



# **YEARLY STATUS REPORT - 2022-2023**

Part A		
Data of the Institution		
1.Name of the Institution	INDIAN INSTITUTE OF SCIENCE	
Name of the Head of the institution	Prof. Govindan Rangarajan	
Designation	Director	
Does the institution function from its own campus?	Yes	
Phone no./Alternate phone no.	08022932222	
Mobile no	9449044736	
Registered e-mail	dean.anf@iisc.ac.in	
Alternate e-mail address	office.director@iisc.ac.in	
• City/Town	Bengaluru	

• State/UT			Karnataka			
• Pin Code			560012			
2.Institutional statu	ıs					
<ul> <li>University</li> </ul>				Deemed		
Type of Institut	ion			Co-education		
Location			Urban	Urban		
Name of the IQAC Co-ordinator/Director		Prof. Vijay	7 Natarajan			
Phone no./Alternate phone no		8022932909				
• Mobile			9448597135			
IQAC e-mail address			chair.scc@iisc.ac.in			
Alternate Email address			vijayn@iisc.ac.in			
3. Website address (Web link of the AQAR (Previous Academic Year)		https://iisc.ac.in/wp-content/uploads/2023/09/AQAR-2021-22.pdf				
4.Whether Academic Calendar prepared during the year?		Yes				
if yes, whether it is uploaded in the Institutional website Web link:			https://cds.iisc.ac.in/academics/calendar/			
5.Accreditation Details						
Cycle	Grade	CGPA	Year of Accreditation		Validity from	Validity to
Cycle 1	A++	3.67	2018		26/09/2018	25/09/2023
6.Date of Establishment of IQAC		22/05/1967				

# 7. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Indian Institute of Science	Institute of Eminence	Ministry of Education	2018 (Till 2025)	1000 Cr
Indian Institute of Science	Deemed to be University	University Grants Commission	1958	NA

8. Whether composition of IQAC as per latest NAAC guidelines	No
Upload latest notification of formation of IQAC	<u>View File</u>
9.No. of IQAC meetings held during the year	11
The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website. (Please upload, minutes of meetings and action taken report)	No
10. Whether IQAC received funding from any of the funding agency to support its activities during the year?	Yes
If yes, mention the amount	All expenditures incurred are taken care by the Institute

# 11. Significant contributions made by IQAC during the current year (maximum five bullets)

• Introduced several new courses. • Curriculum updated for M Tech RAS • Soft-core list in the MSc Life Sciences program updated

# 12.Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
Introduce new courses in various programmes	The following new courses and their outcomes were evaluated, and were approved for offer from the academic year cycle 2023-24: • Optical Communication Systems • Tensor Computations for Data Science • Topics in function theoretic operator Theory • Electron microscopy and 3D image processing for Life sciences • Analysis And Design of Composite Structures • Microhydrodynamics • Introduction to Manufacturing Science • Metal Forming Processes • Quantum Error-Correcting Codes • Semiconductor devices for nanoelectronics

	* Fundamentals of Molecular Biology * Neuronal Ion Transport in Health and Disease * Communication Networking Lab * Microcontroller and its Applications * Machine Learning for Wireless Communication * Open Science: Policy and Practice * STI Policy: Introduction and Contemporary Issues * MTech Project * Artificial Intelligence for Medical Image Analysis * Discrete Control and Estimation * Topics in Reinforcement Learning * Green Catalysis in Chemical Industries * Microelectronics Technology For VLSI Engineers * VLSI Design Principals for Device Engineers * Sliding mode control and its applications * Probabilistic Machine Learning: Theory and Applications * Formal Analysis and Control of Autonomous Systems * Quantum Information Theory * Computational Imaging * Opportunities and Extensions in Life Sciences - Pa * Opportunities and Extensions in Life Sciences - Pa * Laboratory course in Molecular Techniques * Interacting Particle Systems * Introduction to electronic properties of Materials * Materials in Extreme environments * Developmental Biology and Genetics * Physiology and Neurobiology * Machine Learning for Materials and Molecules * Laboratory course in Genetics and Ecology * Biochemistry and Biophysics * Ecology and Evolution * Systems for Machine Learning * Linear and Nonlinear Optimization * Data Science for Smart City Applications * Advanced Laboratory - 1 * Advanced Laboratory - II * Chemistry of Biomolecules * Spectroscopic Methods for Structure Determination * Research Project * Microbiology, Virology and Immunology * Dissertation project * MTech EPD Dissertation Project * Inorganic Chemistry - 2: Organometallic Chemistry * Signal Processing in Practice * MTech Dissertation Project * Field Robotics * Reinforcement Learning * Advanced Deep Representation Learning * Foundations of Robotics * Hydrologic Safety Evaluation of Dams * Dam safety surveillance, instrumentation and monitoring * Integrated Investigation of Dams * Deep Learning for Visual Analytics * Transportation Logistics * Swarm Robotic System
t	Change in curriculum for M Tech RAS approved

Based on discussions, it was planned to change the curriculum for M Tech RAS

Based on feedback with stakeholders, Updation of soft-core list in the MSc Life Sciences

Based on discussions, soft-core list in the MSc Life Sciences program was updated

program was planned		
13.Whether the AQAR	was placed before statutory body?	Yes
Name of the statu	itory body	

Name	Date of meeting(s)
Senate Curriculum Committee	17/11/2023

# 14. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to Assess the functioning?

No

#### 15. Whether institutional data submitted to AISHE

Year	Date of Submission
2021-22	22/02/2023

### 16. Multidisciplinary / interdisciplinary

Interdisciplinary research has emerged as a crucial part of the research landscape in recent years. By breaking down departmental barriers, interdisciplinary research facilitates novel breakthroughs that may not be possible within the confines of a particular discipline. The Division of Interdisciplinary Research has a wide range of Departments/Centres with the common theme of a strong interdisciplinary focus.

#### The departments are:

- 1. Centre for Biosystems Science and Engineering (BSSE)
- 2. Centre for Society and Policy
- 3. Center for infrastructure, Sustainable Transportation and Urban Planning (CiSTUP)
- 4. Centre for Nano Science and Engineering (CeNSE)
- 5. Department of Computational and Data Sciences (CDS)
- 6. Department of Management Studies
- 7. Interdisciplinary Centre for Energy Research (ICER)
- 8. Interdisciplinary Mathematical Sciences
- 9. Interdisciplinary Centre for Water Research (ICWaR)
- 10. Robert Bosch Centre for Cyber Physical Systems (RBCCPS)
- 11. Supercomputer Education and Research Centre (SERC)
- 12. Quantum Technology Initiative

Interdisciplinarity is the characteristic feature of the research carried out in this Division. Specific research areas are: Bioengineering, Urban Infrastructure and Transportation, Nanoscale Materials, Nano Devices and Systems, Economics, Finance, Human Resource Management, Marketing, Optimization, Public

Policy, Energy, Water, Internet of Things, Distributed Sensing, Computer Systems, Computational Science, Data Sciences and Bioinformatics.

### 17. Academic bank of credits (ABC):

Implementation of Academic Bank of Credits (ABC) at IISc is as given in the following link: <a href="https://iisc.ac.in/wp-content/uploads/2023/04/Academic-Bank-of-Credits-ABC.pdf">https://iisc.ac.in/wp-content/uploads/2023/04/Academic-Bank-of-Credits-ABC.pdf</a>

- A) Recognition of credits from other institutes (towards degree programs of IISc):
  - Courses taken by a student from IISERs, IITs, AIIMSs, IIMs, TIFR, RRI, NCBS, JNCASR, ISI, Chennai Mathematical Institute will be considered for credits at IISc. The list of accepted institutions will be reviewed at regular intervals (after a period of 3 years).
- B) Courses from other institutes (towards degree programs of IISc):
  - Students can take a maximum of 30% of their IISc RTP (Research Training Program) requirements through the ABC scheme. These courses may fulfil the requirements of soft core and elective courses. The transfer of credits (from ABC) toward the core courses will not be permitted until and unless a strong justification is offered and approved by SCC.
  - Each DCC along with the committee implementing ABC will be authorized to evaluate and accept or reject the courses to be credited through ABC for considering towards the RTP requirements for IISc degree programs (on the basis of course importance/course syllabus/institute concerned).
  - For IISc students seeking to do a course not offered at IISc, the Research Supervisors may advise the students to take the courses in another Institution where the desired courses are offered, and it may be counted towards RTP through ABC.
  - For research program students if a course is not available at IISc and is deemed mandatory/important by the Research Supervisor/DCC, it may be counted over and above the allowed 30% limit.
  - For course programs, hard core courses should be taken from IISc. Only Soft Core courses/Electives will be permitted through ABC.
  - Initially IISc will not accept the courses done through online or similar platforms.
  - Any courses taken by the student more than three years prior to seeking credit, will not be considered.

External credits accepted by IISc will be valid till the completion of the program.

### 18. Skill development:

#### HAL-IISc Skill Development Centre, IISc Bangalore

Hindustan Aeronautics Limited (HAL) and Indian Institute of Science (IISc), two premier organizations, have joined hands to establish the HAL-IISc Skill development centre wherein high-end skills related to Aerospace domain and manufacturing relates sectors will be imparted. This is a very appropriate activity synchronous with the Atmanirbhar program.

During 2016 IISc approached HAL to partner in this unique project. Considering the shared aims of social good, HAL accepted and funded this as a CSR project. The MoU for establishing this unique HAL-IISc Skill Development Centre was signed on 28th March 2016. The construction of the centre was started on 27th October 2016. The support from HAL covers civil works for the buildings and the laboratory equipment.

The centre has a training centre of about 75,000 sq ft. with modern labs, classrooms and an auditorium to seat 250 members. There is facility to provide residential accommodation to about 250 trainees and faculty. When fully functional, the centre will train about 1000 trainees yearly. The focus is to train the trainers who can in turn train more trainees thus leveraging the multiplier effect. Three areas for training have been selected by the Joint HAL-IISc technical committee. For the immediate future, the selected areas are Composite materials, Sensors and IoT, Manufacturing systems.

The beneficiaries of these program will be experienced engineers, supervisors and faculty members of various technical institutes. The trainings will cover both skill upgradation and also new skills. Another unique feature of the training programs is that more than 50% of the course duration will be devoted to learning by doing laboratory experiments. The faculty for the courses will be selected from IISc and other leading organizations including HAL.

HAL-IISC Skill Development Centre (SDC) has initiated the training activities with five planned courses to be offered in the first cohort in the virtual mode during the period Dec 2020 to Feb 2021. The first program, Workshop on IoT and Embedded Applications, was Inaugurated on Monday 7th Dec 2020. Several training programmes were conducted during the 2021-22 period on the following topics: Renewable energy-applications, Design and Practical Implementation of a Printed Circuit Board, IoT and Embedded Applications, Design of Fixed Wing VTOL UAV, Solar Energy Systems, Introduction to Advanced Polymer Composite material, AI for UI/UX Design, Augmented and Virtual Reality, Lightning-Interaction to Aircrafts and Tall structures.

The SDC programs being offered are in the niche engineering areas of Aerospace, Mechanical, Electrical and Electronic sectors, in line with the 'Make in India' mission. This initiative has brought together two finest organizations of India, a Navaratna Status Public Sector Company (HAL) and a centrally funded Institution of Eminence (IISc) have joined hands and embarked on the path to provide skill upgradation and development in these important areas.

More details can be found in the link below:

https://sdc.iisc.ac.in/index.php/hal-iisc-skill-development-centreiisc-bangalore/

### 19. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course)

Undergraduate Programme

Course Code: UH201

Course Title: People and Nature

Instructor: Dr Bitasta Das Term: August-November

Credit: 2

Summary: This course maps the relationship of humans with nature from a cultural perspective. It discusses human ecology, human geography and the impact humans have had on climate change, environmental degradation, and loss of biodiversity. It emphasises the need to appreciate nature and inculcate love for it.

Course Code: UH 203

Course Title: Mapping India with the Folk Arts

Instructor: Dr Bitasta Das

Term: January-April

Credit: 1

Summary: This course understands India through the living art of the common people. Folk art is a window to the life and philosophy of the region they belong to. The country and its people are better understood by probing into the art and appreciating them. Another focus of the course is to bring art and science together.

### 20. Focus on Outcome based education (OBE): Focus on Outcome based education (OBE):

Indian Institute of Science focuses on an outcome-based education where students take up courses with a certain goal of developing skills or gaining knowledge and they have to complete the goal by end of the course.

With outcome-based education at IISc,

- the students gain expertise in that area of knowledge
- are equipped for carrying out further research in that area
- gain knowledge to meet the industry requirements
- lead cutting edge research outcomes
- evolve new research methodologies in the niche areas of research.

The outcomes of several of our degree programmes and specific courses, in line with programme outcomes suggested by the NBA, are given in the following comprehensive document:

https://iisc.ac.in/wp-content/uploads/2023/11/Section-1.1.1-PSO CO 2022-23.pdf

#### 21. Distance education/online education:

Indian Institute of Science has several online courses on different platforms, namely,

- GIAN courses
- CCE courses
- NPTEL courses
- Massive Online Open Courses (MOOCs)
- Courses for DTH (Direct to Home)
- Courses for ITEC (Indian Technical and Economic Cooperation Programme)

Also, in keeping with India's recent National Education Policy (NEP 2020), the Indian Institute of Science, Bengaluru, continued into the second year of the Master of Technology (Online) degree programme, a fully online programme, for practising engineers and scientists. The degree programme is for professionals who are sponsored by organisations, who already have a BE/BTech/Equivalent degree and wish to upskill or re-skill themselves. The following high priority streams are on offer for admission in the academic year 2022-23:

- Data Science and Business Analytics
- Artificial Intelligence
- Electronics and Communication Engineering

The M.Tech. (Online) degree is equivalent to our residential Master of Technology (M.Tech.) degree in all respects, number of credits, the project, the rigour and the level of the courses.

For more details, visit: <a href="http://cce.iisc.ac.in/">http://cce.iisc.ac.in/</a> and <a href="https://iken.iisc.ac.in/">https://iken.iisc.ac.in/</a>

# **Extended Profile**

114

### 1.Programme

1.1

Number of programmes offered during the year:			
File Description	Documents		
Data Template	Data Template <u>View File</u>		
1.2		40	
Number of departments offering academic programmes		42	
2.Student		<u>'</u>	
2.1		1298	
Number of students during the year		1290	
File Description	Documents		
Data Template	<u>View File</u>		
2.2		750	
Number of outgoing / final year students during the year:		752	
File Description	Documents		
Data Template	<u>View File</u>		
2.3		240	
Number of students appeared in the University examination d	during the year	348	
File Description	Documents		
Data Template	<u>View File</u>		
2.4			
Number of revaluation applications during the year		0	
3.Academic			
3.1		947	

Number of courses in all Programmes during the year		
File Description Documents		
Data Template <u>View File</u>		
3.2		470
Number of full time teachers during the year		478
File Description	Documents	
Data Template	<u>View File</u>	
3.3		550
Number of sanctioned posts during the year		550
File Description	Documents	
Data Template <u>View File</u>		
4.Institution		
4.1		25700
Number of eligible applications received for admissions to all the Programmes during the year		
File Description	Documents	
Data Template	<u>View File</u>	
4.2		0.47
Number of seats earmarked for reserved category as per GOI/ State Govt. rule du	ring the year	847
File Description Documents		
Data Template	<u>View File</u>	
4.3		250
Total number of classrooms and seminar halls		
4.4		5000

local number of computers in the campus for academic purpose	
4.5	61703.58
Total expenditure excluding salary during the year (INR in lakhs)	31.33.30

### Part B

### **CURRICULAR ASPECTS**

### 1.1 - Curriculum Design and Development

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

IISc runs 117 graduate programs across its departments, awarding degrees in BS-MS (Research), BTech (Mathematics and Computing), Master of Science (MSc), MTech, MTech (Research), Master of Design (M.Des.), Master of Management (M.Mgt.), Integrated PhD and PhD. Courses are an integral part of all these programs; their curricula and course outcomes have been carefully designed to be relevant to the needs of a developing nation, as well as those of a globalized world.

The engineering programs are directly useful for public and private industry. This is reflected in the program outcomes; the course curricula which is regularly revised and updated to maintain relevance to industry. In terms of local and regional needs, Bengaluru is an important center for the IT industry, and each year many students are employed by the local industry.

Finally, the humanities courses form a core component of the undergraduate programs and are designed to equip the students to understand the current society they live in and better engage with its needs and problems. These are offered by departments under the Division of Interdisciplinary Sciences.

Several new programs introduced in the period 2022-2023 precisely to address contemporary needs. The following lists a few of them, along with a summary of their program outcomes — a complete list is provided in a supporting document:

- M. Tech. in Earth and Climate Science
- B.Tech. in Mathematics and Computing
- M.Sc. in Life Sciences and Chemical Sciences
- M.Tech. in Bioengineering

File Description	Documents		
Upload relevant supporting document	No File Uploaded		
1.1.2 - Number of Programmes where syllabus revision was carried out during the	year		
2			
File Description	Documents		
Upload the data template	<u>View File</u>		
Upload relevant supporting document	No File Uploaded		
1.1.3 - Total number of courses having focus on employability/ entrepreneurship/ s the year	kill development offered by the University during		
1.1.3.1 - Number of courses having focus on employability/ entrepreneurship/ skill	development during the year		
24			
File Description	Documents		
Upload the data template	<u>View File</u>		
Upload relevant supporting document	No File Uploaded		
1.2 - Academic Flexibility			
1.2.1 - Number of new courses introduced of the total number of courses across all programs offered during the year			
67			
File Description	Documents		
Upload the data template	<u>View File</u>		
Upload relevant supporting document	No File Uploaded		
1.2.2 - Number of Programmes in which Choice Based Credit System (CBCS)/elective course system has been implemented during the year			
114			
File Description	Documents		
Upload the data template	<u>View File</u>		

### 1.3 - Curriculum Enrichment

1.3.1 - Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum

The Institute offers following courses that deals with professional development and ethics

1. 1. Research Communication:

COURSE CODE & CREDITS: CO 202 (2:0)

INSTRUCTORS: Dr Karthik Ram and Dr Narmada Khare (Office of Communications)

DAYS AND TIMINGS: Tuesdays and Thursdays (3:30 - 5:00 PM)

VENUE: Seminar Hall, Office of Communications

GOAL: The course aims to provide the tools required for graduate students (Master's and PhD) to become more effective communicators of their research, crucial for their academic success

#### LEARNING OUTCOMES:

- understand the history and philosophy of research communication
- survey relevant literature
- understand the structure of a research paper
- understand the process of peer-review
- write clearly and concisely
- organise an essay meaningfully
- learn about other forms of research communication including research posters and grant proposals
- understand the importance of research communication in professional development
- appreciate the significance of ethics in research communication
- 2. Process of Scientific Thinking:

COURSE CODE & CREDITS: EC 101 (AUG) (1:0)		
GOAL: Approaches of scientific practice and research conduct. Historical perspective of various philosophies of science and the process of scientific thinking (e.g. deduction, induction and Inference by Best Explanation). Ethics in conducting, writing, and publishing science (including plagiarism), best practices for replicable research. How to read and review scientific literature critically.		
File Description	Documents	
Upload relevant supporting document	No File Uploaded	
1.3.2 - Number of value-added courses for imparting transferable and life skills off	ered during the year	
3		
File Description	Documents	
Upload the data template	<u>View File</u>	
Upload relevant supporting document	No File Uploaded	
1.3.3 - Total number of students enrolled in the courses under 1.3.2 above		
1.3.3.1 - Number of students enrolled in value-added courses imparting transferab	le and life skills offered during the year	
90		
File Description	Documents	
Upload the data template	<u>View File</u>	
Upload relevant supporting document	No File Uploaded	
1.3.4 - Number of students undertaking field projects / research projects / internships during the year		
102		
File Description	Documents	
Upload the data template	<u>View File</u>	
Upload relevant supporting document	No File Uploaded	
1.4 - Feedback System		
1.4.1 - Structured feedback for design and review of syllabus - semester wise / is received from Students Teachers Employers  • Any 2 of the above		

Alumni			
File Description		Documents	
Upload relevant supporting document			No File Uploaded
1.4.2 - Feedback processes of the institution may be classified as follows	• Feedback	collected an	d analysed
File Description			Documents
Upload relevant supporting document			<u>View File</u>
TEACHING-LEARNING AND EVALUATION			
2.1 - Student Enrollment and Profile			
2.1.1 - Demand Ratio			
2.1.1.1 - Number of seats available during the year			
1417			
File Description		Documents	
Upload the data template			<u>View File</u>
Upload relevant supporting document			No File Uploaded
2.1.2 - Total number of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc.) as per applicable reservation policy during the year (Excluding Supernumerary Seats)			
2.1.2.1 - Number of actual students admitted from the reserved categories during the year			
492			
File Description		Documents	
Upload the data template			<u>View File</u>
Upload relevant supporting document			No File Uploaded
2.2 - Catering to Student Diversity			
2.2.1 - The institution assesses the learning levels of the studentsand organises special Programmes for advanced learners and slow learners			advanced learners and slow learners

Every programme at Indian Institute of Science has two types of courses: Core and Elective. While Core courses are mandatory for the specific programmes, elective courses are designed for different learning levels of the students. There are 200 level, 300 level, and 400 level courses in the order of increasing complexity and rigor from simple to advanced learners. Each course will have credits like 2,3,4, etc. Every course has strict evaluation comprising of assignments, seminars, and projects.

The department curriculum committees monitor the performance of every student in the department and suggest reduced course loads for the slower learners.

File Description	Documents
Upload relevant supporting document	No File Uploaded
Link For Additional Information	Nil

### 2.2.2 - Student - Full time teacher ratio during the year

Number of Students	Number of Teachers
4976	478

File Description	Documents	ĺ
Upload relevant supporting document	No File Uploaded	ĺ

### 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 experiences

At Indian Institute of Science, courses are designed in such a way that the students experience and obtain deeper insights into the subject knowledge. Different methods such as tutorials, assignments (problem solving), seminars (experiential) and group discussions (participative), along with class tests are used in the courses. Apart from this IISc organizes several student symposiums and focused summer/winter schools for experiential and participative learning.

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 2.3.2 - Teachers use ICT enabled tools including online resources for effective teaching and learning processes during the year

At Indian Institute of Science, faculty use ICT enabled tools such as MS teams for interaction, MS share point for file sharing, and other MS office 365 tools for effective teaching. Learning Management System (LMS) Tools such as Moodle, Canvas, Piazza is used to deliver online courses. Apart from this IISc has

purchased professional institute-wide licenses for ICT-enabled tools such as Overleaf for collaborative scientific writing, MATLAB and Mathematica for simulations, Grammarly for grammatical corrections in professional writing, and Turnitin for plagiarism checking. Institute faculty utilize academic licenses for GitHub for collaborative projects and there is an ongoing discussion on purchasing institute-wide license of GPT-4 for academic usage.

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 2.3.3 - Ratio of students to mentor for academic and other related issues during the year

#### 2.3.3.1 - Number of mentors

478

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 2.4 - Teacher Profile and Quality

### 2.4.1 - Total Number of full time teachers against sanctioned posts during the year

478

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 2.4.2 - Total Number of full time teachers with Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D'Lit. during the year

478

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 2.4.3 - Total teaching experience of full time teachers in the same institution during the year

### 2.4.3.1 - Total experience of full-time teachers

6253

File Description	Documents		
Upload the data template	<u>View File</u>		
Upload relevant supporting document	No File Uploaded		
2.4.4 - Total number of full time teachers who received awards, recognition, fellowships at State, National, International level from Government/Govt. recognised bodies during the year			
161			
File Description	Documents		
Upload the data template	<u>View File</u>		
Upload relevant supporting document	No File Uploaded		
2.5 - Evaluation Process and Reforms			
2.5.1 - Number of days from the date of last semester-end/ year- end examination	till the declaration of results during the year		
30			
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 year			
30			
File Description	Documents		
Upload the data template	<u>View File</u>		
Upload relevant supporting document	No File Uploaded		
2.5.2 - Total number of student complaints/grievances about evaluation against total number appeared in the examinations during the year			
0			
File Description	Documents		
Upload relevant supporting document	No File Uploaded		
2.5.3 - IT integration and reforms in the examination procedures and processes (continuous internal assessment and end-semester assessment) have brought in considerable improvement in examination management system of the institution			

On the examination procedures and processes, MS sharepoint tools are used to share the assignments, correct them, and internally assess them. Enterprise Resource Planning (ERP) tool (SAP) is used for grade assignment. Once the marks are entered and slabs for grades are indicated, grades are automatically calculated. Transcripts are automatically generated.

Also, teachers discuss with students question papers after the examination and class tutorials. This ensures that each and every student in the class gets to know the topic in greater detail

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 2.5.4 - Status of automation of Examination division along with approved Examination Manual

C. Only student registration and result processing

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 2.6 - Student Performance and Learning Outcomes

2.6.1 - The institution has stated learning outcomes (generic and programme specific)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents

Scheme of Instructions handbook lists all courses in a given academic year. This book is available online:

https://iisc.ac.in/wp-content/uploads/2023/05/Student-Information-Handbook-2023.pdf

Course details are also available at an IISc intranet site.

Each course advertises the course syllabus, the assessment methods, the assessment weights, and the course outcomes.

#### Feedback:

For each course, students rate the course contents and the course instructor on several aspects. About the course, the following aspects are gathered: depth of coverage in tests and assignments, novelty, organization, coverage of contemporary and advanced topics, availability of study material, whether the course is meeting learning expectations, and an overall rating.

About the Instructor, the following aspects are gathered: clarity of expression and presentation, motivation, pace of teaching, accessibility outside the class, responsiveness and encouragement to questions, instructor's expertise in the subject, level of preparation for the lectures, relevance of the tests and assignments, their discussion in class, coverage of the subject, and an overall rating. The instructor feedback is shared with the instructor for self-assessment and improvement.

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 2.6.2 - Attainment of Programme outcomes, Programme specific outcomes and course outcomes are evaluated by the institution during the year

The Senate Curriculum Committee (SCC) at the Indian Institute of Science (IISc), Bengaluru acts as the Institute's Internal QualityAssessment Committee (IQAC).

The SCC comprises the following members:

- Chairperson (a senior faculty member)
- Deans of Faculties (Ex-officio Members)
- Chair, CCE (Centre for Continuing Education)
- Convener of Deans of Divisions
- Representatives from the Divisions of Biological Sciences, Chemical Sciences, Electrical Sciences, Mechanical Sciences, Physical and Mathematical Sciences and Interdisciplinary Sciences
- Secretary (Joint/ Deputy/ Assistant Registrar, Academic)

The SCC meets four times in a year and considers the followingmatters: Offering of courses

- Review of courses content, level New academic programs
- Review of examination results (program/program specific/course outcomes)
- Problem cases or special cases arising out of examination results
- Course and examination timetables The Scheme of Instruction booklet
- Research Training Program (RTP) of research students

While reviewing new programmes, programme outcomes and attainments are evaluated. While reviewing offerings of courses, programme specific outcomes and attainments are evaluated. While reviewing courses, course outcomes and attainments are evaluated.

File Description	Documents
Upload relevant supporting document	No File Uploaded

- 2.6.3 Number of students passed during the year
- 2.6.3.1 Total number of final year students who passed the university examination during the year

354

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 2.7 - Student Satisfaction Survey

2.7.1 - Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design its own questionnaire) (results and details need to be provided as a web link)

https://iisc.ac.in/wp-content/uploads/2023/11/Section-2.7.1-SSR-22-23.xlsx

### RESEARCH, INNOVATIONS AND EXTENSION

- 3.1 Promotion of Research and Facilities
- 3.1.1 The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

Indian Institute of Science has a well-defined policy for promotion of research as stated in the vision/mission statement (as shared in website):

https://iisc.ac.in/vision-and-mission/

Vision

IISc aims to be among the world's foremost academic institutions through the pursuit of excellence in research and promotion of innovation by offering world-class education to train future leaders in science and technology and by applying science and technology breakthroughs for India's wealth creation and social welfare.

Mission

Our mission is to realize our vision by:

- Imparting world-class higher education in an environment of fundamental and applied research in science and engineering
- Conducting high-impact research, generating new knowledge, and disseminating this knowledge through publications in top journals and conferences
- Applying faculty expertise towards the success of national science and technology initiatives
- Applying deep knowledge in various areas to create knowhow and developing such knowhow for utilization by industry and society

In order to support the cutting-edge research in various departments at IISc, constantly the existing facilities are maintained by the IOE grants and new facilities are periodically added.

File Description	Documents
Upload relevant supporting document	No File Uploaded

### 3.1.2 - The institution provides seed money to its teachers for research (amount INR in Lakhs)

20-100

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 3.1.3 - Number of teachers receiving national/international fellowship/financial support by various agencies for advanced studies/research during the year

52

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 3.1.4 - Number of JRFs, SRFs, Post-Doctoral Fellows, Research Associates and other research fellows enrolled in the institution during the year

2267

17		
	File Description	Documents
	. No Description	Documents

Upload the data template		<u>View File</u>
Upload relevant supporting document		No File Uploaded
3.1.5 - Institution has the following facilities to support research Central Instrumentation Centre Animal House/Green House Museum Media laboratory/Studios Business Lab Research/Statistical Databases Moot court Theatre Art Gallery		
File Description		Documents
Upload relevant supporting document		No File Uploaded
3.1.6 - Number of departments with UGC-SAP, CAS, DST-FIST, DBT, ICSSR and other recognitions by national and international agencies during the year		
26		
File Description		Documents
Upload the data template		<u>View File</u>
Upload relevant supporting document		No File Uploaded
3.2 - Resource Mobilization for Research		
3.2.1 - Extramural funding for Research (Grants sponsored by the non-government sources such as industry, corporate houses, international bodies for research projects) endowments, Chairs in the University during the year (INR in Lakhs)		
6127.08		
File Description		Documents
Upload the data template		<u>View File</u>
Upload relevant supporting document		No File Uploaded
3.2.2 - Grants for research projects sponsored by the government agencies during the year (INR in Lakhs)		
20214.43		
File Description		Documents
Upload the data template		<u>View File</u>
Upload relevant supporting document		No File Uploaded

### 3.2.3 - Number of research projects per teacher funded by government and non-government agencies during the year

1.450

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 3.3 - Innovation Ecosystem

3.3.1 - Institution has created an eco-system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

The programs offered in the Institute are designed to equip students with the latest scientific and technological knowhow, and train them in analytical ability, and are thus innovative in nature. A few of the initiatives are:

Foundation for Science, Innovation and Development (FSID, formally SID) is an initiative of IISc, was founded to use the incredible repository of knowledge, world class infrastructure and talent (which it has access to by virtue of its umbilical connection with IISc) to help business enterprises and thereby the economy and the nation at large. Since its inception, FSID has evolved and refined its model of engagement and now actively takes forward its mission through its three divisions — CORE that engages with large corporations in collaborative research, TIME that works with midsized enterprises to put them on a disruptive growth path via innovation, and STEM that incubates start-ups that have deep science and societal impact at their core.

Most visionary companies know that it is not enough to make small iterations on existing products. It is truly important to peer into the future and create innovations that are ahead of the immediate need. Through CORE Labs, FSID provides a window for the industry to have access to some of the best scientific minds at IISc. When enterprises seek significant and intriguing questions that have scientific knowledge at their core, FSID creates a platform for collaborative research to solve them.

For more details, visit: https://fsid.iisc.ac.in/

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 3.3.2 - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR), Entrepreneurship and Skill Development during the year

8			
File Description		Documents	
Upload the data template		<u>View File</u>	
Upload relevant supporting document		No File Uploaded	
3.3.3 - Number of awards / recognitions received for research/innov	vations by the ir	nstitution/teachers/research scholars/students	
3.3.3.1 - Total number of awards / recognitions received for researd scholars/students year wise during the year	ch/innovations v	von by institution/teachers/research	
2			
File Description		Documents	
Upload the data template		<u>View File</u>	
Upload relevant supporting document		No File Uploaded	
3.4 - Research Publications and Awards			
3.4.1 - The institution ensures implementation of its stated Code of	Ethics for resea	arch	
<ul> <li>3.4.1.1 - The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following</li> <li>1. Inclusion of research ethics in the research methodology course work</li> <li>2. Presence of institutional Ethics committees (Animal, chemical, bio-ethics etc)</li> <li>3. Plagiarism check</li> <li>4. Research Advisory Committee</li> </ul>	A. All of t	he above	
File Description		Documents	
Upload relevant supporting document		No File Uploaded	

3.4.2 - The institution provides incentives to teachers who receive state, national and international recognitions/awards Commendation and monetary incentive at a University function Commendation and medal at a University function Certificate of honor Announcement in the Newsletter / website	/e
File Description	

A. All of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 3.4.3 - Number of Patents published/awarded during the year

### 3.4.3.1 - Total number of Patents published/awarded year wise during the year

117

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 3.4.4 - Number of Ph.D's awarded per teacher during the year

# 3.4.4.1 - How many Ph.D's are awarded during the year

289

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 3.4.5 - Number of research papers per teacher in the Journals notified on UGC website during the year

#### 3.52

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

	d chapters in edited volumes published per tead		•	
3.4.6.1 - Total number of bo proceedings during the year	ooks and chapters in edited volumes / books pul r	olished, and pap	pers in national/international conference-	
324				
File Description		Docum	ents	
Upload the data template			<u>View File</u>	
Upload relevant supporting document			No File Uploaded	
CEC (Under Graduate) For S	wed by teachers For e-PG-Pathshala For WAYAM For other MOOCs platform For overnment Initiatives For Institutional	ny 5 or all o	of the above	
File Description		Docum	ents	
Upload the data template			<u>View File</u>	
Upload relevant supporting document			No File Uploaded	
3.4.8 - Bibliometrics of the	publications during the year based on average (	Citation Index ir	n Scopus/ Web of Science/PubMed	
Scopus	Web of Science	Web of Science		
7039	Nil	Nil		
File Description Documents		Documents		
Any additional information No		No File Uploaded		
Bibliometrics of the publications during the year No		No File Uploaded		
3.4.9 - Bibliometrics of the	publications during the year based on Scopus/ V	Web of Science -	- h-Index of the University	
Scopus Web of Science				
26	Nil			
File Description			Documents	
Bibliometrics of publications I	based on Scopus/ Web of Science - h-index of the In:	stitution	No File Uploaded	

# 3.5 - Consultancy

3.5.1 - Institution has a policy on consultancy including revenue sharing between the institution and the individual and encourages its faculty to undertake consultancy

IISc has been interacting informally with the industry since its inception through individual contacts. This interaction was given institutional backing with the establishment in 1975 of the Centre for Scientific and Industrial Consultancy (CSIC). The role of CSIC is to strengthen, promote and streamline the interaction between IISc and industry. CSIC helps IISc faculty to stay tuned to the needs of industry while enabling the industry to gain access to the expertise and facilities available in various departments and centers of the Institute.

The consultancy exercise undertaken by CSIC can be broadlyclassified as Product design and development.

- Process design and development.
- System design and development.
- Software development.
- Technology transfer.
- Technical advice and guidance. Testing and evaluation.
- Diagnostics, Proof checking, System studies.
- Manpower development.

CSIC is also engaged in disseminating research results to the wider community through newsletters, brochures, and audiovisual aids including documentary films. Vichara, the Institute lecture series by eminent men of scienceis aimed at widening the horizons of industrial experience.

For more details, visit: http://csic.iisc.ac.in/

File Description	Documents
Upload relevant supporting document  No File Uploaded	

- 3.5.2 Revenue generated from consultancy and corporate training during the year (INR in Lakhs)
- 3.5.2.1 Total amount generated from consultancy and corporate training during the year (INR in lakhs)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

#### 3.6 - Extension Activities

3.6.1 - Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the year

Note Book Drive (NBD) is a student-run volunteer initiative at IISc, involved with government schools in and around Bangalore. We carry out weekly sessions for the school kids for a wide range of subjects viz. Mathematics, Science, English, Robotics, and Computer Science. The objective of NBD is to teach these subjects with lucid experimental/visual aids to make learning exciting and accessible. In addition to teaching, we also host annual events which include Notebook Distribution, Scholarship Initiative, Children's Day celebrations, and Career Guidance Initiative.

The kids being supported by NBD often fall into weaker economic sections. The activities conducted by NBD have been instrumental in nurturing the budding dreams of young kids, made possible by the effort of its volunteers and donors alike.

File Description	Documents
Upload relevant supporting document	No File Uploaded

- 3.6.2 Number of awards received by the Institution, its teachers and students from Government /Government recognised bodies in recognition of the extension activities carried out during the year
- 3.6.2.1 Total number of awards and recognition received for extension activities from Government / Government recognised bodies during the year

0

File Description	Documents
Upload the data template	No File Uploaded
Upload relevant supporting document	No File Uploaded

3.6.3 - Number of extension and outreach programs conducted by the institution including those through NSS/NCC/Red cross/YRC during the year(including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 3.6.4 - Total number of students participating in extension activities listed at 3.6.3 above during the year

528

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

#### 3.7 - Collaboration

- 3.7.1 Number of collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year
- 3.7.1.1 Total number of Collaborative activities with other institutions/ research establishment/industry for research and academic development of faculty and students during the year

48

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

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

170

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### INFRASTRUCTURE AND LEARNING RESOURCES

# 4.1 - Physical Facilities

4.1.1 - The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc.

IISc has about 50 multimedia classrooms, with video recording and streaming facilities, modern furniture, and high quality acoustics. In addition, each Department have their own set of multimedia enabled lecture and seminar halls. Undergraduate students have their own set of lecture halls and full access to world-class teaching laboratories. Master's and PhD students have access to research laboratories in their respective Departments. In addition, IISc periodically upgrades its central lecture hall complex with multiple lecture halls. IISc also hosts a National Science Seminar Complex which has four auditoriums with seating capacities of 750, 120, 90, and 60. ICMR and IISc have signed an MoU for the creation of a gold standard medical data platform. IISc is setting up a Quantum Research Park with world-class facilities for use by industries, startup partners and academic users of Karnataka. The Kotak IISc AI-ML Centre has a fully-networked instructional lab catering to needs of the BTech (Mathematics and Computing) programme, including the AI-ML course and other projects.

IISc has state-of-the-art computing facilities for use by students. The major central computing facilities provided by IISc include (i) PARAM Pravega, which is a National Supercomputer Mission (NSM) Supercomputer having a peak compute power of 3.3 PetaFlops, and (ii) NVIDIA DGX-1, which is a deep learning system, architected for high throughput and high interconnect bandwidth to maximize neural network training performance. Individual departments and laboratories also have smaller computational facilities.

File Description	Documents
Upload relevant supporting document	No File Uploaded

4.1.2 - The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

IISc Gymkhana is the nodal centre for sports and cultural activities for the students and faculty of the Institute. It offers various facilities for many outdoor and indoor games and has a well-equipped Gymnasium and a swimming pool. The Gymkhana houses the nature club, dance club, music club, dramatic club, literary, fine arts, yoga club, photographic club, and a well-equipped modern music room. The Ranade Library in the Gymkhana offers many books in English and various Indian languages. The Gymkhana has separate grounds for Football, Hockey, and Cricket. It also houses floodlighted courts for Tennis, Volleyball, and Basketball. The Raja Ramanna Students Activities Centre (SAC) accommodates various cultural activities by students. The IISc Gymkhana regularly organizes sports events that are open to all. International Yoga Day sees events such as introductory Yoga programs and meditation sessions that are organized by the I-meditate Club of IISc.

Currently, the Gymkhana is undergoing extensive renovation to upgrade its facilities to the state-of-the-art.

Other facilities in IISc include the Satish Dhawan Auditorium for holding seminars, Amenities Hall for hosting cultural programmes organized by the IISc community, and Choksi Hall (currently under upgradation) for holding meetings.

File Description	Documents
Upload relevant supporting document	No File Uploaded

### 4.1.3 - Availability of general campus facilities and overall ambience

#### General Campus facilities

- 1. Centre for Counselling and Support
- 2. Guest Accommodation IISc has several guest houses in the main campus.
- 3. JRD Tata Memorial Library one of the best libraries in the country for science and technology.
- 4. Supercomputer Education and Research Centre computing centre having state-of-the art computing facilities, catering to the ever-increasing demands of high-performance computing for the scientific and engineering research.
- 5. Dining:
- 6. Faculty Club
- 7. Nesara
- 8. Sarvam
- 9. Recreation: Gymkhana: The Gymkhana houses several recreational facilities including a fitness centre, library, table tennis, badminton, basketball and volleyball courts, indoor game room. The Gymkhana club also screens Hindi and English movies.
- 10. Swimming Pool
- 11. Faculty Club: Members include all faculty and officers.
- 12. Film society: Screens good foreign films and award-winning movies.
- 13. Shopping complex that houses different types of shops.
- 14. Sarvam: The amenities centre for students
- 15. Creche and School
- 16. Banking: Canara Bank & State Bank of India
- 17. Travels Jaybee Travels & Varsha Travels

File Description	Documents
Upload relevant supporting document	No File Uploaded

### 4.1.4 - Total expenditure excluding salary for infrastructure augmentation during the year (INR in Lakhs)

42428.41

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

### 4.2 - Library as a Learning Resource

### 4.2.1 - Library is automated using Integrated Library Management System (ILMS) and has digitisation facility

The J.R.D. Tata Memorial Library (JRDTML) completed its centenary year of establishment in 2011. Started in 1911, the JRDTML was one of the earliest central facilities to have been started by the Indian Institute of Science for teaching and research.KOHA Integrated library management software (ILMS) has been used to automate the library collection and for all the housekeeping operations such as circulation, cataloguing, serials management, cataloguing, authorities, and much more. Users can browse and search library collection, make reservations, and access digital and e-resources through its Online Public Access Catalogue (OPAC) [https://libraryopac.iisc.ac.in/]. Links are also provided for the library's services as well as for open access textbooks, theses, and other resources in the OPAC.

During the library's journey, it has extended its services by maintaining the research publication in ePrints@IISc (http://eprints.iisc.ac.in), collecting, capturing, dissemination, and digitising the theses and dissertations in ETD@IISc (https://etd.iisc.ac.in) from 1996 onwards. The highlight of the JRD Tata memorial library is the vast collection of bound volumes and journal subscription. To collect, curate, and showcase the research activities of the subject experts and faculties and to promote scholarly communication, the library offers a Research Information Management (RIM) service called (IRINS) Faculty profiles (https://iiscprofiles.irins.org/). Shibboleth, a single sign-on log-in system, was identified as a solution for off-campus access to the subscribed online resources.

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 4.2.2 - Institution has subscription for e-Library resources Library has regular subscription for the following: e - journals e-books e-ShodhSindhu Shodhganga Databases

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 4.2.3 - Annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the year (INR in Lakhs)

File Description	Documents	
Upload the data template	<u>View File</u>	
Upload relevant supporting document	No File Uploaded	
4.2.4 - Number of usage of library by teachers and students per day (foot falls and login data for online access)		
8488		
File Description	Documents	
Upload relevant supporting document	No File Uploaded	
4.3 IT infractive characters and		

#### 4.3 - IT Infrastructure

# 4.3.1 - Number of classrooms and seminar halls with ICT - enabled facilities such as LCD, smart board, Wi-Fi/LAN, audio video recording facilities during the year

120

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

4.3.2 - Institution has an IT policy, makes appropriate budgetary provision and updates its IT facilities including Wi-Fi facility

The following link provides the detailedIT policy of the Institute.

https://digits.iisc.ac.in/wp-content/uploads/2022/03/internet-access-usage-policy.pdf

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 4.3.3 - Student - Computer ratio during the year

Number of students	Number of Computers available to students for academic purposes
4976	5000

# 4.3.4 - Available bandwidth of internet connection in the Institution (Leased line)

• ≥1 GBPS

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 4.3.5 - Institution has the following Facilities for e-content development Media centre Audio visual centre Lecture Capturing System(LCS) Mixing equipment's and softwares for editing

A. All of the above

File Description	Documents
Upload relevant supporting document	No File Uploaded
Upload the data template	<u>View File</u>

### 4.4 - Maintenance of Campus Infrastructure

# 4.4.1 - Total expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the year

6885.3

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

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

The academic infrastructure of the institute, such as research and teaching laboratories, classrooms, auditoria, libraries, etc., are housed in over 40 departments and centers spread across the campus; in addition, the institute also has several centralized classrooms, a large central library, undergraduate classrooms, and teaching laboratories.

The regular monitoring of these academic facilities is undertaken by the respective departments that house them, and all upgradation and repair works are conducted by the Center for Campus Maintenance and Development (CCMD), which has several experienced civil and electrical engineers, and is headed by an experienced Chief Engineer-level officer. In addition, engineers from CCMD also undertake periodic survey of the various infrastructure on the campus and take proactive steps to ensure high standards of maintenance. The Institution also has Annual Maintenance Contracts (AMCs) to maintain the lab equipment, computer hardware and software, studios, and so on.

The sports facilities on the campus are actively managed by the Gymkhana Infrastructure Management committee headed by Gymkhana president. The committee includes Deputy Registrar, Senior Sports Officer, and a group of enthusiastic student representatives; all regular maintenance matters are internally managed by the Gymkhana, while all major works are promptly addressed by the engineers of the CCMD.

The computers and the networking on the campus are maintained by DIGITS, which is the office of Digital campus and Information Technology Services. The Institution uses e-Samadhan, Government Residential Accommodation Allotments. The allotment is purely based on bookings.

File Description	Documents
Upload relevant supporting document	No File Uploaded

#### STUDENT SUPPORT AND PROGRESSION

# 5.1 - Student Support

5.1.1 - Total number of students benefited by scholarships and free ships provided by the institution, Government and non-government agencies (NGOs) during the year (other than the students receiving scholarships under the government schemes for reserved categories)

3469

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

5.1.2 - Total number of students benefited by career counselling and guidance for competitive examinations offered by the Institution during the year

369

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

5.1.3 - Following Capacity development and skills enhancement initiatives are taken by the institution Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) Awareness of trends in technology

A. All of the above

File Description		Documents
Upload the data template		<u>View File</u>
Upload relevant supporting document		No File Uploaded
5.1.4 - The Institution adopts the following for redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organisation wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees	• All of the	e above
File Description		Documents
Upload relevant supporting document		No File Uploaded
5.2 - Student Progression		
5.2.1 - Number of students qualifying in state/ national/ international level examinations during the year (eg:NET/SLET/GATE/GMAT/CAT/ GRE/TOEFL/Civil Services/State government examinations)		
5.2.1.1 - Number of students who qualified in state/ national/ international examinations (e.g.: IIT-JAM/NET/SET/JRF/ GATE /GMAT /CAT/ GRE/ TOEFL/Civil Services/State government examinations) during the year		
18		
File Description		Documents
Upload the data template		<u>View File</u>
Upload relevant supporting document		No File Uploaded
5.2.2 - Total number of placement of outgoing students during the year		
385		
File Description		Documents
Upload the data template		<u>View File</u>
Upload relevant supporting document		No File Uploaded
	•	- 1

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

## 5.3 - Student Participation and Activities

# 5.3.1 - Number of awards/medals won by students for outstanding performance in sports/cultural activities at interuniversity/state/national/international events (award for a team event should be counted as one) during the year

14

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

## 5.3.2 - Presence of Student Council and its activities for institutional development and student welfare

The student council plays a crucial role in bridging the student body at IISc and the administration. Its responsibilities include addressing academic and facility-related issues that students may face and follow up with the administration to ensure the resolution. Additionally, the council actively seeks feedback and suggestions from students to enhance the research environment and improve student well-being on campus.

Throughout the year, the council organizes various cultural, sports, and tech festivals for the student community. It also holds a general body meeting to update students on its recent activities and address any concerns raised by the students. The council encourages students to showcase their talents during an open mic session.

The council is also responsible for the cycle auction, which serves the dual purpose of clearing unused cycles from the campus while raising funds for various events. With students from diverse cultural backgrounds across India, the council works in collaboration with various samitis to organize and celebrate festivals that showcase local cultures.

The student council is democratically elected by the students and works to advocate for their welfare and interests.

File Description Documents	Documents
----------------------------	-----------

Upload relevant supporting document	No File Uploaded	

# 5.3.3 - Number of sports and cultural events / competitions organised by the institution during the year

7

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 5.4 - Alumni Engagement

5.4.1 - The Alumni Association/Chapters (registered and functional)contributes significantly to the development of the institution through financial and other support services during the year

Established in 2015, the Office of Development and Alumni Affairs (ODAA) has been the single point of contact for the alumnis, corporates, and philanthropists supporting various development initiatives at the Indian Institute of Science.

Alumni contributions for the FY 2022-23

Total Amount: 25.74 Crores

Alumni have generously supported the following major projects:

- Jay Pullur Neurology and Blood Bank Wing of Bagchi Parthasarathy Hospital
- Rajarshi Bhattacharya Memorial Gold Medal for M. Sc. (Chemical Sciences) program
- Dibakar Das Research Endowment Award in Electric Power
- Prof. S N Balasubrahmanyam Memorial Lecture
- Rajarshi Bhattacharya Memorial Lecture Hall
- Prof. Satish Dhawan Award
- Mallika Women Fellowships
- Prof. T. S. Nagaraj Research Award
- Jay Pullur- PROMYS Sponsorship (Program in Mathematics for Young Scientists)

- Jay Pullur Memorial Fellowship in the B.Tech. (Math and Computing)
- Prof. Gopal Jere Summer Research Fellowship
- Support for Pravega 2022
- ACMI-IISc Pullur Distinguished Computing Visitor (DCV) Program for CDS Dept.
- ECE-IISc Pullur Distinguished Visitor Programme
- IISc AANA Midwest Chapter UG Women Fellowships
- K. Ananth Swamy Memorial Research Award
- Preserving IISc's Legacy project
- Revati and Satva Nadham Atluri Medal
- Prof. R Kumar Fund

• Dr. Rama Ranganathan endowment at Organic Chemistry

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 5.4.2 - Alumni contribution during the year (INR in Lakhs)

File Description	Documents
Upload relevant supporting document	No File Uploaded

A. ≥ 5Lakhs

# GOVERNANCE, LEADERSHIP AND MANAGEMENT

# 6.1 - Institutional Vision and Leadership

6.1.1 - The institution has a clearly stated vision and mission which are reflected in its academic and administrative governance

The vision of IISc clearly articulates its ambition to be recognized among the world's leading academic institutions. It emphasizes research excellence, innovation promotion, world-class education, and the application of scientific and technological breakthroughs for the benefit of India's prosperity and social welfare. The mission statement outlines the specific actions and principles that will bring this vision to life.

Our mission is to realize our vision by:

- Imparting world-class higher education in an environment of fundamental and applied research in science and engineering.
- Conducting high-impact research, generating new knowledge, and disseminating this knowledge through publications in top journals and conferences.
- Applying faculty expertise towards the success of national science and technology initiatives.

  Applying deep knowledge in various areas to create knowhow and developing such knowhow for utilization by industry and society.

IISc's governance and leadership are aligned with this visionary and mission-driven approach. The leadership at IISc actively encourages faculty members to excel in teaching, research, and innovation, recognizing their achievements through reward structures. The institution's commitment to excellence is underscored by its top-ranking position in the MHRD's National Institutional Ranking Framework for two consecutive years.

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 6.1.2 - The effective leadership is reflected in various institutional practices such as decentralization and participative management

Decentralization and participative management in administration:

The Institute administration is divided into three structures — the first involves administrative procedures, finances, planning and infrastructure; the second involves faculty matters including hiring and assessment, and the third involves student matters. Three sets of Deans are assisted by the staff, the chairs of departments, the associate deans, and several committees comprising faculty members (e.g., purchase committee, library committee, etc.), in the discharge of the duties. The above structures are designed to take inputs from the grass-roots level, best practices are identified, participation is ensured, and policies are effectively implemented.

Participation is a fundamental aspect of the institution's governance. Faculty members are actively involved in decision-making processes at various levels, from departmental meetings to committee meetings. This inclusivity fosters a collaborative atmosphere where diverse viewpoints contribute to the institution's growth and development.

The decentralized administration of IISc grants significant autonomy to departmental chairs and faculty members in managing their departments. Regular interactions between the chair and the top administration ensure that the leadership remains connected to the needs and aspirations of the academic units.

Moreover, the institution's commitment to participative management extends to central administration as

well, with decisions being made collaboratively through regular meetings between the director, deputy directors, deans, and divisional chairs.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 6.2 - Strategy Development and Deployment

# 6.2.1 - The institutional Strategic plan is effectively deployed

- Realising the importance of interdisciplinary medical research for the development of next generation healthcare technologies, IISc embarked on a highly ambitious endeavour to establish a post-graduate medical school and a multispecialty research hospital. Substantial funding was received to establish the latter which will become operational by the end of 2024.
- Our COVID-19 efforts continued unabated with work on the heat-tolerant vaccine, oxygen generators and concentrators, and electrochemical ELISA test kits for detecting COVID-19 antibodies, which received approval from the Central Drugs Standard Control Organisation.
- We introduced several other new degree programmes Interdisciplinary PhD programmes in energy, biosystems science and engineering, and cyber physical systems, new MTech programmes in quantum technology and autonomous systems, and a new MTech (Online) degree programme, in line with the NEP 2020 recommendation for continuing education towards an advanced degree.
- We formulated a BTech programme in Math and Computing, and plan to admit the first batch of students from the upcoming academic year.
- IISc is now part of a multi-institutional UK-India Future Network Initiative which will support the integration of high-speed communications in India, exploring supply chain for hardware and software systems that provide access, connectivity and services for future 5G and 6G networks.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

6.2.2 - The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

The institutional perspective plan at IISc is evidently effective, and the functioning of institutional bodies reflects efficiency and alignment with the plan's objectives. This is visible in several key aspects:

- 1. Effective Governance Structure: IISc operates within a well-defined governance framework established under the Charitable Endowment Act 1890, with the Hon'ble President of India serving as the Visitor. The hierarchy of authorities, including the Court, Council, Finance Committee, and Senate, ensures that the institution's policies, administration, and finances are managed effectively. The Director, as the chief executive and academic officer, plays a pivotal role in institute administration.
- 2. Transparent Decision-Making Processes: The various authorities, including the Court, Council, and Senate, meet regularly to discuss and make decisions on key matters related to the institute's aims, administration, and finances. The Council, as the executive authority, is responsible for regulating expenditure, formulating rules, appointing staff, and enforcing penalties. These meetings are well-documented through detailed minutes, demonstrating transparency in the decision-making process.
- 3. Academic Oversight: The Senate, as the academic body of the institute, plays a vital role in academic affairs. This ensures that academic decisions are made in accordance with the institute's mission and vision.
- 4. Adherence to Established Rules and Norms: The institute adheres to various rules and norms, including the Conduct rules, reservation norms, and recruitment rules. This ensures a structured and fair approach to staff recruitment and management.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

#### 6.2.3 - Institution Implements e-governance in its areas of operations

# 6.2.3.1 - e-governance is implemented covering following areas of operation

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

A. All of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

## 6.3 - Faculty Empowerment Strategies

# 6.3.1 - The institution has a performance appraisal system, promotional avenues and effective welfare measures for teaching and non-teaching staff

The institution has made commendable efforts in promoting the well-being and professional development of its teaching and non-teaching staff, as well as in maintaining a structured performance appraisal system. Here are some key highlights in this regard:

#### Performance Appraisal System

- 1. Teaching Staff: The institution follows a rigorous process for performance appraisal of its teaching staff. This process includes probation reports at the end of the first year, interim reports after three years, and comprehensive reports at the end of five years. The assessment is carried out internally to ensure that faculty members are on the right track in terms of research and teaching activities. Subsequently, promotions from Assistant Professor to Associate Professor and from Associate Professor to Professor are handled by the Promotion and Assessment Committee (PAC), which consists of external and internal referees.
- 2. Non-Teaching Staff (Group-B, C, and Multi-Tasking Staff): The performance of non-teaching staff is assessed at two levels. First, through Annual Confidential Reports, where staff members provide self-appraisals annually. For the Multi-Tasking Staff, whose self-appraisals might be limited, the Reporting Officer assesses their performance and assigns item-wise grades. These reports are reviewed by the Reviewing Officer, ensuring accountability and fairness in the assessment process. Second, Technical Evaluation Committees are formed for various staff categories, such as Laboratory Staff and Secretarial Staff.

Some of the Welfare Measures for Staff includesHealth Center, Recreational Facilities, Financial Support and Support for Bereaved Families:

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 6.3.2 - Total number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

272

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

6.3.3 - Number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the year

22

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

6.3.4 - Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the year(Professional Development Programmes, Orientation / Induction Programmes Refresher Course, Short Term Course)

272

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institutional strategies for mobilisation of funds and the optimal utilisation of resources

The Indian Institute of Science (IISc) has established a comprehensive resource mobilization policy and set of procedures that reflect its commitment to financial prudence and optimal utilization of resources. These strategies encompass various avenues for generating funds and ensuring efficient utilization of these resources. Here is a description of IISc's resource mobilization policy and procedures:

## Resource Mobilization Strategies:

- 1. Government Grants: IISc receives budgetary grants from the Ministry of Human Resources, covering essential expenses such as staff salaries and benefits, student scholarships, utilities (electricity and water), and campus maintenance. These grants provide a stable foundation for the institution's operational expenses.
- 2. Extramural Research Funding: The Centre for Sponsored Schemes and Projects (CSSP) plays a crucial role in assisting faculty with research project submissions, project financial management, and utilization certificate submissions.
- 3. Industry Collaboration: IISc actively collaborates with industry partners through the Centre for Scientific and Industrial Consultancy (CSIC). This collaboration not only generates projects with industry but also enables faculty to offer consultancy services to these partners.

- 4. The establishment of the Society for Innovation and Development (SID) further facilitates interactions with multinational companies, fostering innovation and applied research.
- 5. Alumni and Philanthropic Support: The Office of Development and Alumni Affairs (ODAA), staffed by professionals, spearheads efforts to engage with alumni, corporate entities, and philanthropists.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

# 6.4.2 - Funds / Grants received from government bodies during the year for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs)

6222.35

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 6.4.3 - Funds / Grants received from non-government bodies, individuals, philanthropists during the year for development and maintenance of infrastructure (not covered under Criteria III and V)(INR in Lakhs)

2430.52

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting document	No File Uploaded

# 6.4.4 - Institution conducts internal and external financial audits regularly

An Internal Auditor from AG's office, Bangalore conducts the audits supported by the audit team. In addition, CAG conducts financial audits every year.

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) 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

- The Internal Quality Assurance Cell (IQAC) at the Indian Institute of Science (IISc) has significantly contributed to institutionalizing quality assurance strategies and processes within the institution. Specifically, the Senate Curriculum Committees (SCC) within the IQAC have introduced and maintained practices that improve the quality of education and research at IISc.
- The institution follow a rigorous process for revising curricula, develop new curricula, and instituting new programmes. This involves, planning, scrutiny, discussion at various level, followed by revision, re-scrutiny, approval and implementation.
- The institution has a robust mechanism to gather teaching and learning feedback. We have a robust continuous assessment mechanism.
- The Department Curriculum Committees oversee the assessment and teaching/learning performance at the department level. The Senate Curriculum Committee calibrates across departments and ensures quality across the institute. The Senate Committee on Research Conferment evaluates at research performance assessments.
- The institution organizes various workshops where our students are exposed to the best research methods, teaching methods and soft skill acquisition techniques.

File Description	Documents
Upload relevant supporting document	No File Uploaded

6.5.2 - Institution has adopted the following for Quality assurance Academic Administrative Audit (AAA) and follow up action taken Confernces, Seminars, Workshops on quality conducted Collaborative quality initiatives with other institution(s) Orientation programme on quality issues for teachers and studens Participation in NIRF Any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

A. Any 5 or all of the above

File Description	Documents
Upload the data template	<u>View File</u>
Upload relevant supporting documnent	No File Uploaded

6.5.3 - Incremental improvements made for the preceding during the year with regard to quality (in case of first cycle) Post accreditation quality initiatives(second and subsequent cycles)

In this year the Indian Institute of Science (IISc) has made significant incremental improvements and introduced various post-accreditation quality initiatives to enhance its educational and research programs. Here are some key developments:

- IISc has launched 67 new courses and 6 new online courses for the MTech (Online) programme, and revised the course curriculum for a number of courses.
- The number of postdoctoral fellows in the Institute increased substantially during this period due to a systematic evaluation and appointment process of postdoctoral fellows.
- Students whose academic performances were deficient were identified and suitable remedial actions were suggested.
- The improved teaching assignment process ensured greater technical and teaching support for better teaching-learning outcomes.
- A more robust and centralised learning management was set up for better offline educational material access.

File Description	Documents
Upload relevant supporting document	No File Uploaded

#### INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 - Institutional Values and Social Responsibilities

# 7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

Gender sensitization: Campus community is sensitized about dangers of sexual harassments and ways to prevent it through regular workshops. Every member of the community, including faculty, students and staff members mandatorily attends a workshop on sexual harassment in workplaces at least once a year. Such workshops are conducted by experts from external agency contracted by IISc (https://www.sashaindia.com/).

In addition, IISc's vision with respect to sexual harassment of women at workplace is as follows:

- Zero tolerance for the sexual harassment at workplace
- Implementation of zero tolerance by putting preventive measures in place
- Make the community aware of the sexual harassment and the consequences one will face.

ICaSH (Internal Complaints Committee Against Sexual Harassment) is in place at IISc to address the issue of Prevention of Sexual Harassment at workplace.

Gender equity: The division of Electrical, Electronics and Computer Sciences has introduced supernumerary quota of 10% for women candidates in M.Tech programs across the division. This has helped admit more women students in the Master's programs.

Different departments of IISc periodically conducts special recruitment drives to increase female faculty members.

File Description	Documents
Upload relevant supporting document	<u>View</u> <u>File</u>
Annual gender sensitization action plan(s)	Nil
Specific facilities provided for women in terms of: a. Safety and security b. Counseling c. Common rooms d. Daycare Centre e. Any other relevant information	Nil

# 7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power-efficient equipment

A. Any 4 or All of the above

File Description	Documents
Upload relevant supporting document	No File Uploaded

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

IISc has two organizations for waste management. The first one named SWaMII or Solid Waste Management Initiative for IISc handles solid waste, e-waste and waste recycling. OLSEH or Office of Laboratory Safety and Environmental Health (https://olseh.iisc.ac.in/) is responsible for liquid and biomedical waste management, besides managing hazardous chemicals and radioactive wastes.

SWaMII is responsible for providing an end-to-end solution to the waste generated at its campus through environmentally sound processing and disposal technology. The final goal is to have "zero" organic waste taken out of IISc campus for disposal into municipal landfills.

The SWaMII initiative found a mention in the Swachh Bharat Mission of GoI https://swachhbharat.mygov.in/activities/solid-waste-management-initiative-iisc .

OLSEH or Office of Laboratory Safety and Environmental Health (https://olseh.iisc.ac.in/) is responsible for ensuring laboratory safety across the campus and for picking up and managing chemical and other hazardous wastes. It performs regular scheduled pickup of such materials. It also has well-established and publicized safety protocol in handling hazardous materials. OLSEH is also responsible for any emergency situation emanating out of laboratory or waste management.

File Description		Documents
Upload relevant supporting document		<u>View File</u>
7.1.4 - Water conservation facilities available in the Institution: Rain water harvesting Bore well /Open well recharge Construction of tanks and bunds Waste water recycling Maintenance of water bodies and distribution system in the campus	A. Any 4 or all of the	above

File Description	Documents
Upload relevant supporting document	No File Uploaded

# 7.1.5 - Green campus initiatives include

- 7.1.5.1 The institutional initiatives for greening the campus are as follows:
  - 1. Restricted entry of automobiles
  - 2. Use of bicycles/ Battery-powered vehicles
  - 3. Pedestrian-friendly pathways
  - 4. Ban on use of plastic
  - 5. Landscaping

A. Any 4 or All of the above

File Description	Documents
Upload relevant supporting document	No File Uploaded

- 7.1.6 Quality audits on environment and energy are regularly undertaken by the institution
- 7.1.6.1 The institution's initiatives to preserve and improve the environment and harness energy are confirmed through the following:
  - 1. Green audit
  - 2. Energy audit

A. Any 4 or all of the above

- 3. Environment audit
- 4. Clean and green campus recognitions/awards
- 5. Beyond the campus environmental promotional activities

File Description	Documents
Upload relevant supporting document	No File Uploaded

7.1.7 - The Institution has a disabled-friendly and barrier-free environment Ramps/lifts for easy access to classrooms and centres. Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities: accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

A. Any 4 or all of the above

File Description	Documents
Upload relevant supporting document	No File Uploaded

- 7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, socio-economic and other diversities (within a maximum of 200 words)
  - Samvaada is an initiative that aims to provide an informal platform for IISc admin officers and staff members to come together and share something about themselves with a larger audience. It helps build a network among the admin personnel of IISc across the various departments. This not only serves as a stimulating intellectual activity but also enables the staff members to relate and work with one another in a more effective way. All events are video recorded and uploaded on the YouTube channel of the Office of Communications, IISc: https://www.youtube.com/@officeofcommunicationsiisc4446/videos The event is held twice every month and email announcements are sent to everyone. So far, 22 editions of Samvaada have been held.
  - Paraspar, an initiative of the Office of Communications (OoC) at IISc is a platform for conversations about knowledge systems, particularly science. The lecture series started in 2020 and talks on diverse topics such as Science and Society, Understanding India, Thinking ecologically about Indian cities, Being Digital and Gandhian among others, have been held. There is at least one talk each month. All talks are video recorded and are available at the YouTube channel indicated above.
  - Campus community welcomes students and faculty from across the length and breadth of the country.

    There are various regional and linguistic organizations such as Hindi samiti, Tamil, Telegu, Malayali

and Bengali associations. These associations organize regional festivities on the campus such as Onam, Durga puja, Janmashtami and Holi celebrations.

File Description	Documents
Upload relevant supporting document	<u>View File</u>

- 7.1.9 Sensitization of students and employees of the institution to constitutional obligations: values, rights, duties and responsibilities of citizens:
  - Celebration of National Days on campus: Independence Day and Republic Day events include flag
    hoisting, speeches in Kannada, Hindi and English and a cultural program by students and staff members.
    Sports events such as Cyclothon and Freedom Run are also conducted. On Gandhi Jayanti, there are
    special programs such as Swacchata hi Seva (cleaning of the IISc Kendriya Vidyalaya school ground by
    IISc participants) and painting competitions that are open to all.
  - Vigilance Awareness Week: The special events that are held during this week include Vigilance Oath, Vigilance Awareness run and Vigilance Awareness Quiz.
  - Constitution Day, also known as 'Samvidhan Divas', is celebrated on the campus on 26th November each year. Every department and center organize meets to read the preamble of the constitution. IISc also organizes essay writing competitions on the occasion.
  - Sadbhawana diwas is celebrated on the campus on 30th January each year. A Sadbhavna Daud (Run for Harmony across the campus is organized on the occasion.
  - Science for Rural India (SFRI) is a student group in IISc that focuses on rural science outreach. It started in 2016 with the aim of inculcating a sense of curiosity among children in rural areas through lab demonstrations and interactive sessions. SFRI also hosts Kids Zone, which features school level science experiments and is arguably the most popular event on IISc's annual Open Day. SFRI also hosted a pan India conference aimed at creating a network of outreach groups with similar aims.
- 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. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on Code of Conduct are organized

Any 2 of the above

File Description	Documents
Upload relevant supporting document	No File Uploaded

## 7.1.11 - Institution celebrates / organizes national and international commemorative days, events and festivals

IISc celebrates five "Great Days" each year, during which the Director of IISc presides, and all the protocols are duly followed wherever applicable.

1. Republic Day (26th January)

Republic Day is celebrated annually on 26th January to commemorate the significant moment when the Constitution of India came into effect.

2. Founders Day (3rd March 2023)

Jamsetji Nusserwanji Tata, the industrialist and philanthropist who conceived of IISc and donated his wealth to set up the Institute, was born on 3rd March 1839 in Navsari, Gujarat. As a tribute to Tata's munificence and vision, the Institute celebrates 3rd March of each year as Founder's Day.

3. Independence Day (15th August 2023)

Independence Day is celebrated annually on 15th August to commemorate the nation's independence.

4. Gandhi Jayanthi (2nd October 2023)

Gandhi Jayanti is observed on October 2nd every year to mark the birth anniversary of Mohandas Karamchand Gandhi.

5. Karnataka Rajyotsava (1st November)

This day marks a significant historical moment in 1956 when all the Kannada language-speaking regions of southwestern India was amalgamated to form the state of Karnataka.

File Description	Documents
Upload relevant supporting document	No File Uploaded

#### 7.2 - Best Practices

7.2.1 - Describe one best practice successfully implemented by the Institution as per NAAC format provided in the Manual

Title of the Practice: Laboratory safety

Objective: Establishing a dedicated office for ensuring laboratory safety across the campus; and picking up and managing chemical and other hazardous wastes from laboratories.

Context: From its beginnings, IISc has laid equal emphasis on fundamental research and the solution of practical problems. With the institute housing numerous research laboratories, safety cannot be an afterthought. To adhere to world-class safety practices, the institute created a dedicated office for ensuring safety and manage wastes from laboratories across the campus. Practice: OLSEH or Office of Laboratory Safety and Environmental Health (https://olseh.iisc.ac.in/) is responsible for ensuring laboratory safety across the campus and for picking up and managing chemical and other hazardous wastes. It performs regular scheduled pickup of such materials. It also has well-established and publicized safety protocol in handling hazardous materials. OLSEH is also responsible for any emergency situation emanating out of laboratory or waste management.

Evidence of Success: OLSEH conducts safety tests which is mandatory for every student in the institute to work in laboratories. This practice ensures that the students and the campus community in general are aware of best safety practices. Since its inception, OLSEH has been successfully collecting and disposing off chemical, biological, and other wastes from laboratories, keeping the campus hazard-free.

#### 7.3 - Institutional Distinctiveness

# 7.3.1 - Highlight the performance of the institution in an area distinct to its priority and thrust (within a maximum of 200 words)

Quantum Research Park (QuRP) at IISc aspires to deploy a dedicated effort to address key quantum technology challenges by establishing a framework to promote collaborations between physicists, material scientists, computer scientists, and engineers. IISc, the key institute instrumental in helping India develop past strategic missions (Indian nuclear technology and space technology programs were conceived and nurtured at IISc), has a multi-disciplinary research faculty interested in quantum science and technologies. Prior to the current interest in quantum technologies, IISc has played a pioneering role in the country for efforts to become self-reliant in areas of Condensed Matter Physics, Nanoelectronics, and Nanoscience.

Bengaluru Science and Technology cluster (BeST): The BeST cluster, coordinated by IISc, plays a crucial role in establishing a sustainable innovation ecosystem with well-connected network of entrepreneurs, domestic and foreign private enterprises, educational and research institutions, government agencies, investors, business incubators, and technology and business mentors. Such innovation clusters bring together capital, expertise, and talent to foster technological breakthroughs that have a tremendous impact on society.

TCS Smart-X Hub: The hub is created in collaboration with TCS to nurture innovative research on smart mobility, 3D sensor systems, biomedical science and engineering, and automated guided vehicles.

## 7.3.2 - Plan of action for the next academic year

IISc will embark on a new dimension to establish the IISc Medical School, adding to our strength along with science and engineering, and nurture cross-disciplinary research training programmes aimed at creating a new breed of physician-scientists who will pursue careers in clinical research to develop new treatments and healthcare solutions.

We will explore the creation of a national medical data platform, aimed at collecting and curating high-quality medical data from across the country, to drive reliable AI engines that can assist doctors in their effort to scale up the delivery of quality and affordable healthcare.

IISc organizes Open Day event every year wherein all the departments and labs from the institute stage simple experimental demos and presentations aimed at communicating science to general public and school children. This year, the Open Day event was resumed after a gap of two years, which attracted a significant engagement with the public. The institute hopes to make this event bigger and further increase the public engagement in the coming years.