
6. To monitor the student's regularity and discipline.
7. To enable the parents to know about the performance/regularity of their wards.

The mentors play a multifaceted role, offering support in both academic and non-academic aspects. Their guidance aims to motivate students, helping them concentrate to achieve learning objectives and improve academic performance. The mentors provide assistance, encouragement, and they counsel on various challenges, addressing the mental and emotional well-being of students. Patiently listening to concerns, they support students in resolving issues. Additionally, mentors foster students' enthusiasm for academics, co-curricular, and extracurricular activities, aiming to instigate a holistic development approach.

Role of a Faculty Mentor:

- To take the lead in supporting a mentee for his/her welfare through one-to-one relationship.
- To build a relationship of trust by caring and planning.
- To serve as a positive role model.
- To motivate mentees for interdisciplinary research/innovation within a group.

Outcomes of the Mentoring System:

- The attendance percentage of the students has increased to greater extent.
- The number of detainment of students has decreased consistently.
- Due to direct communication between mentor and the student, there is good improvement in student-teacher relationship.

File Description	Document
Upload any additional information	View Document
List of Active mentors	View Document
Provide Link for Additional Information	View Document

2.3.3

Preparation and adherence of Academic Calendar and Teaching plans by the institution

Describe the Preparation and adherence to Academic Calendar and Teaching plans by the institution.

Response:

A comprehensive academic calendar, outlining all curriculum-related activities for students and faculty, is meticulously prepared in advance. The calendar is designed in consultation with the Director, Dean (Academic), and Heads of Departments.

Preparation and Adherence of Academic Calendar:

- The coverage of academic calendar encompasses the dates-wise listing of academic assessments (mid-term tests, quizzes, assignment submissions, internal/external viva-voce, project presentations, and end-semester examinations), seminars, conferences, guest lectures, technical workshops, industrial visits, holidays, vacation dates, annual technical and cultural fests, important meetings (DPAQIC, IQAC, BOS, Academic council) etc.
- The academic calendar is uploaded on the institute's website and displayed on the institutional/departmental notice board to make all students aware of all academic activities before/at the time of commencement of the academic year.
- Based on the calendar, the members of the timetable committee prepare the timetable for all the programs. The planned schedule is followed systematically and monitored by the HODs and class in-charges.
- The calendar provides time for the students to plan for internships.
- The departments strictly adhere to the academic calendar in running their programs.

Preparation and Adherence of Teaching Plan:

- The teaching plan includes Number of hours required for each topic, assessment procedures etc. The concerned faculty members prepare teaching (lecture/lesson) plans for their respective courses of each proportional to the academic credits of the respective course. These credit proportional hours are distributed among class room teaching, tutorials, lab sessions and academic assessments as per the respective course requirements.
- These plans are prepared in advance and serve as guide for conducting sessions. The HOD and senior faculty members check the progress of each course and ensure timely and effective completion of each course under different curriculums (PG and UG) in the specified time frame along with perfect blend of practical and theoretical inputs.
- Strictly adhering to the academic calendar, internal and other assessment tests are conducted according to Institute standard procedure. The student's monthly attendance and internal assessment test marks are displayed on the notice board.

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

2.4 Teacher Profile and Quality

2.4.1

Average percentage of full time teachers appointed against the number of sanctioned posts year wise during the last five years

Response: 99

2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
220	220	220	220	220

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template merged with 2.4.3 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2

Percentage of full time teachers with Ph.D./D.Sc. / D.Litt./ L.L.D during the last five years

Response: 39.38

2.4.2.1 Number of full time teachers with *Ph.D./D.Sc. / D.Litt./ L.L.D* during the last five years

Response: 126

File Description	Document
List of faculty having Ph.D./D.Sc. / D.Litt./ L.L.D along with particulars of the degree awarding university, subject and the year of award per academic year.	View Document
Institutional data in the prescribed format (data template merged with 3.2.3 and 3.4.2)	View Document
Copies of Ph.D./D.Sc. / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Copies of Ph.D./D.Sc. / D.Litt./ L.L.D awarded by UGC recognized universities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.3

Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)

Response: 13.31

2.4.3.1 Total teaching experience of full-time teachers as of latest completed academic year

Response: 2874

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.4)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.4

Percentage of full time teachers working in the institution throughout during the last five years

Response: 66.51

2.4.4.1 Number of full time teachers worked in the institution throughout during the last five years:

Response: 145

File Description	Document
Institutional data in the prescribed format (data template merged with 2.4.1 and 2.4.3)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5 Evaluation Process and Reforms

2.5.1

Average number of days from the date of last semester-end/ year- end examination till the last date of declaration of results during the last five years

Response: 39.2

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
34	46	60	23	33

File Description	Document
Result Sheet with date of publication	View Document
Result Sheet with date of publication	View Document
Policy document on Declaration of results (if any)	View Document
Institutional data in the prescribed format (data template)	View Document
Exam timetable released by the Controller of Examination	View Document
Exam timetable released by the Controller of Examination	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.5.2

Percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years**Response:** 6.07**2.5.2.1 Number of complaints/grievances about evaluation year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
184	34	0	439	591

2.5.2.2 Number of students appeared in the examination conducted by the institution year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
4419	4083	4132	3948	3995

File Description	Document
List of students who have applied for re-valuation/re-totaling program wise certified by the Controller of Examinations year-wise for the assessment period.	View Document

2.5.3**IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA)/Formative Assessment have brought in considerable improvement in Examination Management System (EMS) of the Institution****Describe the examination reforms with reference to the following within a minimum of 500 words**

- **Examination procedures**
- **Processes integrating IT**
- **Continuous internal assessment system**

Response:

Implementing IT integrations helps in streamlining various examination-related tasks, such as registration, grading, and result processing. This automation further reduces manual errors, saves time, and improves overall efficiency in managing exams.

In CIA, performance is evaluated through internal examinations for theory as well as practical courses. In

addition, continuous assessment is done through assignments, quizzes, mid semester tests, viva-voce, etc. with appropriate weightage.

In the past five years, the institute has specifically used online systems such as Moodle, Google Classroom, etc., for both teaching and examinations, particularly during the COVID period. These practices for Continuous Internal Assessment (CIA) or Formative Assessment, have brought about significant improvements in the Examination Management System (EMS) of the institute.

The examination schedule is prepared and shared on the college website. Question papers are set in accordance with Bloom's Taxonomy, indicating course outcomes and performance indicator mapping as per the reform policy of AICTE, New Delhi. The entire examination system, including CIA, adheres to the philosophy of outcome-based education. Course outcomes are assessed for each course through both direct and indirect methods. The outcomes of all programs (POs) are compared with the target values. Subsequently, a gap analysis is conducted to enhance teaching-learning methods further. Program-wise PO attainments for each year are accessible on the institute's website for stakeholders to review.

Showing the valued answer scripts of End Semester Examinations to the concerned students helps to achieve greater transparency of the assessment process. This process is useful for the institute in gaining confidence of the students on the fairness and transparency in the examination system. The grievance of the students are considered, and there is a provision to appeal against the result.

Student portal is another example of IT integration in the examination procedures. Students apply for their examination through the portal and can also view their results, mark sheets as well as academic history. It also serves as a platform for students to submit the subject/faculty feedback.

Departments perform the task of marks entry of practical and sessional work through the portal.

Examination Control System (ECS) Software is employed for both pre and post-examination data processing, encompassing various tasks, including the declaration of results.

File Description	Document
Upload any additional information	View Document
Provide links as Additional Information	View Document

2.6 Student Performance and Learning Outcomes

2.6.1

The institution has stated learning outcomes (programme and course outcome)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

Response:

The institute is committed to outcome-based education, placing emphasis on well-defined visions and missions. Individual academic departments articulate their distinct visions and missions. Moreover, Program Educational Objectives (PEOs) align with the respective department's vision and mission, ensuring a cohesive and purpose-driven educational framework. This approach underscores the institution's commitment to creating a comprehensive educational experience aligned with the goals of the institute and its academic departments.

Undergraduate (UG) courses are designed to align with program outcomes 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.

The Course Outcomes (COs) and Program Outcomes (POs) are quantifiable. The institute adheres to the AICTE exam reform policy during student assessments. The attainment of Course Outcomes (COs) occurs through two methods: direct and indirect. Direct attainment is measured through student exams, while indirect attainment is derived from student surveys. 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. Through an annual gap analysis, the institute systematically improves program outcomes, ensuring a continual refinement of educational approaches and achieving optimal student success. The achievements of program outcomes are accessible on the institute's website, providing transparency and easy access for stakeholders to assess the educational accomplishments and adherence to defined objectives.

The institute prioritizes NBA accreditation for its programs, undergoing periodic assessments. Currently, it has five undergraduate and three postgraduate programs accredited by NBA.

File Description	Document
Upload POs and COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	View Document
Provide links as Additional Information	View Document

2.6.2

Pass percentage of students (excluding backlog students) (Data for the latest completed academic year)

Response: 93.96

2.6.2.1 Total number of final year students who passed the examination conducted by Institution during the latest completed academic year:

Response: 1136

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Certified report from the COE indicating the pass percentage of students of the final year (final semester) eligible for the degree program-wise / year wise	View Document
Annual report of Controller of Examinations (COE) highlighting the pass percentage of final year students	View Document

2.7 Student Satisfaction Survey**2.7.1****Online student satisfaction survey regarding teaching learning process****Response: 2.89**

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1

The institution's research facilities are frequently updated and there are well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

The institute has a clearly articulated policy for the promotion of research, and this policy document is readily accessible on the institute's website (https://www.sgsits.ac.in/files/RD_Approved_Policy_2023-compressed.pdf). The R&D Cell creates an environment that encourages faculty members to enhance their research efforts and stay updated on current research requirements.

Over the time, the institute has improved its research facilities which is evident from respective developed laboratories e.g. Antenna lab, VLSI Lab, Power Electronics Lab, Vibration & Noise Control Lab, Nanoscience & Nanotechnology lab, Optoelectronics lab etc. Institute has also received NABL accreditation for Centre of Pump Engineering (COPE). Recently developed research facilities are also evident from the Centre for Innovation, Design and Incubation CIDI and Idea Lab of the institute. Faculty members at the institute have received research funding from various agencies, including DST, New Delhi, AICTE, New Delhi, and others. As per the policy, annual budget is allocated to the departments for expenditure towards development of laboratories and research facilities.

Faculty members are specifically encouraged to engage with industries, gaining insights into their requirements and challenges. In alignment with this, faculty members orient their research work to address pertinent relevant issues within their respective areas of expertise. Furthermore, they are motivated and supported to draft research projects that align with the identified needs in their fields of study. It may be noted that many of the laboratories have been developed through funding received by faculty members in the form of external research projects and other projects from various agencies. The institute has Memorandums of Understanding (MoUs) with industries and reputed institutes, which also facilitate academic and research activities. This collaborative approach aims to enhance the relevance and impact of the institute's research initiatives. Faculty members are encouraged to pursue their research work for PhD from institutes of repute such as IITs. To facilitate this, necessary study leave is sanctioned. As per the research promotion policy, the faculty members are encouraged to publish their research work in reputed journals (SCI/Scopus indexed). Moreover, they are encouraged to present their work in national/international conferences of repute; the expenditure (towards registration fee, travel, stay etc.) of which is born by the institute. Further, they are motivated to pursue Intellectual Property Rights (IPR) and patents. All these endeavors ultimately enrich the institute's academic and research facilities.

File Description	Document
Upload any additional information	View Document

3.1.2

The institution provides seed money to its teachers for research

Response: 0

3.1.2.1 Amount of seed money provided by institution to its teachers for research year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
0	0	0	0	0

File Description**Document**

Institutional data in the prescribed format (data template)

[View Document](#)

3.1.3

Percentage of teachers receiving national/ international fellowship/financial support by various agencies for advanced studies/ research during the last five years

Response: 10.94

3.1.3.1 Number of teachers who received national/international fellowship /financial support by various agencies, for advanced studies / research; year-wise during the last five years

Response: 35

File Description**Document**

List of teachers who have received the awards along with nature of award, the awarding agency etc.

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

E-copies of the award letters of the teachers

[View Document](#)

3.2 Resource Mobilization for Research**3.2.1**

Total Grants research funding received by the institution and its faculties through Government and non-government sources such as industry, corporate houses, international bodies for research

project, endowment research chairs during the last five years (INR in Lakhs)**Response:** 958.71165

File Description	Document
List of Extramural funding received for research, Endowment Research Chairs received during the last five years along with the nature of award, the awarding agency and the amount	View Document
Institutional data in the prescribed format (data template is merged with 3.2.2)	View Document
Copies of the letters of award for research, endowments, Chairs sponsored by non-government sources	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.2.2

Number of research projects per teacher funded by government, non-government , industry, corporate houses, international bodies during the last five years

Response: 0.13**3.2.2.1 Number of research projects funded by government and non-government agencies during the last five years.**

Response: 40

File Description	Document
List of project titles with details of Principal Investigator, amount sanctioned and sanctioning agency etc	View Document
Institutional data in the prescribed format (data template merged with 3.2.1)	View Document
Copies of the grant award letters for research projects sponsored by government agencies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.2.3

Percentage of teachers recognised as research guides as in the latest completed academic year**Response:** 26.39**3.2.3.1 Number of teachers recognised as research guides as in the latest completed academic year:**

Response: 57

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.4.2)	View Document

3.3 Innovation Ecosystem**3.3.1**

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

The institute has following establishments/facilities/policies in context to the mentioned criterion:

1. Institute Innovation Council (IIC) has been working as per the guidelines provided by Ministry of Education's (MoE) Innovation Council (MIC) for the last six years. The primary aim of **MHRD's Innovation Cell, MIC** is to encourage, inspire and nurture young students by supporting them to work with new ideas while they are in formative years.
2. **National Innovation Startup policy** is also introduced in the Institute with a vision to ensure startup and innovation ecosystem in SGSITS for startups, entrepreneurship, Intellectual Property Rights (IPR) ownership, technology licensing and promoting Rural Enterprise.
3. **The Start-up cell** in SGSITS was established in the year 2018. The cell with its team of mentors, coordinators and E-cell student volunteers of the institute works for nurturing the potential start-up ideas that will cater need of both tech and non-tech solution to various social, economic and industrial problems of the nation.
4. **E-Cell SGSITS, Indore** officially began in the year 2015. E-Cell hosts various workshops, speaker sessions, innovative events, competitions for aspiring entrepreneurs etc.
5. **Centre for Innovation, Design & Incubation (CIDI)** was established in the year 2018 and is functioning with aims to facilitate Innovation, Design and to promote Incubation activities related to all the engineering departments in identified key areas. An exclusive building with staff headed by CEO is provided for the same. In addition to the in-house trainings, CIDI had collaborated with some of the industries and companies for training in its functional areas. Presently it is also providing fab-lab facility to **SGSITS Incubation Forum**.
6. **SGSITS Incubation Forum (SIF)** is a section 8 company incorporated on 11th December 2019

with an objective to create a vibrant ecosystem to foster Technology Incubation and Entrepreneurship. SIF offers Mentoring, Funding, Investors Connect, and other supports

7. **Indian Knowledge System:** The institute has included the Essence of Indian Knowledge System (EIKT) as a non-credit mandatory subject in its academic scheme for all the B.Tech programmes. It has conducted a three days lecture series on **Bhartiya Gyan Parampara** in July 2022. The institute has also signed an MOU with Centre for Ancient Indian Mathematics at department of Data Science and Forecasting, DAVV, Indore.
8. **IPR Cell:** The Institute is having Intellectual Property Right Cell (IPRC) to facilitate, encourage, promote, protect and safeguard IP, scientific research work generated by faculty, research scholars and students. It has its own IP policy and procedural guidelines for its functioning. It enables the Institute to make beneficial use of intellectual property (IPR) so as to confer maximum benefit to the inventor(s), the Institute and the society at large.
9. **Idea Lab:** AICTE-IDEA (Idea Development, Evaluation and Application) Lab is established for encouraging students for application of science, technology engineering and mathematics (STEM). IDEA Lab provides all facilities under one roof including mentorship, for conversion of an idea into a prototype 24x7 in the campus. IDEA lab also organizes Boot camps, Skilling Programme, Faculty Development Programme, Ideation workshop, Hardware Hackathon and provides support for Projects of school students.

File Description	Document
Upload any additional information	View Document
Link for Any other additional information	View Document

3.4 Research Publications and Awards

3.4.1

The Institution ensures implementation of its stated Code of Ethics for research.

The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following:

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of institutional Ethics committee (Animal, Chemical, Bio-ethics etc.)**
- 3. Plagiarism check through software**
- 4. Research Advisory Committee**

Response: A. All of the above

File Description	Document
Copy of the syllabus of the research methodology course work to indicate if research ethics is included	View Document
Constitution of the ethics committee and its proceedings as approved by the appropriate body	View Document
Constitution of research advisory committee and its proceedings as approved by the appropriate body.	View Document
Bills of purchase of licensed plagiarism check software in the name of the HEI	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.2

Number of candidates registered for Ph.D per teacher during the last five years

Response: 2.25

3.4.2.1 Number of candidates registered for Ph.D during the last 5 years:

Response: 128

File Description	Document
Ph.D. registration letters/Joining reports of candidates.	View Document
Letter from the university indicating name of the Ph.D. student with title of the doctoral study and the name of the guide.	View Document
Institutional data in the prescribed format (data template merged with 2.4.2 and 3.2.3)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.3

Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

Response: 0.99

3.4.3.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

Response: 316

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Link to the uploaded papers, the first page/full paper (with author and affiliation details) on the institutional website	View Document
Links to the paper published in journals listed in UGC CARE list	View Document
Link re-directing to journal source-cite website in case of digital journals	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.4**Number of books and chapters in edited volumes published per teacher during the last five years**

Response: 0.35

3.4.4.1 Total Number of books and chapters in edited volumes published during the last five years

Response: 112

File Description	Document
List of chapter/book along with the links redirecting to the source website	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document

3.4.5**Bibliometrics of the publications during the last five years based on average Citation index in Scopus/ Web of Science**

Response: 6.13

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.6

Bibliometrics of the publications during the last five years based on Scopus/ Web of Science – h-index of the Institution

Response: 24.5

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy**3.5.1**

Revenue generated from consultancy and corporate training during the last five years

Response: 131.11

3.5.1.1 Total Amount generated from consultancy and corporate training year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
25.42234	21.68305	12.12155	42.95213	28.93584

File Description	Document
Letter from the corporate to whom training was imparted along with the fee paid.	View Document
Letter from the beneficiary of the consultancy along with details of the consultancy fee	View Document
Institutional data in the prescribed format (data template)	View Document
CA certified copy of statement of accounts as attested by head of the institution	View Document
Audited statements of accounts indicating the revenue generated through corporate training/consultancy.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.6 Extension Activities

3.6.1

Outcomes of extension activities in the neighbourhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)

Describe the impact of extension activities in sensitising students to social issues and holistic development with four case studies within a maximum of 500 words

Response:

Being an oldest technical Institute of the central India, the Institute is having a strong bonding with the society. Students are encouraged to undertake extension activities within the local community to sensitize individuals to social issues, and promote holistic development. These endeavors are facilitated through various clubs as well as the National Cadet Core (NCC) and the National Service Scheme (NSS) units.

Both NCC and NSS play a pivotal role by organizing activities ranging from 3 to 5 hours, one-day, and seven-day outreach programs. These initiatives aim to inculcate an understanding of various social issues prevalent in society, including but not limited to Child Education, Child Marriage, Intoxication (Nasha), Cleaning and Health issues, Malnutrition, Blind faith, Child Labour, Environmental Problems etc. Through these programs, students actively contribute towards addressing and raising awareness about crucial societal challenges.

During the outreach programs, students conduct various activities such as Rallies, Nukkad Nataks, Shramdan, teaching and interaction with children and village people, orphanage and old-age home services, various food, clothes, and stationary distribution programs, plantation, cleaning awareness, and

blood donation activities. These initiatives aim to increase sensitivity and responsibility among students towards social development. The NSS Unit of the institute has actively worked in villages like Ujjaini (45 KM), Badarkha (32 KM), Yashwant Sagar Dam (25 KM), and Tinchha (50 KM), from 2019 to 2023, conducting various activities to sensitize students to social issues.

The NCC wing of the institute has also been actively participating in various camps, such as Yoga, Swachh Bharat Abhiyan under the Swachh Bharat Mission, and a cycle rally to support and save fuel. Additionally, the NCC organized a Mini Marathon for awareness, a rally against drug abuse and trafficking, and participated in Road Safety awareness campaigns and traffic week organized by the District Administration. NCC cadets also contribute to counting the donations at Khajrana Ganesh Temple. Furthermore, students of the institute conducted a remarkable mask-bearing campaign during the COVID-19 pandemic. Cadets of NCC wing also organize Marathon for social awareness in which the students as well as public at large from various nearby places participate for some social cause. Social awareness camps have also been organized by NCC cadets at nearby places like Ralamandal and other rural areas.

Annually, the institute hosts Techfest AAYAM, a dynamic event that draws active participation from both its students and those from nearby colleges. During this event, participants showcase their talent and technical knowledge across diverse domains, contributing to a holistic development experience. The prestigious "Chitale Award for Outstanding Social Work" is also given to the student who has made the best contribution towards a social cause. Applications are invited from the students of the institute, based on which the award is decided by the jury.

The students of the Nature Club actively engage in nature-related activities. They participate in tree plantation, environmental conservation initiatives etc. within as well as outside the institute. Recently, the institute has also won Green Campus Award given by Indore Municipal Corporation.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

3.6.2

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years

Response: 75

3.6.2.1 Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community year wise during the last five years.

2022-23	2021-22	2020-21	2019-20	2018-19
20	12	12	16	15

File Description	Document
Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Institutional data in the prescribed format (data template)	View Document
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document

3.7 Collaboration

3.7.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years

Response: 34

File Description	Document
Summary of the functional MoUs/linkage/collaboration indicating start date, end date, nature of collaboration etc	View Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activity-wise and year-wise	View Document
Institutional data in the prescribed format (data template)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for

- 1. teaching – learning, viz., classrooms, laboratories, computing equipment etc**
- 2. ICT – enabled facilities such as smart class, LMS etc.**
- 3. Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc.**

Response:

The Institute possesses required number of **classrooms** for facilitating the classroom teaching of UG, PG, and PhD students. Classes take place in the Lecture Theatre (LT), main Academic Block, and ATC building of the institute. Lecture theatres are equipped with modern teaching aids. Furthermore, there are smart seminar rooms and drawing halls. Smart boards are installed in almost all departments. Typically, PG classes are held within their respective departments. Program-specific laboratories are typically located within the concerned academic departments. However, for interdisciplinary subjects, students also visit related departments. The departments have their own seminar rooms and conference rooms.

There are numerous central facilities available for students, which are utilized by all the departments as per their needs. These facilities include the Computer Centre, Central Workshop, Centre of Innovation, Design & Incubation (CIDI), Central Library, Idea Lab, etc.

The **Computer Center** is a vital component of the institute, featuring two well-equipped labs with state-of-the-art computers. It offers computing facilities to all first-year students (B.Tech.) for their practical programming work and internet usage. With a large number of computers available, students have sufficient time and opportunities to practice and enhance their programming skills. Moreover, the facilities of the computer center are also utilized for conducting programming labs for students in advanced classes across various branches. Additionally, the Computer Center serves as the venue for online tests conducted by companies recruiting from the institute. The Centre of Innovation, Design & Incubation (CIDI) remains accessible to students beyond institute hours, from 8 PM to 9 PM.

Physical recreation through **games and sports** has been integral part of the Institute. The institute provides ample sports facilities for a variety of indoor and outdoor games for students on its premises. Adequate facilities for both outdoor activities (e.g., cricket ground, lawn tennis court, basketball court, turf volleyball court, etc.) and indoor sports (badminton court, table tennis court, etc.) are available in the institute. Annual Sports Meet “VARCHASVA” (Inter-branch Tournament) is organized every year for the promotion of Sports activities among students. Various Sports tournaments for Teaching & non-Teaching Staff are also organized.

The **gymnasium** was started in the Institute on the occasion of the Silver Jubilee of the 1986 batch with the name “GYMNASIUM LEGEND 86”. The institute gym is equipped with advanced exercise

machines both for aerobics and heavy weight lifting like treadmills, cross-trainers etc. The gym facility is available for students, faculties, and alumni of the institute. Gymnasium has a full-time dedicated team of a trainers and an attendant supervised by a Professor-in-charge. Students also practice yoga in the gym premises.

There is a separate space “SILVERIA 91” for **cultural activities**& Induction program. There is an open ground & stage in front of the Student Activity Centre for organizing the Annual cultural fest.

Institute has a separate space for student clubs (SAC) at the central level e.g. for SAE (BAJA), KSHITIJ, Students Robotics Club (SRC) etc. Departmental clubs are also active which operate from their respective departments.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.1.2

Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years

Response: 7.93

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
8.01	7.17	13.49	57.84	46.85

File Description	Document
Institutional data in the prescribed format (data template is merged with 4.2.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

The Institutes' Central Library was established in 1955 with a small collection of 429 books. Currently, it is fully equipped with more than one lakh high-quality, high-cost standard reference and textbooks, world-renowned international and national research journals, theses, project reports, audio/visual and electronic learning resources in all disciplines of technical education. It also contains literature in the fields of social sciences and humanities. The central library occupies a separate three-floor building with a floor area of 2050 square meters and a seating capacity of more than 300. On average, more than 1000 books are added each year to the library. Approximately 400 users visit the library per day. The library remains open every day of the week, including Saturdays and Sundays, to provide effective services to users.

Library Automation: The library has complete automation, maintaining databases of books and library readers, an online catalogue (Web OPAC), and barcoding of documents. It also offers various digital resources to satisfy the needs of faculty members and students.

Infrastructure: The library has 40 computers, Servers, Scanner, 1 GB speed Internet, Library LAN, Campus Wide Networks (CWN), CCTV Cameras and associated infrastructure to provide library services and e-resources.

Library Software: The library is using the latest version of Libsys10 Cloud, an Integrated Library Management Software (ILMS), to automate all functions.

E-resources: Subscribed to a sufficient number of e-books and e-journals through DELNET, UGC N-LIST, ASME, BENTHAM, and the Knimbus Remote Access Platform. Also, NPTEL videos are available and links to a large number of open-source learning resources, etc., are provided.

Important Library Services:

(i) **Book Borrowing Service:** UG students may borrow 3 books, PG students 4, PhD students 5, non-teaching staff 5, and faculty members 10. Borrowing periods are 30 days for students and 180 days for faculty.

(ii) **Reference Service:** Readers may read books in the reference section. The library staff is always available to offer personalized assistance in locating reading materials and information.

(iii) **Book-Bank:** The Book-Bank facility is available to all undergraduate students belonging to Scheduled Castes and Scheduled Tribes. A separate collection of good-quality textbooks is provided for SC/ST students.

(iv) **Inter Library Loan:** Any document that is not available in the library is provided to users through cooperation with other libraries in the country..

(v) Reprography: The library provides document printouts, photocopies, binding, and lamination facilities to all users at very nominal charges.

(vi) Internet: Internet facilities with 1 Gbps speed are available on all computers in the library. A separate section has been designated for accessing this facility during all working hours. Only learning resources and educational information are permitted to be accessed under this facility.

Use: All print and e-resources are optimally used by the faculty and students.

External Membership of Library: Library has opted the external membership of Indian Institute of Technology (IIT) Indore, Learning Resources Center (Central library).

File Description	Document
Provide the link for additional information	View Document

4.2.2

Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years

Response: 0.13

4.2.2.1 Expenditure for purchase of books / e-books and subscription to journals/e-journals year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
0.43897	0.05772	0.38	0.02239	1.37

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.4.1)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for purchase of books/ e-books and subscription to journals/e-journals should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

The Institute maintains its IT facilities through a separate cell called as campus-wide Network (CWN) Cell, which also has dedicated manpower.

The CWN Cell frequently upgrades its IT Services by procuring modern equipment like Servers, Switches, Routers, Storages, etc. The Institute has 03 Nos. of ISP Connections. There is a 1 GBPS leased line from NKN, 300 MBPS Broad Band connection through Tikonaand a 10 MBPS leased line through Khetan Internet Services.

The campus wide network cell is backbone of institute's communication network. The CWN take responsibility for the following:

- Providing uninterrupted 24x7 internet facility to academic blocks, all laboratories, faculty rooms, boys and girls hostels, staff quarters,directorsbuglow, non-teaching staff quartes etc.
- The CWN also connects all surveillance system through a speratevirtual private network. The recorded data of surveillance camera are stored at servers. These data are shared as and when requested by parties through proper channel.
- The CWN also provides email services (through mail.sgsits.ac.in) to all faculty members, non-teaching members as well as to all students. The email servers are hosted at CWN and have 99% uptime. Appropriate firewalls and spamassisns are loaded to minimize spams and unwanted emails.
- The software such as Microsoft products through azure, Matlab, LabView, AutoCAD,

Purchased and the license are offered through centralized servers to all onsite through proxy servers.

- The Moodle server is also hosted and CWN. The server provides support to conduct online examinations, quizzes, data collection, feedback, etc. The server has a capacity of accommodating more than 1000 simultaneous users.
- The CWN section maintains WiFi facilities by procuring latest technologies equipment, like Acces Points, switches, etc.
- The CWN also hosts EduRoam, an academic wireless services of MHRD.
- Uninterrupted services are provided through appropriate powerbackup for airconditioners and servers, fiber optic looped networking, uniniterrupted power supply, etc.

File Description	Document
Upload any additional information	View Document

4.3.2

Student - Computer ratio (Data for the latest completed academic year)

Response: 4.5

4.3.2.1 Number of computers available for students' usage during the latest completed academic year:

Response: 912

File Description	Document
Purchased Bills/Copies highlighting the number of computers purchased	View Document
Extracts stock register/ highlighting the computers issued to respective departments for student's usage.	View Document

4.3.3

Institution has dedicated audio visual centre, mixing equipment, editing facility, media studio, lecture capturing system(LCS) and related hardware and software for e-content development

Response:

The institute utilizes the well-developed audio-visual centre at its affiliated university campus i.e. RGPV, Bhopal. The center is equipped with mixing equipment, editing facility, lecture capturing system and related hardware and software for e-content development. The faculty members of the institute have utilized the facility to record the lectures and get the lectures uploaded on YouTube channel for the benefit of students

<https://www.youtube.com/playlist?list=PLL7liBDYa4YaZeymOiWwPXf8mUPNBRtRx>

<https://www.youtube.com/@GSProductionHouse>

Moreover, the Institute has the GS Production House (GSPH), serving as the official media management club tasked with capturing college events and producing short videos. Comprising four primary domains, the GS Production House team excels in diverse capacities: the Content Writing team crafts compelling captions and scripts for events. Graphic Designing team produces eye-catching illustrations and visuals for various social media platforms, highlighting their artistic ingenuity.

The Management team facilitates coordination among simultaneous domains, ensuring a seamless and efficient working environment; and the Media Production team, positioned at the core, transforms conceptualized ideas into visually stunning masterpieces through the creation of engaging videos. Collectively, these domains collaborate synergistically to elevate the Institute's media presence, presenting a unified effort in documenting and sharing the college experience, creatively and professionally. GSPH members are official student members of Institute Innovation Council(IIC). They manage the social media activities of all IIC and other activities carried out in the institute.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years

Response: 8.42

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities of DDE and total expenditure excluding salary, year - wise, over the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
48.64	38.84	32.96	13.41	7.69

File Description	Document
Institutional data in the prescribed format (data template merged with 4.1.2 and 4.2.2)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for maintenance of physical facilities and academic support facilities should be clearly highlighted)	View Document

4.4.2

There are established systems and procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc.

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

Response:

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

Classrooms: The institute has a well-established system and procedure for the utilization and maintenance of its academic resources and facilities. There is a **Classroom management committee** headed by a Professor-in-charge, which takes care of allotment of classrooms to various departments for its maximum and effective utilization. Committee is also responsible for upgrading the classrooms with ICT tools. The committee is tasked with ensuring the effective maintenance of classrooms, including the cleaning of all classrooms, auditoriums, lecture theatres, and washrooms, carried out by the institute's housekeeping staff. Electrical and civil maintenance of classrooms is taken care of by the Electrical and maintenance cell of the institute. Water coolers are maintained and cleaned regularly as per the standard practices.

Laboratories:-There is a Professor in charge of each laboratory. Routine equipment maintenance is managed by the lab staff. General record-keeping of all the laboratory equipment is conducted at the departmental level. Stock registers are maintained for both, non-consumable (dead stock) and consumable items. An institute-level committee conducts annual physical stock verification for each of the departments/sections/hostels. Electrical and civil maintenance of laboratories is handled by the institute's electrical and maintenance cell respectively. The staff at the computer center maintains both the hardware and software themselves. This includes periodic checks of computer hardware components such as CPUs, monitors, keyboards, mice, and printers. Regular cleaning of internal components is performed to prevent overheating and malfunctions. Softwares are regularly updated to fix bugs, enhance security, and improve functionality. Implementing backup solutions and disaster recovery plans are in place to safeguard critical data and ensure uninterrupted operations.

Library:-There are various systems and procedures for maintaining Library resources, facilities and their

maximum utilization by the students and faculty members. The library operates under an Open Access System, utilizing Barcoding, Classification, and Computerized Cataloguing. It employs a standardized Library Automation Software for efficient Issue/Return processes. Additionally, there is access to a wide range of E-resources, including e-Journals and e-books, facilitated by high-speed Internet connectivity. The library's information is conveniently accessible on its dedicated web page through the institute's website. The library's resource utilization data can be accessed through its Automation Software and Online System, which is renewed time to time from the concerned agency.

SportsComplex:-The institute has appointed a proficient trainer to look after the regular maintenance and conduct routine activities at the gymnasium. Outdoor sports grounds are maintained by two groundskeepers from outsourcing agency by performing tasks such as watering, rolling, and marking. An attendant looks after the indoor sports complex for cleanliness and maintenance. The institute covers expenses such as travel allowances, daily allowances, rent, and sports uniforms for students participating in selected sports events.

Similar practice is followed for maintaining and utilizing the resources at other places throughout the institute.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 33.24

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1605	1543	1437	1185	899

File Description

Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority.

[View Document](#)

Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language).

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.1.2

Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years

Response:

Nurturing Futures: 5 Years of Comprehensive Career Counseling at SGSITS Indore

In the last five years, SGSITS Indore has undertaken proactive measures to elevate the career prospects of its students by providing robust career counseling, including e-counseling, and guidance for competitive examinations. The institution's multifaceted approach encompasses a wide array of

initiatives, focusing on skill development, placement, internships, higher education, research, corporate ethics, and life skills.

Placement and Internship Coordination: The institution has been at the forefront of planning and organizing numerous placements and internship drives within the campus. This involves actively inviting reputed companies to participate in training and placement programs. To streamline the recruitment process, the institution conducts written tests, both online and offline, and organizes interviews and group discussions, ensuring that students are well-prepared for the corporate world. Additionally, the institute facilitates placement and internship opportunities through open corporate competitions, fostering a competitive yet supportive environment.

Placement Induction Sessions: To prepare students for the professional arena, the institution conducts comprehensive pre-placement sessions. These sessions cover employability skills assessments, enhancement trainings, and awareness about the entire training and placement process. From the first to the final year, students get guidance on employability skills, ensuring they are well-equipped for the challenges ahead. The institute also conducts placement preparation test series, mock interviews (both in-person and remote), and group discussion preparation sessions, refining students' abilities to face real-world scenarios.

Career Counseling and Planning: Recognizing the importance of holistic development, SGSITS Indore integrates career counseling and planning into its curriculum. Industry expert sessions provide students with insights into corporate expectations, while exposure to PAN India competitions widens their horizons. The institute offers information on summer and winter internships, industrial trainings, workshops, and summits, enabling students to gain practical experience alongside their academic pursuits. Moreover, students are guided through the intricacies of higher education and foreign education through counseling sessions conducted by external experts.

Building the Bridge between Industry and Academia: SGSITS Indore places a strong emphasis on bridging the gap between industry and academia. Managing recruiters' correspondence and feedback is a crucial aspect of this effort, ensuring a seamless exchange of information and expectations. The institution instills values of discipline, punctuality, and seamless communication among all stakeholders, fostering an environment conducive to professional growth.

Continuous Learning and Development: To meet the evolving demands of the job market, SGSITS Indore facilitates information about online learning, certifications through Massive Open Online Courses (MOOCs), and corporate platforms. This ensures that students are not only well-versed with theoretical knowledge but also equipped with the latest industry-relevant skills.

In conclusion, the past five years have witnessed SGSITS Indore dedicatedly nurturing the careers of its students through a comprehensive and innovative approach to career counseling. By seamlessly integrating traditional methods with cutting-edge e-counseling strategies, the institution continues to empower its students to navigate the competitive landscape of the professional world successfully.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

5.1.3

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills**
- 2. Language and communication skills**
- 3. Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)**
- 4. Awareness of trends in technology**

Response: A. All of the above

File Description	Document
Report with photographs on programmes conducted for awareness of trends in technology	View Document
Report with photographs on programmes/activities conducted to enhance soft skills, Language & communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies**
- 2. Organisation wide awareness and undertakings on policies with zero tolerance**
- 3. Mechanisms for submission of online/offline students' grievances**
- 4. Timely redressal of the grievances through appropriate committees**

Response: A. All of the above

File Description	Document
Proof w.r.t Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 48.87

5.2.1.1 Number of outgoing students placed and progressed to higher education during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
633	583	530	429	527

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

Percentage of students qualifying in state/ national/ international level examinations out of the graduated students during the last five years

(eg: NET/SLET/ Civil Services/State government examinations etc.)

Response: 5.25

5.2.2.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/SLET/Civil Services/State government examinations etc.) year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
44	60	77	63	46

File Description	Document
List of students qualified year wise with details of examination and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format (data template)	View Document

5.3 Student Participation and Activities**5.3.1****Number of awards/medals for outstanding performance in sports/cultural activities at University / state /national / international Level events during the last five years****Response:** 76**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at University / state / national / international level events (award for a team event should be counted as one) year wise during last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
26	06	0	28	16

File Description	Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2

Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution.

Describe the Student Council activity and students' role in academic & administrative bodies within a maximum of 500 words

Response:

The institute encourages participation of student representatives in various academic and administrative committees, which enables them to learn team building, decision making, time management and self-discipline. Students' opinion and suggestions are considered while taking decision measures.

Academic Council Serves as the Institute's supreme academic body. The Council does have student representation from both male and female categories. Additionally, the **Board of Studies (BoS)** within each department also includes students as invitees. The committee to deal with cases of **Unfair Means in Exam (UFM)**, also includes student representatives. The Institute Innovation Council (IIC) ensures substantial student representation, which is officially recorded on the Ministry of Education's Innovation Council portal.

Several **student clubs** exist in the institute, and their details are available on the institute's website. Though faculty coordinators guide students in their respective activities, but the organization of club activities is primarily managed by the students themselves. Student clubs have various positions such as President, Secretary, Treasurer, etc. Furthermore, there are **departmental clubs** that focus on co-curricular activities related to specific departments. There are placement coordinators and volunteers for managing placement activities in the **placement cell**. Other bodies, such as the start-up cell and alumni cell, also include student representation.

The institute offers hostel accommodation for students from other cities. **The Hostel and Mess Management Committees** look after the management responsibilities in both Boys and Girls hostels. These committees play a significant role in ensuring food quality, hygiene, and general facilities. Members voluntarily monitor day-to-day activities and promptly report any issues to the respective hostel wardens.

Student representation exists in managerial capacities within the **National Cadet Corps (NCC)** and **National Social Services (NSS)**. NCC unit actively promotes the growth of leadership, character, comradeship, sportsmanship, and ideal services among the youth, whereas NSS unit organises outreach activities such as blood donation, rural health and sanitation, adult education, and environmental awareness camps in neighbouring areas as part of their social responsibilities.

The girl students are part of the **Grievance Redressal & Feedback Cell**, which addresses issues on women welfare. The committee adopts the policy guidelines as envisaged by AICTE, UGC, RGPV, DAVV and State government as applicable from time to time.

In general, student representation in various academic and administrative bodies has been a longstanding tradition in the institute and continues to be upheld.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

5.3.3

The institution conducts / organizes following activities:

- 1.Sports competitions/events**
- 2.Cultural competitions/events**
- 3.Technical fest/Academic fest**
- 4.Any other events through Active clubs and forums**

Response: A. All four of the above

File Description	Document
Report on Sports, Cultural competitions/events, Technical/academic fests, Any other events through active clubs and forums along with photographs appropriately dated and captioned (whichever is applicable)	View Document
List of students participated in different events year wise signed by the head of the Institution	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of circular/brochure indicating such kind of activities.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4 Alumni Engagement

5.4.1

Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution through registered Alumni association:

Response: 80

5.4.1.1 Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution year wise through registered Alumni association:

2022-23	2021-22	2020-21	2019-20	2018-19
38.70	5.50	0	0	35.8

File Description	Document
List of alumnus/alumni with the amount contributed year-wise	View Document
Annual audited statements of accounts of the HEI highlighting the Alumni contribution duly certified by the Chartered Accountant/Finance Officer	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4.2

Alumni contributes and engages significantly to the development of institution through academic and other support system

Describe the alumni contributions and engagements within a maximum of 500 words

Response:

The SGSITS Alumni Association, a registered body, plays a crucial role in the institution's development by providing financial and other support services. Established to maintain connections with alumni and foster a sense of belonging, the association actively contributes to the growth of the Alma Mater. The association provides a platform for interaction between alumni, present students, faculty of the institute and institute administration. Alumni are also included as members in the Board of Studies of all departments. They are invited to meetings at the college where they interact with their teachers and express their suggestions. The mission of the Alumni Association is to foster a mutually beneficial relationship between the Institute and its alumni.

The alumni association has played a vital role in enhancing the institute's infrastructure and facilities over the past several decades. It has contributed in development of infrastructure (e.g. Silveria, Institute Canteen etc.) as well as academic facilities (e.g. in the form of laboratory equipment to various departments). In the last five years, alumni have actively contributed both financially and non-financially, greatly improving the institute's amenities through their engagement and support.

Contribution by the Alumni Association:

During the period of 2018 -2023, significant contributions have been made by the alumni towards:

- Development of the infrastructure of the institute, like Golden Jubilee Gate, Silveria 1990 Auditorium etc.
- Development of departmental laboratories.
- Developing and implementing the energy saving concept in the institute through installation of Solar Panels.
- Innovative projects to aspiring students and thereby encouraging the Research & Development of the institute.
- Guidance for professional and career development.
- Placement and placement activities.
- Assistance to the Poor and meritorious students of the Institute.
- Curriculum revision.
- Development of sports facilities.

Further, detailed listing of the support extended by Alumni has been provided in the supporting document.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

Governance and leadership

The institute aligns its efforts with its vision and mission, consistently striving to be a leading institution in technology and science within the state and the western region of the country. It has made significant contributions by supplying skilled technical human resources to industries both domestically and internationally. The stakeholders actively participate in various academic and administrative activities. The Finance Committee is responsible for preparing the annual budget. The institute operates in alignment with decisions made by its Governing Body. The organization set-up has been shown in **Organogram** attached in the form of supporting documents, which clearly describes the decentralization of powers in implementing the policy matters.

Alignment with Vision and Mission

The institute's administration has always aligned its efforts with the institute's vision and mission. In accordance with this alignment, institute five year perspective plan has been prepared, which focuses on academic activities, industrial interaction, placement activities, infrastructure development and quality assurance policy as evident from the institute perspective plan.

The institute aims to impart futuristic technical education and instil high standards of discipline through its dedicated well qualified Faculty and supporting staff. This commitment aims to set global standards, making students technologically superior and ethically strong. The institute emphasizes rigorous learning experiences both inside and outside the classroom, including hands-on research and leadership opportunities."

NEP Implementation:

The institute's administration has prioritized the integration of National Education Policy (NEP) principles into its diverse range of programs across departments. Through proactive measures and strategic planning, it has adopted NEP 2020 as a part of strategic development plan. The institute holds approval from the All India Council for Technical Education (AICTE), and it has been operational under autonomous status as given by the University Grants Commission (UGC), New Delhi, since year 1989.

Under the autonomous status, the institute is affiliated to the RGPV (University of Technology of M.P.), Bhopal for Engineering/Technology and Pharmacy Programs and DAVV, Indore for Applied Sciences and Management Programs. Institute under the umbrella of both the universities has implemented NEP 2020 in its various programs.

Sustained institutional growth:

Established in 1952 with three programs, the institute has grown significantly over the years. At present, the institute offers 11 UG Programs (6 NBA Accredited) and 25 PG Programs (3 NBA Accredited) including PhD. It is a QIP Centre declared by AICTE in 5 disciplines and Research center of RGPV for PhD in different faculty of Engineering, Technology & Pharmacy. Moreover, it is research center of DAVV, Indore in faculty of Applied Sciences. The institute has developed a Centre for innovation, Design and Incubation (CIDI), and IDEA Lab to support start-ups, Projects and upcoming Entrepreneurs.

Ranked in National Institutional Ranking Framework (NIRF) by MHRD, it has always sought to bridge the worlds of the scholar and the industry. The institute is also catering to the need of students to pursue higher studies, entrepreneurship and start-ups with strong Alumni support.

All the above mentioned activities are in line with the Institutional Perspective Plan.

File Description	Document
Upload any additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

Institute Perspective Plan: The five-year perspective plan of the institute for 2023 to 2027 is available on the website. This plan indicates the goals, current status, and strategies to implement various activities such as academic initiatives, industry interaction, placement efforts, infrastructure development, and quality assurance policy

Functioning of the Institutional Bodies:

Shri G. S. Institute of Technology and Science, Indore, is a Government-Aided Autonomous Institute established in 1952 by the Shri G. S. Technological Society. It is fully owned and governed by the

Governing Body (GB) of the Institute. The Honorable Minister of the Technical Education and Skill Development Department, Government of Madhya Pradesh, Bhopal, serves as the Chairman of the GB. The GB includes representation from AICTE, UGC, Government of MP, RGPV, industry, society, and the institute's faculty. The Director of the Institute serves as the Member Secretary of the GB.

The GB approves all the policies/rules, appointments and all the financial matters of the Institute. Additionally, there is a Finance Committee and few other committees for the financial and the other relevant matters of the institute.

Policies: Quality policy of the Institute, Code of conduct and Professional ethics for Teachers, Students and staff of the Institute and other stake holders have been approved and uploaded on the website.

Administrative setup: For the assistance of the Director in routine matters of the Institute there are other administrative posts like Dean Administration, Dean Academics, Dean Research and Development, Dean Student Affairs, Dean Staff Welfare, Dean Skill Development and Placement, Heads of the department, Chief Warden, Wardens, Section in charges, Registrar, Finance Officer, etc. Different committees are also there like Institute Purchase Committee, Discipline Committee, and Anti-Ragging Committee.

Appointment, service rules, and procedures: Institute follows all the rules and regulations of AICTE, UGC and Government of Madhya Pradesh as applicable in different matters. Appointment of faculty members and their promotions are undertaken by the selection committee having representation from University, Government of MP, external experts and PSC member as chairperson. Service rules and salary structure are same as declared by Government of MP time to time.

File Description	Document
Upload any additional information	View Document
Institutional perspective Plan and deployment documents on the website	View Document

6.2.2

Institution implements e-governance in its operations. e-governance is implemented covering the following areas of operations:

- 1. Administration including complaint management**
- 2. Finance and Accounts**
- 3. Student Admission and Support**
- 4. Examinations**

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

Performance Appraisal system: A well-structured Self-Appraisal Report form is already in use for assessing the performance of faculty members. The appraisal form encompasses a wide range of factors including teaching, mentoring, feedback, publications, participation in faculty development programs (FDPs), and it emphasizes the holistic development of faculty members in alignment with Outcome-Based Education. At the end of the academic year, faculty members are required to provide details of their academic, administrative, research and development (R&D), and consultancy activities for the previous academic year. This information is used to evaluate their performance for annual salary increments and promotion opportunities.

Effective welfare measures: The institution efficiently administers welfare programs for both teaching and non-teaching staff members. The institute implements various government schemes/rules pertaining to Gratuity, Earned Leave encashment, Maternity Leave, Medi claim support etc. The institute also allows faculty members to attend Faculty Development Programs (FDPs) such as Orientation programs, Refresher courses, and short-term courses for career development and advancement opportunities for all staff members. Additionally, the institute offers residential accommodations within the campus for faculty members and other staff. Furthermore, various amenities such as dispensary services, gym access, internet access and both indoor and outdoor recreational facilities are available to faculty and staff members. The spouse or family member (Non-Teaching Staff) is given a job on compassionate grounds.

Avenues for Career Development and Progression: The institute also facilitates promotions for faculty members and staff in accordance with the regulations of AICTE, and the state government. Additionally, they are encouraged to pursue higher studies, with study leaves granted as necessary.

File Description	Document
Upload any additional information	View Document

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years**Response:** 17.86**6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year-wise during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
3	19	33	74	65

File Description	Document
Policy document on providing financial support to teachers	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head.	View Document
Audited statement of account highlighting the financial support to teachers to attend conferences/workshops and towards membership fee for professional bodies	View Document

6.3.3**Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years****Response:** 33.43**6.3.3.1 Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years**

2022-23	2021-22	2020-21	2019-20	2018-19
59	63	72	98	71

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the certificates of the program attended by teachers.	View Document
Annual reports highlighting the programmes undertaken by the teachers	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources

Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words

Response:

Other than salary and fees, following are the heads under which Institute earns and utilizes the funds received:

1. World bank funding:

The Institute has received funding from World Bank for IMPACT project during 1990 to 1995. Presently, it is a TEQIP (Technical Education Quality Improvement Programme) of Government of India funded institute. The institute has received funding from TEQIP-I, TEQIP-II and TEQIP-III phases. Over the two decades the institute has developed and modernized a number of laboratories and other facilities with the support of the World Bank Project under the TEQIP. The funding under the scheme has also been utilized by faculty members for attending international conferences and related expenses.

1. Testing and Consultancy:

The institute generates funds through testing and consultancy services provided to external parties Rates of testing and consultancy are approved by the concerned committees. Distribution norms are approved by Governing Body. The amount includes the basic consultancy fee plus Institute's overhead 15% plus GST as applicable. Two kind of consultancy are there, one in which Institutes equipments are used and the other in which equipments are not used. In first type of consultancy 70% amount of basic cost are

distributed to faculty and staff while in the other case 50% amount of basic cost is distributed to faculty and staff. The remaining amount is utilized for Lab up gradation and maintenance of equipment.

1. Funding from government agencies/organizations like MPCOST, DST, AICTE, UGC etc.

The institute promotes research activities and encourages faculty members to secure external funding through projects related to research, laboratory/facility development, etc. The substantial number of externally funded projects that the institute has secured over the years serves as a clear indicator of the institute's commitment to mobilize funds from other sources. The Funds received are utilized according to the proposal and guidelines of the concerned agency.

1. Sponsorship

The institute also receives funds in the form of sponsorships during various events throughout the year, such as its Techfest AAYAM. Funds received are utilized according to the proposals and guidelines provided by the sponsors of the events,

1. Donations by alumni or other organisations/Persons

Institute has received good support from its alumni and other organizations The funds received under this category have been utilized for infrastructure development, laboratory modernization, for the help of poor students etc. Recently, some notable major contributions include the renovation of the main front part of the administrative block of the institute by its alumni and the development of a Miyawaki forest on 1 acre of land as part of CSR funding.

File Description	Document
Upload any additional information	View Document

6.4.2

Funds / Grants received from government bodies, non-government bodies, and philanthropists during the last five years (not covered in Criterion III and V)

Response: 25.79

6.4.2.1 Total Grants received from government/non-government bodies, philanthropists year wise during last five years (not covered in Criterion III and V) (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
11.317	6.944	2.97143	2.84898	1.7039

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Copy of the sanction letters received from government/ non government bodies and philanthropists	View Document
Annual audited statements of accounts highlighting the grants received	View Document

6.4.3

Institution regularly conducts internal and external financial audits regularly

Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words

Response:

Institution regularly conducts internal and external financial audits regularly

The Institute has appointed an internal auditor who screens all the bills, verifies them, and returns them to the concerned department if any corrections are required. If the bills and procedures are correct, the auditor prepares the vouchers for submission to the local fund audit, which is conducted by the Government of Madhya Pradesh and is resident in the Institute.

The flow of the purchase process and audits is as follows:

Stock verification Committee

The Director appoints a stock verification committee each year to verify the stock available in all departments and sections of the Institute. The committee's main objective is to physically verify the presence of items in the departments/sections as per the stock register entry. The committee recommends obsolete items to be written off and verifies items in working and good condition. Items recommended for write-off are submitted to the Governing Body (GB) for permission to dispose the items that are not in working condition, as determined by the committee.

Department Purchase Committee

Purchases in the departments and sections are made following the store and purchase rules of the Government of Madhya Pradesh. Typically, most items are purchased through the Gem Portal. After receiving approval from the appropriate authority (Heads/Director/GB), the Department Purchase Committee (DPC) initiates the purchase process and forwards it to the Institute Purchase Committee (IPC) for approval.

Institute Purchase Committee (IPC)

Members of the IPC are appointed by the Director. The IPC discusses all proposals submitted by the DPC. If the purchase rules are followed, the IPC approves the purchase of items and forwards them to the Director for ordering through the store section.

Store Section and In charge

All purchases are recorded, and files are maintained. The final order for the purchase is placed through the store section of the Institute

Local Fund Audit

All the files, bills and vouchers related to any payment and receipts are submitted to Local fund audit for verification through the Internal auditor/Finance Officer of the Institute.

Audited balance sheet by Chartered Accountant

A chartered accountant is appointed by the Institute for solving the account related matters and at the end of every financial year the balance sheet is audited by the CA.

Finance Committee

The Finance Committee discusses the balance sheet at the end of the financial year and reviews the budget proposal at the beginning of the financial year for the entire year. It allocates budgets to all departments and sections for various purposes, subject to final approval by the Governing Body (GB).

File Description	Document
Upload any additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of –

- **Incremental improvements made for the preceding five years with regard to quality (in case of first cycle)**
- **Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)**

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words

Response:

Incremental improvements made for the preceding five years with regard to quality (in case of first cycle). Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles). Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words.

The institute is undergoing its first NAAC accreditation process. Nonetheless, the Internal Quality Assurance Cell (IQAC) of the institute has been diligently operational since its establishment in December 2018, showcasing the institute's commitment to quality education. IQAC meets quarterly to address the needs and ensures quality education across the departments. The detailed minutes of the quarterly meetings and the action taken thereon are available on the institute website.

The institute, through its IQAC, has demonstrated a proactive approach towards implementing the National Education Policy (NEP) 2020. Directives regarding NEP 2020 implementation have been effectively disseminated to all departments. Additionally, IQAC has organized workshops specifically focused on NEP 2020, for further understanding and engagement with its principles.

Furthermore, IQAC's recommendations have led to the establishment of several committees, including but not limited to the Autonomy Committee, NAAC Committee, and various audit committees such as academic, energy, fire, and environmental audits. These committees play a pivotal role in ensuring the smooth and efficient functioning of academic affairs, thereby upholding the institute's commitment to quality education and compliance with regulatory standards.

Two best practices institutionalized as a result of IQAC initiative are (i) Outcome based education, and (ii) Idea Development Evaluation and Application (IDEA) lab. Their descriptions are as follows:

Outcome based education: IQAC has consistently prioritized Outcome-Based Education (OBE) through its regular meetings and initiatives. To further this goal, IQAC has organized workshops on OBE, catering to both internal faculty members and external participants. Additionally, IQAC's recommendations have led to the establishment of a central committee dedicated to NBA accreditation. This committee oversees the preparation of various departments for NBA accreditation and provides recommendations to facilitate their progress through the accreditation process.

Idea Development Evaluation and Application (IDEA) lab: IDEA Lab is established for encouraging students for application of science, technology engineering and mathematics (STEM) fundamentals towards enhanced hands-on experience, learning by doing and even product visualization. Further, empowering young minds with cutting-edge technologies, it has many state of the art equipment and machines. Based on recommendations of IQAC, all the students visit the IDEA lab in their first year of the program. Moreover, IDEA lab selects 30 students for related work and training as their curricular activity.

IQAC quarterly discusses various matters related to quality enhancement in teaching and learning. It has recommended maximum possible usage of the incubation Centre (CIDI) and Idea lab to its students. The IQAC committee has also discussed in details the Annual Quality Assurance Report (AQAR form).

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

6.5.2

The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Describe any two examples of institutional reviews and implementation of teaching learning reforms facilitated by the IQAC within a maximum of 500 words each.

Response:

Teaching Learning Process:

The faculty members endeavor to discover innovative teaching methods through both theoretical instruction and laboratory classes. The Departmental Program Assessment and Quality Improvement Committee (DPAQIC) meet biannually to deliberate on various aspects of curriculum, teaching, and learning. The committee discusses the scheme, course, and syllabus in detail and records the suggestions in the minutes of the meeting, which are then further discussed in the related BOS for the final updating of the curriculum. The Internal Quality Assurance Cell (IQAC) has established norms that each department must adhere to within their respective DPAQIC meetings. Over the time, the IQAC has identified several gaps in the curriculum and the teaching-learning process. Consequently, many subjects such as the Constitution of India and Indian Knowledge System have been incorporated into the curriculum of various programs. Although the institute is undergoing the NAAC accreditation process for the first time, it has recorded incremental improvements and quality initiatives over the past six years, which are available on the institute's website.

Structures and Methodologies:

The institute adheres to a well-defined structure and operational methodology. An academic calendar is prepared by the institute and made accessible on its website. Various departments align their activities, such as industry visits and mid-semester tests, with the institute's academic calendar. Ample time is allocated within the academic calendar for students to undertake their summer/winter industrial training or internships. Faculty members meticulously plan their classes and develop lesson plans for their courses, ensuring that these plans are distributed to students well in advance.

Learning outcomes:

The institute follows the philosophy of Outcome Based Education (OBE). In this regard, the institute and its various departments have defined their Vision/Mission, Program Educational Objectives, Program Outcomes (POs)/Programs Specific Outcomes (PSOs), and Course Outcomes (Cos). Course outcomes are evaluated using both direct approaches (such as mid-semester and end-semester examinations) and

indirect approaches (such as feedback from students). The attainment of Cos, POs, PSOs, etc., is discussed in DPAQIC meetings, where any gaps are identified for further enhancements in the outcomes.

DPAQIC prepares the data according to the self-study report (SSR) format, submits the minutes to IQAC, and also presents the same before the Academic and Administrative Audit Committee (AAAC). AAAC prepares its report and submits it to IQAC with SWOC analysis of the department. IQAC further decides the action plan for quality improvement and accordingly instructs to the concerned for implementing the same. The department implements the action plan suggested by IQAC and records that in the subsequent DPAQIC meetings.

File Description	Document
Upload any additional information	View Document

6.5.3

Institution has adopted the following for Quality assurance:

- 1. Academic and Administrative Audit (AAA) and follow up action taken**
- 2. Conferences, Seminars, Workshops on quality conducted**
- 3. Collaborative quality initiatives with other institution(s)**
- 4. Orientation programme on quality issues for teachers and students**
- 5. Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc**
- 6. Any other quality audit recognized by state, national or international agencies**

Response: A. Any 5 or more of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period	View Document
NIRF report, AAA report and details on follow up actions	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

Gender Equity & Sensitization in Co-Curricular Activities:

Shri G. S. Institute of Technology and Science (SGSITS) enthusiastically focuses on gender issues on the campus. Equal opportunities are provided to all individuals irrespective of gender, caste, language and religion.

The institute strengthens the potential of young girls and boys to advocate for gender equity and monitors progress towards gender justice. The institute provides a healthy and congenial atmosphere for staff and students by promoting measures aimed at achieving gender equity, eliminating gender bias or discrimination, preventing sexual harassment, and addressing other acts of gender-based violence. It also organizes awareness programs and campaigns.

Facilities for women: The campus is well equipped with following facilities for women:

Safety and Security

- CCTV cameras are installed throughout the campus for the security purpose
- Well-trained and vigilant women Wardens are appointed to the Girls Hostel in the campus.
- Security guards remain on duty at institute entrance and exit gate to prevent forced entry and trespass
- A complaint box has been put for any issues encountered by students who are concerned about disclosing their identity
- Strict implementation of Anti-Ragging measures and keeping the campus ragging free.
- Awareness campaigns on women safety and gender sensitivity through street plays, rallies and camps by NSS and NCC student volunteers.
- Separate hostels are provided to girls with appropriate security arrangements and hostel committees are formed to take care of the students.
- Sufficient lighting is provided in the campus during night hours in case of extension of regular working hours due to placements or cultural activities
- Women faculty members accompany girl students when they participate in outdoor activities or tours.
- Internal Complaints Committee (ICC) interacts regularly with the girl students and resolves the issues raised by them.
- Emergency contact numbers are displayed at prominent places in the campus

Counseling:

- Female counselor have been appointed to counsel the students during mentoring regarding academic performance, career plans and personal issues
- ICC members enquire and counsel the students regarding their problems from time to time.
- Guest lectures are arranged by ICC to address health, stress or gender sensitization issues.
- Eminent persons from the police department and constitutional members are invited to counsel the students regarding ragging, eve teasing and harassment during college events.
- Grievance Redressal Committees for staff and students does exist.
- Alumni Association has extended their support by providing desktop computers and printers to female hostel residents who are unable to have their own.

Common Rooms:

- Institute has a Girls Common Room, where a lady attendant stays for all the time.
- Health Centre is available in the campus with qualified physician.
- A Sanitary napkin dispenser is installed in the restroom for an easy access.

College canteen has sufficient space, girls can use separate space to avoid inconvenience during working hours.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment
6. Wind mill or any other clean green energy

Response: A. Any 4 or more of the above

File Description	Document
Permission document for connecting to the grid from the Government/ Electricity authority	View Document
Geo-tagged photographs of the facilities.	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document

7.1.3

Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **e-Waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

Shri G. S. Institute of Technology and Science believe in “Let’s go green and keep our campus clean”. The College practices the concept of 3 ways i.e. Reduce-Reuse-Recycle in all activities, to protect the environment.

1. SOLID WASTE MANAGEMENT:

The waste is generated from following sources due to a wide range of routine activities like Wrappers, Papers, Food-left over used papers and Workshop crap, etc,

Disposal & treatment of this waste

- **Wet organic waste – Hostel & Canteen waste:**

On a daily basis, approximately 70 Kg of wet organic waste is generated, which makes approximately 35 to 40 Kg of compost from composter machine. Compost of wet organic waste is used as organic manure in the institute for various trees, plants.

- **Dry Organic Waste**

For the composting process, dry organic waste is systematically stored in rectangular boundaries of metal sheets, after that black cotton soil is spread over the top surface area of dry organic waste with spray of sanitreat for ease of composting process in only monsoon season. The composting process takes around 6 months for making final compost

- **Other regular waste**

Regular waste generated from the campus is segregated into dry & wet waste, which is collected by Indore Municipal Corporation waste collection vehicles (Tippers).

- **Construction & demolition waste**

C & D waste i.e. concrete (blocks, cylinders, beams) which is casted by students from Civil Engineering & Applied Mechanics Department for research & testing purpose is given to construction & demolition

waste management unit of Indore Municipal Corporation for recycling.

2. LIQUID WASTE MANAGEMENT

A 60 kLDSTP plant is operational behind the boy's hostel and treated water is used for gardening and flushing purposes.

3. BIOMEDICAL WASTE MANAGEMENT

The common biomedical dry waste generated from the biomedical laboratories and dispensary is collected by the IMC waste collection vehicle in the dry waste section. Contaminated waste such as cotton and swabs is deposited in the hazardous waste black box located at the back of the vehicle (tipper)

4. E WASTE MANAGEMENT

E-waste cell collects defective electrical & electronic equipment and 15-20 years old equipment as E waste and disposes through tendering process for recycling of E-Waste.

Our E- waste recovery practices result in around 2.5% recovery of E-waste.

5. WASTE RECYCLING SYSTEM

1. Liquid waste

Treated wastewater is used for gardening & flushing purposes.

2.Solid waste

Compost made from dry & wet waste used as a fertilizer for trees, plants.

3. E- waste

Around 2.5 % of E waste is recycled

6. HAZARDOUS AND RADIOACTIVE WASTE

The hazardous chemical waste i.e. acid waste (Hydrochloric acid & sulphuric acid) generated from the Chemistry department is treated by neutralization by adding calcium hydroxide & calcium carbonate, which forms calcium sulphate which is used in various experiments & research work. Any kind of radioactive waste is not generated in the institute.

File Description	Document
Any other relevant information	View Document
Geo-tagged photographs of the facilities	View Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document

7.1.4**Water conservation facilities available in the Institution:**

- 1. Rain water harvesting**
- 2. Borewell /Open well recharge**
- 3. Construction of tanks and bunds**
- 4. Waste water recycling**
- 5. Maintenance of water bodies and distribution system in the campus**

Response: A. Any 4 or more of the above

File Description	Document
Green audit reports on water conservation by recognised bodies	View Document
Geo-tagged photographs of the facilities	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.5**Green campus initiatives include**

Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles , Pedestrian Friendly pathways , Ban on use of Plastic, landscaping with trees and plants etc in 500 words

Response:

Describe the Green campus initiative of the institution including restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles, Pedestrian Friendly pathways, Ban on use of Plastic, landscaping with trees and plants etc in 500 words

The institute believes in “Let’s go green and keep our campus clean”. It puts the emphasis on being

close to the nature and making the campus pollution free and environmental friendly. The campus extends over 30 acres of land in a spacious, noise free, clean, green zone and serene atmosphere perfectly suited for technical education.

- In the campus, there are restrictions on the use of automobiles in both the academic and administrative areas. This measure aims to reduce the emission of harmful gases to promote the use of bicycles and battery-operated vehicles.
- There are 3 bicycles for supervisors that are battery operated.
- There is ban on use of plastic bags in the campus.
- The college runs a campaign named “1 seed 1 tree”. In the campaign, 20000 seed balls are donated every year. The seed balls are collected from the institute nursery itself.
- For landscaping purposes, the campus is planted with approximately 50,000 to 60,000 plants. Due to the campus's proximity to the VIP road, special measures were taken during tree plantation to minimize vibration impact.
- The campus road is separated from common roads with the help of paver blocks.
- To keep the roads of the campus clean, battery operated road sweeping machine is used.
- The dry leaves are being collected and being composted.
- For collection of waste throughout the campus 6 numbers of tricycles are being used. The tricycles are designed and developed by the students of Mechanical Engineering Department.
- Different old buildings in the campus are being renovated and used for various purposes such as Nature club office and are named in a distinct manner.
- Under a project, a Miyawaki forest has been established on 1 acre of land within the institute campus. In this initiative, 8000 plants, primarily consisting of native species not commonly found, have been planted

File Description	Document
Policy document on the green campus/plastic free campus	View Document
Geo-tagged photographs/videos of the facilities	View Document
Circulars and report of activities for the implementation of the initiatives document	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.6

Quality audits on environment and energy are regularly undertaken by the institution

The institutional environment and energy initiatives are confirmed through the following

1. Green audit / Environmental audit
2. Energy audit
3. Clean and green campus recognitions/awards
4. Beyond the campus environmental promotion and sustainability activities

Response: A. All of the above

File Description	Document
Report on environmental promotion and sustainability activities conducted beyond the campus with geo-tagged photographs with caption and date.	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.7

The Institution has Differently-abled (Divyangjan) friendly, barrier free environment

Write description covering the various components of barrier free environment in your institution in maximum of 500 words

- **Built environment with Ramps/lifts for easy access to classrooms**
- **Divyangjan friendly washrooms**
- **Signage including tactile path, lights, display boards and signposts**
- **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
- **Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response:

- For individuals with disabilities, the institute provides lifts and ramps to ensure easy access to classrooms. There are three lifts in the college and Ramps are also available in the campus
- Software based assistive technology is available for the persons with disabilities to access the website/library, like Screen reading software, reader, soft copy of e-books etc.

- Washrooms, parking facilities and display boards for the disabled persons are proposed in the campus
- A proposal is submitted to the Department of Empowerment of Persons with Disabilities under the “**Accessible India Campaign (Sugamaya Bharat Abhiyan)**” scheme for achieving universal accessibility for persons with disabilities in all walks of life.

File Description	Document
Upload any additional information	View Document

7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities (within 500 words).

Response:

The institute is proactively taking efforts in providing an inclusive environment. Being the top engineering institute of state, the main aim is to promote student achievements and preparation for global competitiveness by fostering educational excellence and ensuring equal access. The initiatives are to promote better education, economic upliftment of the underprivileged students, and set communal harmony between them.

Institute’s NSS wing conducts various Nukkad Natak and lectures in the villages for increasing their environmental and ethical awareness. Institute has organized health checkup camps and blood donation camps for students and staff. The extension activities are targeted towards enabling a holistic environment for student development. Institute is always engaged in sensitizing students to the cultural, regional, linguistic, communal, and socio-economic diversities of the state and the nation.

The Institute celebrates cultural and technical festivals Aayam, Engineers’ Day, Singing Programs, Nukkad Natak etc. to teach tolerance and harmony to the students. The Gender Equality Policy focuses on equal access, opportunities, and rights for males and females. Policy for the differently abled ensures that every single member of the department/Institute should be empathetic to them. By providing a barrier-free environment, needed facilities, and human and technological assistance, the department takes continuous efforts to make the differently-abled feel included in every part of the activity of the institute. The institute, during its Induction Program arranged lectures on Universal Human Values. Which includes the topics related to human rights, peace, tolerance, love, compassion, harmony, promotion of social values, awareness of environmental protection, and ethics

An inclusive environment on campus contributes to making our Institute a safe, enjoyable and productive place for everyone, and can enhance our interactions with the community outside campus.

File Description	Document
Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	View Document
Any other relevant information	View Document

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

Response:

1. Academic Scheme:

The institute ensures the sensitization of the students and faculties to the Constitutional Obligations through following:

1. The institute offers two mandatory courses in all B Tech programs: **Constitution of India** (non credit) and **Values, Humanities, and Professional Ethics** (two credits) These courses are conducted in tutorial mode. At the beginning of each course, an orientation program is conducted to familiarize students with the subject matter, CO-PO, and objectives. Tutorial activities, including extempore speaking, group discussions, presentations, quizzes, assignments, etc., are employed to instill values conducive to responsible citizenship.
2. The institute has established NCC and NSS units with the dual purpose of sensitizing both students and faculty members about social service, rural problems, civic duties, discipline, and other pertinent societal issues. These units not only serve to complement academic courses but also play a crucial role in fostering a sense of responsibility and civic engagement among the students.

1. NCC activities:

NCC regularly conducts its activities in the domain of socio-political awareness and its core activities being NCC. These activities include Road Safety & Anti Tobacco Day, Blood Donation, Air force camp, Swaccha Bharat, Republic Day Parade, Independence Day celebration, Youtube series on "Making of Constitution", Webinar on National education policy, Cleanliness and plantation drive, Webinar on "World water day", Plantation drive on "World environment day", International Yoga Day celebration

1. NSS activities:

- 1.Regular Activities: Plantation, Blood donation, health and hygiene moves, environment awareness, traffic awareness, child education, youth club activities, pared, drill, yoga, civic awareness about government schemes,
- 2.One Day Camps (ODCs): Two ODCs are organized at the adopted village in an year to make student aware of village life and rural problems. The students did a social survey to understand the rural livelihood.
- 3.Seven Day Residential Camp (SDC): One SDC is organized in each year for giving the practical exposure of rural life, social work and labour work for the NSS volunteers.

File Description	Document
Details of activities that inculcate values necessary to nurture students to become responsible citizens	View Document
Any other relevant information	View Document

7.1.10

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1.The institutional Code of Conduct principles are displayed on the website**
- 2.There is a committee to monitor adherence to the institutional Code of Conduct principles**
- 3.Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4.Annual awareness programmes on Code of Conduct are organized**

Response: A. All of the above

File Description	Document
Report on the student attributes facilitated by the Institution	View Document
Policy document on code of ethics.	View Document
Handbooks, manuals and brochures on human values and professional ethics	View Document
Document showing the Code of Conduct for students, teachers, governing body and administration as approved by the competent authority.	View Document
Constitution and proceedings of the monitoring committee.	View Document
Circulars and geo-tagged photographs with date and caption of the activities organized under this metric for teachers, students, administrators and other staff	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Response:

1st best practice

Outcome Based Education (OBE).

Following are the key Objectives of OBE:

- To fulfill the institute Vision and Mission
- Based on the Institute vision and mission, department vision and mission is defined
- Various programs at UG and PG levels are designed with specific program outcomes (POs)
- Different courses are prepared according to the course outcomes (COs).
- Feedbacks of stakeholders (Faculty, Student, Parents, Alumni, Examiner, Employers and Staff) are incorporated to design and refine the programs, courses, curriculum and methodology of teaching.
- Ensure 3600 development of the students, which includes science and technology as well as socio-

economic and physical development.

3. The Context

OBE is implemented with the requirements of society, technology, individuals and environment. Based on these requirements, vision and mission of the institute are framed. Accordingly, programs, curriculum and teaching methodologies are developed. During execution of the program, each individual student is evaluated with continuous assessments tools and techniques.

4. The Practice

As mentioned earlier, the OBE practices are framed in such a way so as to fulfill the requirements of the society, technology, individuals and environment. A well defined procedure is developed with the help of feedback received from the stakeholders.

During execution of programs a continuous rubric based assessment and evaluation of individual students using various tools (Assignments, quiz, midterm test, seminar, end semester exam, internal/external viva etc) is carried out. A gap is identified between the achieved attainment and the set target. This gap is analyzed by the department committee (DPAQIC) and corresponding action is planned. The actions include remedial classes, identification of weaker and bright students, faculty counseling, faculty development programs, student mentoring etc. The assessment also includes the feedback from stakeholders.

5. Evidence of Success

OBE has been successfully implemented in the institute. Presently, six UG programs and three PG programs are accredited from National Board of Accreditation, New Delhi.

Institute has remarkable placement record in the central India region and therefore the SGSITS is the first choice of the 12th pass PCM students after IITs and few NITs.

Many students have successfully cleared UPSC, MPPSC, defense and other civil services and public sector exams and are serving the nation.

Institute has very strong alumni base and they are constantly connected with institute at department as well as institute level in the various committees and events. SGSITS Alumni are spread across the globe and holding very high and responsible positions in government organizations and institutes, scientific communities, private sectors, business, politics, social work and environmental work etc.

6. Problems Encountered and Resources Required

Despite being an institute of high repute, the institute is facing few significant challenges and problems as listed below:

- Shortage of human resources in terms of trained regular faculty member and technical staff.
- Lack of grant from central and state govt.
- Institute is bound to follow the rules and regulation laid by the affiliating university, hence no flexibility in starting new programs/courses etc.

- No provision for incentives and promotion policies for the contractual faculty members.

7. Notes (Optional)

Institute is open for collaborations with nearby institutes in terms of Faculty development programs, collaborative research work, student exchange programs etc.

2nd best practice

- **Title of the Practice**

Idea Development Evaluation & Application (IDEA) lab

- **Objectives of the Practice**

IDEA Lab is established for encouraging students for application of science, technology engineering and mathematics (STEM) fundamentals towards enhanced hands-on experience, learning by doing and even product visualization.

Objective of IDEA Lab

- To provide the facilities under one roof, for conversion of an idea into a prototype.
- To provide a platform to experiment with ideas for qualitative change in the life of compatriots.
- To support, mentor and catalyze multidisciplinary projects and research in technical education.

The Context

The IDEA lab is equipped with advanced multidisciplinary equipment which are utilized in prototype making. To make students aware of IDEA lab uniqueness, the lab is included in the curriculum through workshop practices and extracurricular subject for first year students. As a result, students become aware of the IDEA lab during their first year, enabling them to utilize these facilities throughout their degree course for their innovative projects and final year assignments.

The Practice

The uniqueness of this lab, within the context of Indian higher or technical education, lies in its emphasis on hands-on skill development across interdisciplinary areas. The IDEA lab provides all facilities under one roof for conversion of an idea into a prototype. With these facilities available 24*7 in the campus, large number of students and faculties are encouraged to take up creative work and, in the process, get training on creative thinking, problem solving, collaboration etc. which conventional labs are not focusing on. The focus is on hands-on-training of students as well as faculties so that they become imaginative and creative. Academic departments are encouraged to actively introduce all students to the IDEA lab, organize training sessions for interested students, and provide support for projects

Evidence of Success

Since the establishment of the IDEA lab, many activities have been conducted for skill development of students and faculties. The IDEA lab provided internships to both our students and those from outside the institution. Some final year projects also have been done in the IDEA lab. The big success of IDEA lab is prototype development of one industry sponsored product. Approximately more than 400 students and 40 faculties are benefitted through various activities such as skilling programme, bootcamp, FDP, ideation, and internship etc. Further, IDEA lab also gives access to school students through an open day programme.

• Problems Encountered and Resources Required

The IDEA lab requires a 3000 square feet area for equipment and conduction of activities. Following major equipment is mandatory for establishing this lab.

- 3D Printer
- CNC Router
- PCB prototype
- 3D Scanner
- Laser cutting machine
- Table CNC milling
- Wood lathe
- Portable welding machine

7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

Over the last decade, Shri G.S. Institute of Technology & Science, Indore, has systematically built an ecosystem for innovation, startups, and entrepreneurship, which is indeed **one of the major areas distinctive to its priority & thrust**. The ecosystem has been developed recognizing the Institute's responsibility towards national priorities such as Atma Nirbhar Bharat and Make in India, and its contribution to society to support the SGSITS community in particular and society at large. In the ecosystem, the institute has Centre for Innovation, Design and Incubation (CIDI), Institute Innovation Council (IIC), E-cell, Startup cell, IPR Cell, Idea Lab, Industry Institute Partnership Cell (IIPC) departmental facilities etc. SGSITS Incubation Forum (SIF), in operation since Dec 2019, has proved instrumental in the development of the ecosystem for the said purpose.

In the institute the Centre for Innovation, Design and Incubation (CIDI) works as the central facility to support students of the institute for the cause of innovation, entrepreneurship and incubation.

An integrated environment has been created to facilitate innovators and incubatees, combining the existing facilities of CIDI and AICTE Idea Lab. None of the resources are duplicated; instead, they are incrementally added in stages. This allows for ideation and testing of innovative ideas, creating prototypes, and if desired, progressing towards enterprise creation or obtaining patents through the IPR Cell. The existing IPR cell of the institute actively provides initial counseling to students and startups for IPR applications. Later, third-party consultations are also facilitated if needed

Details of ecosystem are given below:

Centre for Innovation, Design & Incubation (CIDI):

Center for Innovation, Design and Incubation (CIDI) has been established under the World Bank funded Technical Education Quality Improvement Program (TEQIP) project. The center aims to facilitate Innovation, Design, promote Incubation activities, Technology Trainings and Industry Institute Interaction thus acting as a bridge for all the Departments of SGSITS. CIDI is Coordinating with institute's engineering departments, Collaborating with Industries and Cooperating with peer institutes to attain its goals of design and incubation (3C model).

In order to discharge the above functions, CIDI is working in close coordination with IIC, E-Cell, Start-up cell to foster Innovation; to inculcate Design Thinking CIDI interacts with industry and departments; for incubation CIDI works in close association with MSME-DI (Govt. of India), Incubators in the surrounding ecosystem, nearby industry associations and Alumni; relevant happening technology trainings are also offered by CIDI in coordination with the departments, industry and experts in various technology domains on need basis.

IDEA Lab

Idea Development Evaluation & Application (IDEA) is a platform where innovator can develop his/her prototype at one place. IDEA lab provides all the basic facilities which are used in developing a prototype. Apart from this, IDEA lab conducts various activities which empowers young minds with cutting-edge technologies. In last two years IDEA lab had conducted 5 boot camps and 5 skilling programmes on various advanced machines, organized 6 internships on emerging areas & organized one FDP and one industry awareness programme on advanced technologies. Furthermore, IDEA lab hosted visit of 22 colleges, universities, and schools. The major objective of IDEA lab is to provide the facilities under one roof, for conversion of an idea into a prototype and encouraging the young students for innovation.

IIC

Various departments/bodies of the institute contribute to this nationally important cause. The Institute Innovation Council (IIC), comprising faculty members across the departments, students, and alumni, actively conducts a number of activities throughout the year to promote innovation. The activities conducted by IIC are in line with the directives and instructions as framed by the Ministry of Education's Innovation Council (MIC). The council has been involved in organizing various activities, such as Ideathon, to motivate students to bring forward their innovative ideas and build confidence.

E Cell

The Entrepreneurship Cell contributes towards creation in entrepreneurs and is involved in various activities pertinent to the cause. The cell receives strong support from alumni, who guide students in entrepreneurial activities. (E-Cell SGSITS (ecellsgsits.com))

IPR Cell

The IPR cell provides the necessary support to the students with innovative minds to filing the copyrights and patents. (Shri G. S. Institute of Technology and Science, Indore - IPR Cell (sgsits.ac.in)).

Start-up Cell

The start-up cell helps students to convert their ideas and efforts in start-ups. (Shri G. S. Institute of Technology and Science, Indore - Startup (sgsits.ac.in))

SGSITS Incubation Forum (SIF)

SGSITS Incubation Forum a section 8 company incorporated on 11/12/2019 with **CIN No. U85300MP2019NPL050317** of SGSITS as parent institute with an objective to create a vibrant ecosystem to foster Technology Incubation and Entrepreneurship. It has received 12A & 80G certificate for Tax exemption and CSR 1 registration. It aims to create jobs, wealth and business aligning with national priorities. The incubator is supported by **the Department of Science & Technology (DST)** and is entitled as **National Initiative for Development and Harnessing Innovations – Inclusive Technology Business Incubator (NIDHI– iTBI)** under DST.

Located in the heart of central India, SIF targets to focus on the relevant technology domains to develop an ecosystem for entire region of central India in general and the state of Madhya Pradesh for local needs and talent. The hand holding efforts for start-ups include problem definition, articulation, innovative solutions, effective business model creation and awareness for the upcoming technologies. The domain areas for incubation supported by SIF are: Product Services to Industry4.0, Product & Services for Armed Forces, Logistics related to smart city components, Sustainability & Circular Environment Management, Food & Agri–Tech, Medi–Tech, Pharmacy and Fin–Tech.

SIF offers Training & Education, Mentoring, Seed Funding, Investors Connect, and Network with other Incubators and Technology Institutions. Industry Connects, Business Advisory and Services like Legal, Tax, Technical Advisory & IPR to the startups are also offered.

In addition to iTBI, SGSITS Incubation Forum (SIF) is also a partner incubator under Startup India Seed Fund Scheme of DPIIT for financial support to startups. Till date around 45 startups have been supported so far in the form of mentoring, guidance, prototype development, scaling & go to market strategies, funding support, and working space.

File Description	Document
Any other relevant information	View Document
Appropriate webpage in the Institutional website	View Document

5. CONCLUSION

Additional Information :

- Environmental awareness through credit courses
- Compulsory village visit assignment to students and further evaluation
- Centralized industrial RO+UV water supplied to Academic, Hostel and Staff quarters.
- Availability of Laboratories and Library facilities beyond working hours
- 24x7 availability of IDEA and CIDI laboratories
- WiFi and Eduroam facility in academic blocks and hostels.
- Low-cost Lunch facility to day-scholar students at Canteen
- Availability of student activity center for extra-curricular activities
- Nature Club to appreciate nature
- 280 CCTV cameras at strategic locations in academic block and at hostels
- The institute is particularly focused on nature and the environment. Its campus is filled with greenery. The institute has also received the Green Campus Award from the Municipal Corporation of Indore for this.
- Faculty members of the institute are actively involved for the betterment of society. Prof. Manish Panchal from the Electronics & Telecommunication department has offered his technical services to improve traffic in Indore city and has received multiple awards/appreciation letters for his efforts.

Concluding Remarks :

We would like to conclude the application for accreditation with the motto of our institute, which is "Right conduct is the greatest knowledge": [Acharh Parmo Dharmah] (Manusmriti Sec. LXI, Verse 1:108). The motto can be translated to "there is no religion higher than Right conduct (The first and foremost duty is right conduct i.e. Right conduct is the greatest knowledge. Right conduct is the greatest knowledge. Right conduct is the greatest knowledge. There is not anything which you can't achieve through right conduct". Even though the motto is followed and embedded to the life of GSTIANS for last seven decades, it is relevant even today. The institute provides the students with the value of right conduct from the first day of admission. The induction program instills the seeds of values and conduct. In addition to the academic and technical skills, each student club of the institute enlightens the students with numerous value educational activities. Friendly competitions, sports activities, national integration activities through NSS and NCC, and internships at villages, towns and make the students ready to face the real world after the successful completion of degree.

In addition to conventional courses on Engineering and Technology, the students are given exposure to natural beauty of the country, teachings on diverse nature of culture and environment via compulsory internship training at villages, and strength of the constitution of India. By this way, the students leaving the institute inherit the ethics and ethos of the country and make them to love their country and its people.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																														
1.3.2	<p>Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years.</p> <p>Answer before DVV Verification : Answer After DVV Verification :81 Remark : Input edited excluding repeat courses</p>																														
2.1.1	<p>Enrolment percentage</p> <p>2.1.1.1. Number of seats filled year wise during last five years (Only first year admissions to be considered) Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>2.1.1.2. Number of sanctioned seats year wise during last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>1335</td> <td>1227</td> <td>1365</td> <td>1321</td> <td>1296</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>1335</td> <td>1227</td> <td>1365</td> <td>1296</td> <td>1296</td> </tr> </tbody> </table>	2022-23	2021-22	2020-21	2019-20	2018-19						2022-23	2021-22	2020-21	2019-20	2018-19	1335	1227	1365	1321	1296	2022-23	2021-22	2020-21	2019-20	2018-19	1335	1227	1365	1296	1296
2022-23	2021-22	2020-21	2019-20	2018-19																											
2022-23	2021-22	2020-21	2019-20	2018-19																											
1335	1227	1365	1321	1296																											
2022-23	2021-22	2020-21	2019-20	2018-19																											
1335	1227	1365	1296	1296																											
2.4.3	<p>Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)</p> <p>2.4.3.1. Total teaching experience of full-time teachers as of latest completed academic year Answer before DVV Verification : 3121 Answer after DVV Verification: 2874</p>																														
3.4.3	<p>Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years</p> <p>3.4.3.1. Number of research papers in the Journals notified on UGC CARE list year wise during the last five years Answer before DVV Verification : 427 Answer after DVV Verification: 316</p> <p>Remark : Input edited considering research papers which are listed on the UGC care</p>																														

3.4.4	<p>Number of books and chapters in edited volumes published per teacher during the last five years</p> <p>3.4.4.1. Total Number of books and chapters in edited volumes published during the last five years Answer before DVV Verification : 113 Answer after DVV Verification: 112</p>																									
4.1.2	<p>Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years</p> <p>4.1.2.1. Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs) Answer before DVV Verification:</p> <table border="1" data-bbox="306 712 1046 884"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>58.00527</td> <td>121.3241</td> <td>304.6033</td> <td>795.0082</td> <td>483.8969</td> </tr> <tr> <td></td> <td>2</td> <td>7</td> <td>2</td> <td>9</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="306 965 1046 1095"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>8.01</td> <td>7.17</td> <td>13.49</td> <td>57.84</td> <td>46.85</td> </tr> </tbody> </table> <p>Remark : Input edited as per income and audit report uploaded by HEI</p>	2022-23	2021-22	2020-21	2019-20	2018-19	58.00527	121.3241	304.6033	795.0082	483.8969		2	7	2	9	2022-23	2021-22	2020-21	2019-20	2018-19	8.01	7.17	13.49	57.84	46.85
2022-23	2021-22	2020-21	2019-20	2018-19																						
58.00527	121.3241	304.6033	795.0082	483.8969																						
	2	7	2	9																						
2022-23	2021-22	2020-21	2019-20	2018-19																						
8.01	7.17	13.49	57.84	46.85																						
4.2.2	<p>Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years</p> <p>4.2.2.1. Expenditure for purchase of books / e-books and subscription to journals/e-journals year wise during last five years (INR in lakhs) Answer before DVV Verification:</p> <table border="1" data-bbox="306 1458 1046 1588"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>2.79668</td> <td>3.89681</td> <td>15.62047</td> <td>32.90236</td> <td>19.2904</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="306 1668 1046 1798"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>0.43897</td> <td>0.05772</td> <td>0.38</td> <td>0.02239</td> <td>1.37</td> </tr> </tbody> </table> <p>Remark : Input edited as per income and audit report uploaded by HEI</p>	2022-23	2021-22	2020-21	2019-20	2018-19	2.79668	3.89681	15.62047	32.90236	19.2904	2022-23	2021-22	2020-21	2019-20	2018-19	0.43897	0.05772	0.38	0.02239	1.37					
2022-23	2021-22	2020-21	2019-20	2018-19																						
2.79668	3.89681	15.62047	32.90236	19.2904																						
2022-23	2021-22	2020-21	2019-20	2018-19																						
0.43897	0.05772	0.38	0.02239	1.37																						
4.4.1	<p>Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years</p> <p>4.4.1.1. <i>Expenditure incurred on maintenance of physical facilities and academic support</i></p>																									

facilities of DDE and total expenditure excluding salary, year - wise, over the last five years (INR in lakhs)

Answer before DVV Verification:

2022-23	2021-22	2020-21	2019-20	2018-19
196.5987 6	210.9904 8	283.9022 6	236.5473 1	215.8691 7

Answer After DVV Verification :

2022-23	2021-22	2020-21	2019-20	2018-19
48.64	38.84	32.96	13.41	7.69

Remark : Input edited as per income and audit report uploaded by HEI

2.Extended Profile Deviations

ID	Extended Questions																				
1.1	<p>Total expenditure excluding salary year wise during the last five years (INR in lakhs)</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>461.90218</td> <td>503.11104</td> <td>634.11908</td> <td>1155.1072 5</td> <td>764.96846</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1"> <thead> <tr> <th>2022-23</th> <th>2021-22</th> <th>2020-21</th> <th>2019-20</th> <th>2018-19</th> </tr> </thead> <tbody> <tr> <td>401.10</td> <td>377.89</td> <td>313.89</td> <td>327.19</td> <td>261.78</td> </tr> </tbody> </table>	2022-23	2021-22	2020-21	2019-20	2018-19	461.90218	503.11104	634.11908	1155.1072 5	764.96846	2022-23	2021-22	2020-21	2019-20	2018-19	401.10	377.89	313.89	327.19	261.78
2022-23	2021-22	2020-21	2019-20	2018-19																	
461.90218	503.11104	634.11908	1155.1072 5	764.96846																	
2022-23	2021-22	2020-21	2019-20	2018-19																	
401.10	377.89	313.89	327.19	261.78																	