



# **SELF STUDY REPORT**

**FOR**

**2<sup>nd</sup> CYCLE OF ACCREDITATION**

**MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY**

MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY C-4 JANAKPURI  
110058

[www.msit.in](http://www.msit.in)

**SSR SUBMITTED DATE: 12-08-2021**

Submitted To

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**August 2021**

# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

Maharaja Surajmal Institute of Technology (MSIT) was established by Surajmal Memorial Education Society in 2001 with the approval of AICTE and affiliation of Guru Gobind Singh Indraprasha University. MSIT is ideally located in the Institutional area of Janakpuri, New Delhi. The institute has a spacious seven storied building with built up area of 17837 sq.m with a campus spread over eight acres of land along with beautiful eco-friendly surroundings. The institute has, over a short span of time, acquired and developed impressive infrastructure, expertise and resources for imparting high quality engineering education. It is an ISO 9001:2015 certified institute and all the courses are NBA accredited.

MSIT started with four-year Engineering Degree programs in the following branches:

1. ECE (intake of 180 students)
2. CSE (intake of 240 students)
3. IT (intake of 180 students)
4. EEE (intake of 60 students)

### Vision

To become one of the most admired centers of academic excellence in the field of Engineering & Technology for all-round professional development of students to enable them to meet the growing technological needs of the country.

### Mission

Developing new paradigm in imparting education in the fields of Engineering and Technology and to imbibe national values leading to student's empowerment, with a view to prepare them to meet the national and global challenges.

## 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

### Institutional Strength

- All courses offered by the Institute are NBA accredited.
- The Institute is ISO 9001:2015 certified.
- Envidable position among affiliated engineering institutes of GGSIPU. The institute is one of the most sought after institutes in GGSIPU, with its seats filled up during third day of single counseling for admission to B.Tech. programmes conducted by GGSIPU.
- Excellent placement records.

- Healthy student teacher ratio (STR).
- First among the affiliated institutes of GGSIPU to implement sixth pay commission scale.
- Eco- friendly and amicable working atmosphere, good infrastructure.
- Experienced, dedicated and highly qualified faculty members.
- Air-conditioned Seminar Halls, fully equipped with state-of-art audio-visual devices.
- Well maintained state of art laboratories.
- Language Laboratory
- High speed internet facility i.e. 100 Mbps with Wi-Fi is accessible for students and staff.
- Constant encouragement given for faculty members in pursuing research leading to PhD.
- Well stacked library with good number of national and international journals.
- Exclusive Book Bank facility for students.
- Since its inception in the year 2001 with an intake of only 180 students, the institute has acquired approval of 660 student's admission.
- Centrally located in the institutional area of Janakpuri, New Delhi.
- Hostel accomodation with 24x7 power backup facility.
- On campus banking facility.
- Separate parking facility .

### **Institutional Weakness**

- R&D and Consultancy work in collaboration with national agencies and industries as resource of funding need to be improved.
- Affiliated university curriculum is not flexible
- International collaboration needs to be improved.

### **Institutional Opportunity**

- Institute Collaboration with reputed and foreign universities for student-faculty exchange program.
- Industry-Institute interaction in R&D projects funded by Industry and Govt. Organizations.
- Developing more Certificate program, Career building sessions, Counseling sessions Skill- Upgradation and Value Added Courses for empowering students.
- Developing the placement opportunities for students in core companies.

### **Institutional Challenge**

- Scope of procuring R&D grants from Government organizations is limited.
- Coping up with dynamic changes in Industry.
- Lack of academic autonomy especially in the curriculum and syllabus design. Therefore, need a dynamic curriculum that easily adapts to new technology.
- Coping with growing emotional and psychological needs of students.
- Changing social, political and economic scenario leading to unpredictable future.

## 1.3 CRITERIA WISE SUMMARY

### Curricular Aspects

Maharaja Surajmal Institute of Technology is affiliated to Guru Gobind Singh Indraprastha University, New Delhi and follows the curriculum and syllabus prescribed by the University for all its courses. Affiliated Institutions are not allowed to design their own curriculum. Rather, after every 5 to 6 years, University revise their syllabus and senior faculty members from our college have been a part of the curriculum development committee formulated by University and have contributed to curriculum development. For every semester subject coordinators are selected from affiliated Institutes. The curriculum and lesson plan of each subject is available in Ms Teams. The course content to be used respective faculty is also uploaded in Ms Teams and visible to concerned student.

### Teaching-learning and Evaluation

We follow a holistic approach for growth and development of students, our teaching and learning methodology includes brainstorming, presentations, quizzes, inquiry learning, hands on activities, case studies etc. We provide Computer Laboratories with latest configuration hardware and original licensed software. Wide access to internet facility in labs, browsing centres and library to inculcate online learning management resources. Campus is Wi-Fi enabled campus and provides facility for students to use internet as a resource in their studies. E-book, e-journal facility for carrying out project works.

As per University rules, there is one Midterm examination to be conducted in a semester by the institution and at the end of semester End Term Examination is conducted by University, which is a centralized process managed by University.

We at MSIT follows disciplined strategy for evaluating our students, which includes. Continuous evaluation is done through class tests, assignments, viva and presentations.

### Research, Innovations and Extension

Library of the Institute has subscription for various online research journals and books to provide latest resources for the faculty members. Almost all faculty members are provided with personal computer /library which helps them carry out their research work. The institute has Wi-Fi enabled internet facilities for the fast access to online resources. The institute motivates the faculty members to attend research-oriented seminars/workshops/conferences, etc., by providing special duty leave.

- International Conference on Artificial Intelligence and Applications was held on February 6-7, 2020.
- 7th National Conference on Advances in Metrology (AdMet-2021) was organized on March 5-6, 2021

The Institute encourages faculty members to pursue Ph.D programmes in reputed universities. The

**institute supports the researchers by providing high end computing facility with necessary software and with modern equipment. Institute recognizes and awards faculty publishing in reputed journals**

### **Infrastructure and Learning Resources**

**The library materials via Web- OPAC & library has also subscribed for online databases that can be browsed from 9 AM to 6.30 PM.**

**Each terminal is having internet facility.**

**Library is having reprographic facility within the institute's campus.**

**Library is having 1 server and 26 computers**

**Detailed list of currently subscribed journals is also uploaded on library website (printed & online).**

**Besides this regular e-mail is being sent to faculty to upgrade them with the latest information of library.**

**CD Collection: Library also maintains the CD's received along with the books. The users can get them issued.**

### **Student Support and Progression**

**Online admission is conducted by the affiliating university to Guru Gobind Singh Indraprastha University. Information related to admission, fees and other events are provided in the website. Digital records of student's are stored.**

**Online examination facility and Digital records of students' results are maintained.**

### **Governance, Leadership and Management**

**The Institute believes in motivating faculty and staff for best outcomes. Various orientation and enrichment programmes are regularly organized for both teaching and non-teaching staff members for upgrading their skills in the latest technology. Salary, pay-scale and increments are given to staff members as per Government norms which lead to employee satisfaction. The management contributes an amount equal to the employee share for EPF with Pension scheme and Group insurance. Institute grants Medical, Casual, On Duty and Special Leave to its faculty members. And Non Teaching gets Medical, Causal and Earned Leave as per the norms of University. It also provides Maternity Leave according to norms to its female members. MSIT provide Special Leave for pursuing higher studies, attending enrichment courses/seminars/conferences/workshops and exam duties. The faculty and staff members are entitled to avail summer and winter vacations as per guidelines of the University. The Institute also provides term insurance and group insurance facility to faculty and staff.**

**The Institute has Biometric, CCTV facility for better human resource management.**

## **Institutional Values and Best Practices**

Maharaja Surajmal Institute of Technology firmly believes and fosters the idea of excellence in Education.

MSIT has NBA accreditation in all courses. The institute promotes collaborative and independent learning among the students. Chalkboard and audio visual aids are in use for interactive learning. To enhance the learning experience of students, numbers of experiments beyond the minimum specified by the university are also performed by individual students to encourage learning beyond curriculum. Technical and non-technical societies for students in the supervision of faculty are established, for exploring the leadership, creative thinking, life-long learning and innovation ideas among students.

The Institute is ISO 9001:2015 certified. In ISO, every year two internal audits are conducted, one in each semester. These internal audits take care that all the processes are smoothly running in the institute.

Also, every year the institute conducts five day Fests comprising of Technical Fest (Avensis), Environmental Fest (ENVA), Cultural fest (Genesis), to motivate and promote creativity , scientific thinking and environment awareness among students. This also encourages the concept of self learning and improves the confidence of the students.

To promote the sense of community responsibility among students, the UBA (Unnat Bharat Abhiyan) Cell team has strived to include all the students and teachers from various departments of the institute to plan activities and discuss solutions to the village problems.

The Institute also has a unique **Book Bank facility**. All the students joining the institute are being given a set of text books (one book per Theory Subject). Book-Bank books are issued every semester and have to be returned similarly. This has come as a boon to the students who do not have to buy costly books for their academic preparations.

All the students of MSIT have an insurance cover which is a unique practice comprising of Accidental cover @ Rs. 50,000/- per student and Mediclaim Rs. 50,000/- per student from “Star health and Allied Insurance Co. Ltd.” (Policy no. P/16118/02/2021/0003641).

## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	MAHARAJA SURAJMAL INSTITUTE OF TECHNOLOGY
Address	Maharaja Surajmal Institute of Technology C-4 Janakpuri
City	New Delhi
State	Delhi
Pin	110058
Website	<a href="http://www.msit.in">www.msit.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director	A. K. Singh	011-25528117	9871408791	011-25528116	iqac@msit.in
IQAC / CIQA coordinator	Koyel Datta Gupta	011-25552667	9999061790	011-25613689	koyel.dg@msit.in

Status of the Institution	
Institution Status	Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of establishment of the college	29-06-2001

**University to which the college is affiliated/ or which governs the college (if it is a constituent college)**

State	University name	Document
Delhi	Guru Gobind Singh Indraprastha University	<a href="#">View Document</a>

**Details of UGC recognition**

Under Section	Date	View Document
2f of UGC	20-06-2016	<a href="#">View Document</a>
12B of UGC		

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

Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	<a href="#">View Document</a>	25-06-2021	12	Approval valid for one academic year

**Details of autonomy**

Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?	No
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**Recognitions**

Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	National Board of Accreditation
Date of recognition	29-03-2019



<b>Location and Area of Campus</b>				
<b>Campus Type</b>	<b>Address</b>	<b>Location*</b>	<b>Campus Area in Acres</b>	<b>Built up Area in sq.mts.</b>
Main campus area	Maharaja Surajmal Institute of Technology C-4 Janakpuri	Urban	5	17837

## 2.2 ACADEMIC INFORMATION

<b>Details of Programmes Offered by the College (Give Data for Current Academic year)</b>						
<b>Programme Level</b>	<b>Name of Programme/Course</b>	<b>Duration in Months</b>	<b>Entry Qualification</b>	<b>Medium of Instruction</b>	<b>Sanctioned Strength</b>	<b>No.of Students Admitted</b>
UG	BTech,Engineering And Technology	48	XII	English,Hindi	240	238
UG	BTech,Engineering And Technology	48	XII	English	60	55
UG	BTech,Engineering And Technology	48	XII	English	180	173
UG	BTech,Engineering And Technology	48	XII	English	180	174

### Position Details of Faculty & Staff in the College

<b>Teaching Faculty</b>												
	<b>Professor</b>				<b>Associate Professor</b>				<b>Assistant Professor</b>			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	15				30				107			
Recruited	3	3	0	6	12	17	0	29	24	83	0	107
Yet to Recruit	9				1				0			
Sanctioned by the Management/Society or Other Authorized Bodies	6				29				107			
Recruited	3	3	0	6	12	17	0	29	24	83	0	107
Yet to Recruit	0				0				0			

<b>Non-Teaching Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				15
Recruited	7	8	0	15
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				15
Recruited	7	8	0	15
Yet to Recruit				0

<b>Technical Staff</b>				
	<b>Male</b>	<b>Female</b>	<b>Others</b>	<b>Total</b>
Sanctioned by the UGC /University State Government				0
Recruited	21	7	0	28
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				0
Recruited	0	0	0	0
Yet to Recruit				0

**Qualification Details of the Teaching Staff**

<b>Permanent Teachers</b>										
<b>Highest Qualification</b>	<b>Professor</b>			<b>Associate Professor</b>			<b>Assistant Professor</b>			<b>Total</b>
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	2	3	0	10	17	0	2	20	0	54
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	19	49	0	68

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	4	0	4

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

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	6		10		16

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

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
		UG	Male	422	111	0
	Female	86	21	0	0	107
	Others	0	0	0	0	0

<b>Provide the Following Details of Students admitted to the College During the last four Academic Years</b>					
<b>Programme</b>		<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>
SC	Male	61	48	79	61
	Female	14	10	18	14
	Others	0	0	0	0
ST	Male	1	2	6	6
	Female	0	0	0	0
	Others	0	0	0	0
OBC	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
General	Male	472	565	524	437
	Female	92	100	96	85
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
<b>Total</b>		<b>640</b>	<b>725</b>	<b>723</b>	<b>603</b>

## Extended Profile

### 1 Program

#### 1.1

Number of courses offered by the Institution across all programs during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	4	4	4
File Description		Document		
Institutional data in prescribed format		<a href="#">View Document</a>		

#### 1.2

Number of programs offered year-wise for last five years

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	4	4	4

### 2 Students

#### 2.1

Number of students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
2646	2502	2423	2290	2244
File Description		Document		
Institutional data in prescribed format		<a href="#">View Document</a>		

#### 2.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
163	163	160	134	134

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 2.3

#### Number of outgoing / final year students year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
577	568	562	505	572

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 3 Teachers

### 3.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
126	133	127	131	144

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.2

#### Number of sanctioned posts year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
132	102	90	144	144

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 4 Institution

### 4.1

#### Total number of classrooms and seminar halls

**Response: 42**

**4.2**

**Total Expenditure excluding salary year-wise during last five years ( INR in Lakhs)**

2020-21	2019-20	2018-19	2017-18	2016-17
409.44545	460.27924	419.95828	383.79662	421.43630

**4.3**

**Number of Computers**

**Response: 583**

**4.4**

**Total number of computers in the campus for academic purpose**

**Response: 544**



## 4. Quality Indicator Framework(QIF)

### Criterion 1 - Curricular Aspects

#### 1.1 Curricular Planning and Implementation

**1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process**

**Response:**

The Maharaja Surajmal Institute of Technology is an affiliate college of Gugu Gobind Singh Inderprastha University and adheres to its academic features. The College fully adheres to the University's academic calendar of education and other activities. With a view to achieving academic excellence, the institution ensures timely adjustment of the timetable; workload allocation; access to adequate resources; and periodic reviews. A detailed selection of skills strengthening and technical enhancement papers for optional subjects are opted by all departments. A variety of co-curricular activities are planned and held throughout the course to provide learning instruction for students. Responses from stakeholders are taken to advance the teaching and learning process. The institute has taken many efforts to ensure the successful delivery of the curriculum.

**Dissemination of information on curriculum**

Prospectus containing information about programs and curriculum is uploaded to the website and printed for distribution. Timetables are prepared in advance every semester and posted on the college website and displayed on each floor, enabling students to attend class right from the start of the course.

**Skillful engagement in teaching and learning**

Skilled and motivated skills are involved in curriculum development, curriculum preparation and inter-assessment by working in partnership with the parents' department at the university. They ensure the successful delivery of the curriculum; and regular participation in faculty development programs, conferences and seminars enhances academic enrichment.

**Effective Curriculum delivery and succussive review of curriculum progress**

The academic calendar prescribed by Guru Gobind Singh Inderprastha is strictly adhered to. Accordingly, the college prepares an academic calendar, Individual department complies with the college schedule and submits its department-specific details of (academic) activities planned for the session. The faculty members follow and strictly adhere to the teaching plans provided by the university. Various course delivery methods are followed by the faculty such as traditional classroom lectures, class presentations, tutorials and e-learning. Apart from classroom education, students also gain experiential learning through educational trips, lectures by eminent speakers, summer training programmes and project work. Upgradation of laboratory materials and infrastructural facilities for timely and effective curriculum delivery. The progress of students is monitored through regular assignments and tests. This mechanism judges the progress of students and aids in identifying and correcting problem areas among students. Parents/guardians of under-performing students are informed by the institution. Tutorials are held to

enhance the performance of students. The departments analyse university examination results and the same is presented in the management meeting. Students are mentored by the faculty in small groups to address any difficulty they may be facing academically or otherwise. Feedback is sought regularly from students to improve curriculum delivery. Appropriate action is taken on the problem areas.

Various academic committees are formed to ensure effective and timely delivery of curriculum.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

### 1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

#### Response:

Maharaja Surajmal Institute of Technology prepares its academic calendar based on the calendar of Guru Gobind Singh Inderprastha University. It is uploaded on the college website. It includes various timelines such as dates of beginning and end of the session, mid-semester breaks, dispersal of classes, preparatory leave, and tentative dates of practical and theory examinations. The college calendar also includes proposed guest lectures, seminars/conferences/workshops, educational trips, project work, and other academic activities for the session. At the beginning of the session, the departments allocate papers to the faculty members. The departmental timetables are prepared well in advance based on the master timetable and are uploaded on the website. They are also displayed on the floors and laboratory, which helps in monitoring the regularity of classes. Timely completion of syllabus, revision and internal evaluation is carried out in compliance with the schedule listed in the academic calendar. The performance of students is assessed continuously. Tests, assignments, presentations and mock practical exams are held in a time-bound manner. The departments hold regular faculty meetings to ensure that continuous assessments are executed efficiently. To ensure timely completion of syllabus, the teaching plan of each teacher is obtained in advance and information of syllabi covered every month is sought thereafter.

Students and parents have access to attendance records online. This information is updated regularly on the college website. Any queries or discrepancies are resolved satisfactorily. The Internal Examination Committee of the college ensures that marks are filled on OMR or uploaded timely on the university portal. All faculty members participate in the central evaluation process to ensure timely declaration of results of university examinations. This facilitates the commencement of the new session as per schedule. Compliance with the departmental activities is verified through the ISO audit conducted by the internal ISO Audit Committee at the end of every semester for all departments. Through the academic audit, all curricular and co-curricular activities and progress/achievements of the department, including those of students and faculty members are analysed in detail. Physical verification of laboratories is undertaken annually.

File Description	Document
Upload Additional information	<a href="#">View Document</a>
Link for Additional information	<a href="#">View Document</a>

**1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years**

1. Academic council/BoS of Affiliating university
2. Setting of question papers for UG/PG programs
3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses
4. Assessment /evaluation process of the affiliating University

**Response:** A. All of the above

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Details of participation of teachers in various bodies/activities provided as a response to the metric	<a href="#">View Document</a>

## 1.2 Academic Flexibility

**1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented**

**Response:** 0

**1.2.1.1 Number of Programmes in which CBCS/ Elective course system implemented.**

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**1.2.2 Number of Add on /Certificate programs offered during the last five years**

**Response:** 5

**1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.**

2020-21	2019-20	2018-19	2017-18	2016-17
1	1	1	1	1

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

**Response:** 35.45

#### 1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
1522	2759	37	50	129

File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View Document</a>

## 1.3 Curriculum Enrichment

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

**Response:**

The courses of Guru Gobind Singh Inderprastha University curricula that contribute towards instilling professional ethics, gender equality and human rights, and sensitivity to environmental concerns among students may be classified as:

**Gender sensitisation:** Various awareness seminars are conducted at different levels for the knowledge of gender equality and mental health.

**Human values Professional ethics:**

Human Values and Professional ethics I course is taught common to all branches in 1st semester

Human Values and Professional ethics II course is a compulsory subject common to all branches in the 8th semester

**Environmental consciousness:**

It is done through the committees operating in the college such as NSS and Prakriti. Various activities like

cleanliness drive, tree-plantation, seminars and workshops are organised by these committees to heighten awareness and sensitivity among students and faculty.

### Enrichment through various co-curricular activities

To ensure that simultaneity of theory and practice, the college has a Cultural committee MUTANT that includes octave music society, aarambh dramatic society, unity for street dance and other dance forms for the holistic cultural development.

File Description	Document
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<a href="#">View Document</a>

### 1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 100

#### 1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	4	4	4

File Description	Document
MoU's with relevant organizations for these courses, if any	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

### 1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 100

#### 1.3.3.1 Number of students undertaking project work/field work / internships

Response: 2646

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 1.4 Feedback System

**1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2) Teachers 3) Employers 4) Alumni**

**Response:** B. Any 3 of the above

File Description	Document
URL for stakeholder feedback report	<a href="#">View Document</a>

**1.4.2 Feedback process of the Institution may be classified as follows: Options:**

1. Feedback collected, analysed and action taken and feedback available on website
2. Feedback collected, analysed and action has been taken
3. Feedback collected and analysed
4. Feedback collected
5. Feedback not collected

**Response:** A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Upload any additional information	<a href="#">View Document</a>
URL for feedback report	<a href="#">View Document</a>

## Criterion 2 - Teaching-learning and Evaluation

### 2.1 Student Enrollment and Profile

#### 2.1.1 Average Enrolment percentage (Average of last five years)

**Response:** 98.9

##### 2.1.1.1 Number of students admitted year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
640	725	723	603	601

##### 2.1.1.2 Number of sanctioned seats year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
726	726	726	582	582

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

#### 2.1.2 Average percentage of seats filled against reserved categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy ) during the last five years ( exclusive of supernumerary seats)

**Response:** 54.1

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

2020-21	2019-20	2018-19	2017-18	2016-17
77	64	101	81	81

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 2.2 Catering to Student Diversity

### 2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

#### Response:

MSIT is one of the pre-eminent engineering colleges in Delhi. Delhi being a cosmopolitan city there is diversity in the social and financial background of the students it is the stratagem of the institute to consider the aims and expectations of students from all over the country irrespective of their social and financial background.

#### Response:

The previous results (i.e. 12th % age, rank in entrance exam) from the students at entry level are taken the initial indicator of students' learning ability. Further, the assessment of students learning in subsequent years is based on academic performance, level of alertness, participation in discussions, performance in class assignments and evaluation based on their mid-terms. These are escalated by observations made by mentors.

-Students involvement in subjects with extra interests or approach teachers with their problems. Quantifying the levels of student competency measures are taken accordingly to address the needs.

The available free slots of all faculty members are communicated to the students.

#### Steps taken for advanced learners:

Motivate the weak students to attend tutorials and help them to solve more problems. Motivate and guide the bright students for higher studies and university ranks.

The available free slots of all faculty members are communicated to the students.

Provided material related to subjects with references to journals and advanced study material. Encouraged to make presentations, write research papers and participate in international/national conferences/seminars/workshops

To pursue various internship programs letter of recommendation is provided.

Involvement of students for real time research projects is encouraged by faculty. This stimulates out-of-the-box thinking and provides training in planning and carrying out experiments and fieldwork, analyzing various outcomes of research projects and publishing results.

Provide training in using latest apparatus and techniques in respective laboratories for different subjects.

Semester toppers and university rank holders are felicitated on the Annual Day.

Students are chosen as class representatives, giving them an opportunity to display their leadership skills.

Motivate students to participate in various extra curriculum activities and also, to represent the college or



department in intra & inter-college competitions.

Steps taken for slow learners:

Efforts are made to identify the cause of their problem and appropriate solutions are worked out.

Teachers coordinate with parents of slow learners so that their needs can be catered.

Mentor-mentee interaction keeps faculty in constant touch with students, irons out academic and personal issues, stimulates overall personality development.

Academic problems are addressed in tutorial classes, assignments are evaluated, and suggestions for improvement are made. Some tutorial classes are taken as remedial sessions for slow learners.

Slow learners are given more attention both inside and outside the class.

Encourage them to take part in departmental activities. Those with potential eventually graduate to leadership roles.

Efforts are made to identify and nurture their skills and talents in order to bolster their confidence.

College provides laptops to students in need

Multiple career options are suggested to all students, keeping in mind their aptitude and interests.

File Description	Document
Upload any additional information	<a href="#">View Document</a>

### 2.2.2 Student- Full time teacher ratio (Data for the latest completed academic year)

**Response:** 21:1

## 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

**Response:**

The academic calendar is prepared by the Guru Gobind Singh Indraprastha University, New Delhi, before the commencement of each academic year. The academic calendars have the commencement and end of each semester stating various academic and extracurricular activities like internal & external examination, university festivals, university sports meet to be conducted during the session. In addition to this, an institute academic calendar is also prepared for each academic session in consonance with the academic calendar issued by GGSIPU which includes the tentative schedule for various academic and extra-

curricular activities like Annual day, Institute technical festival, and industrial visit of students to be done at the departmental level/institute level.

Experiment Based Independent Learning:

- As per the university guidelines, a minimum of eight experiments is to be conducted in each lab. However, one or two experiments are conducted beyond the specified list for relevant courses. Laboratory manuals explaining circuit diagrams and methodology required to perform the experiment are available with the course teacher and are given to the students at the commencement of the semester.
- All the laboratories have excellent hardware and software facilities. Students are encouraged to interact with the course teacher or lab assistant during lab hours to get their doubts clarified on the spot. We encourage students to perform experiments in groups so that students learn to work as a team. One/two faculty members and one instructor are assigned for each practical class.
- A continuous assessment system is implemented for the assessment of laboratory work. The assessment is done based on punctuality, timely submission of laboratory records, viva voice and their performance in conducting the experiments.

Teaching Plan:

- Subject allocation to each faculty is done well in advance based on several criteria such as their specialization, experience, and proficiency in the subject.
- Time table (class wise and faculty wise), course files, lab manuals, assignments/tutorial sheets are prepared for effective teaching. Coverage of the syllabus is also ensured as per the university lesson plan.
- Internal assessment tests in each semester are conducted by the university. Questions papers are set by university-appointed subject coordinators for the various courses.
- The answer sheets are evaluated and shown to the students within one week. Solutions are also discussed in the class.
- The IQAC meetings are frequently conducted to plan and implement quality enhancement measures related to the teaching-learning process, and the decisions are taken are communicated to the faculty.

Class Room Lecture and Interactive learning:

- We follow various teaching methodologies such as blackboard teaching, tutorial sheets, PPTs, NPTEL Video Lectures, topic-specific seminars to promote collaborative and independent learning among the students.
- Industrial visits are conducted at least once a year to reduce the gap between industry and institute.
- Identification of bright and weak students is done. Motivate the weak students to attend tutorials and help them to solve more problems. Motivate and guide the bright students for higher studies and university ranks.

### **2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.**

**Response:**

MSIT is one of the pre-eminent engineering colleges in Delhi. Delhi being a cosmopolitan city there is diversity in the social and financial background of the students it is the stratagem of the institute to consider the aims and expectations of students from all over the country irrespective of their social and financial background.

Response:

The previous results (i.e. 12th % age, rank in entrance exam) from the students at entry level are taken the initial indicator of students' learning ability. Further, the assessment of students learning in subsequent years is based on academic performance, level of alertness, participation in discussions, performance in class assignments and evaluation based on their mid-terms. These are escalated by observations made by mentors.

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Provide training in using latest apparatus and techniques in respective laboratories for different subjects.

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Motivate students to participate in various extra curriculum activities and also, to represent the college or department in intra & inter-college competitions.

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Efforts are made to identify and nurture their skills and talents in order to bolster their confidence.

College provides laptops to students in need

Multiple career options are suggested to all students, keeping in mind their aptitude and interests.

### 2.3.3 Ratio of students to mentor for academic and other related issues (Data for the latest completed academic year )

**Response:** 21:1

#### 2.3.3.1 Number of mentors

Response: 126

## 2.4 Teacher Profile and Quality

### 2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

**Response:** 111.59

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

**Response:** 34.15

#### 2.4.2.1 Number of full time teachers with *Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt.* year wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
54	52	44	40	34

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

**Response:** 10.93

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

Response: 1377

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 2.5 Evaluation Process and Reforms

### 2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

**Response:**

Continuous Internal Evaluation System

The institution adopts Continuous Internal Evaluation (CIE) System to assess all aspects of a student's development on a continuous basis throughout the year to ensure overall growth of students in every sphere of life. The following steps are implemented to ensure smooth execution of CIE:

- Awareness on Evaluation Process: Students are made aware of the evaluation process, all amendments in existing process and procedures along with the timetable, through their class proctor/teacher.

Result Analysis Review Meeting: Meetings for Result Analysis is organized on regular basis by the subject teachers and after every CIA Test. Pass percentage of each course is calculated by dividing the total number of students appeared and passed in each course. The performance of the students is monitored by class proctors. Thereafter, Parents are briefed about their wards' performance in PTM.

- Remedial Classes are conducted for the slow learners, absentees and the students who participate in Sports, extra curriculum and Placement Interviews.

- External examinations of three hours duration are conducted at the end of every semester for all the theory papers and practical papers. Students should satisfy the eligibility criteria of 75 attendance in each

semester to appear for University Examination.

### **2.5.2 Mechanism to deal with internal examination related grievances is transparent, time- bound and efficient**

#### **Response:**

MSIT is a constituent college of the IPU and is guided by the regulations formulated at University level in all the matters pertaining to syllabi, examination and evaluation.

College has a transparent and continuous internal assessment system. 25 marks in each paper are awarded through internal assessment while the remaining 75 are awarded by University-appointed examiners on the basis of performance of students in semester-end examinations.

The internal assessment is carried out through a mechanism specified by IPU.

5% of the marks are awarded on the basis of attendance and assignments, presentations, and projects. Attendance is calculated as per university rules. A student needs to attend at least 75% of the classes in order to appear in the end-semester examination. Teachers mostly assign innovative projects to students to develop their creative skills and to engage them in critical thinking and problem solving.

20% marks are awarded on the basis centralized test conducted by the IPU. Students are informed by IPU about the date and syllabus of the test by issuing academic calendar specifying all the important dates. Evaluated answer scripts are shown to the students and suggestions for improvement are made by teachers.

Students are also informed about the criteria for internal assessment and continuous evaluation during the orientation program at the entry level. It is also reiterated by teachers from time to time during regular classes.

Continuous evaluation is incorporated into teaching plans. Each Department holds meetings to ensure that teachers take regular class tests, assignments, presentations etc. as a part of the initiative taken by the college for effective evaluation of the students. A team of Academic Auditors appointed by the Staff Council further supervises the functioning of departments.

The attendance and internal assessment record (assignments, tests and projects) are uploaded periodically on the college website and can be easily accessed at any time by the students and parents. The Students are required to check and sign their internal assessment record before it is uploaded on the website.

## **2.6 Student Performance and Learning Outcomes**

### **2.6.1 Teachers and students are aware of the stated Programme and course outcomes of the Programmes offered by the institution.**

#### **Response:**

Programme outcomes provide a wide scope of knowledge, skills, abilities and attitudes that students attain while pursuing their graduation course. MSIT offers a number of B.TECH in different disciplines with each having sufficient weightage of fundamental & amp. This provides a strong correlation between Course Outcomes (COs) and Program Outcomes (POs) to develop necessary skills in students to make them proficient engineer. To keep track of how and where program outcomes are addressed in the curriculum, the university curriculum is grouped into different academic components at the institute level. The specific learning outcomes of various courses are built into the curriculum of each discipline and are available on the website.

MSIT has created an ecosystem for learning beyond the classroom and through numerous other co-curricular and extracurricular activities.

Teachers inculcate among students a quest for knowledge that lasts for a lifetime while simultaneously training them in the art of self-learning. We impart the attitude to keep learning, remain updated and readily adopt new developments in technology and in their subject matter. Students are taught to identify, formulate, and analyze real life problems, design and develop solutions and reach valid conclusions using basic principles of their subjects.

Critical thinking for new technological advancements is encouraged for solving real world problems. Enhancing their skills and allowing them to exchange their ideas, knowledge and information effectively.

Working in departmental and societal activities fosters in students team spirit and brings their leadership qualities to the fore. Students learn to embrace plurality, respect others' views, mediate disagreements, and arrive at conclusions while maintaining professional and life ethics.

We empower students to become future teachers, entrepreneurs, scientists, soldiers and administrators with motivation. They acquire the ability and sensitivity to lead India to strengthen its place in the community of nations.

Mechanism of communication of Programme and Course Outcomes:

MSIT has designed effective mechanism to communicate programme and course outcomes to all stakeholders, which are:

Fresher's who are to pursue their career in Engineering can get the requisite information from the college website as well as from the prospectus.

Well established counseling cell, information cell and Students' Help Desk also apprise students of expectations from various courses.

The outcome of courses is clearly outlined during the Orientation Day. We believe that in order to become productive citizens, our students must be equipped with all basic and engineering advanced skills. Course outcomes are kept in focus while designing extra and co-curricular activities for students.

Students are provided opportunities to interact with senior students and alumni to learn about their experiences and career paths, so that they are encouraged and motivated to chart out similar roadmaps for their own future.

File Description	Document
Upload COs for all courses (examples from Glossary)	<a href="#">View Document</a>
Paste link for Additional information	<a href="#">View Document</a>

### 2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

#### Response:

MSIT offers courses in Engineering. Over the duration of their program, students acquire knowledge, skills and abilities that enable them to build a future for themselves while also contributing positively to society and the country at large.

Following are direct and indirect measures for evaluating attainment of PO/CO.

Internal Assessment and end-semester examination as direct assessments is discussed below:

#### 1. Direct Assessment (25 Marks)

As per University guidelines, direct assessment is done on the basis of following:

Sessional examination (20 marks): Sessional exams are conducted twice in a semester (30 marks each). ?  
Assignment/Quiz/Tutorial Sheets etc. (05 marks): Regular Assignments/Quiz/Tutorial Sheets are given and evaluated by subject teachers. The weightage of direct assessment for CO attainment of a course is taken as 40% of the total internal marks scored by the student.

#### 2. Indirect Assessment (75 marks)

Score obtained by students in external or end-term exam is taken as indirect Assessment. The weightage of indirect assessment for CO attainment is 60% of the external marks scored by the student.

CO attainment process for Lab courses:

Attainment is based on direct and indirect Assessment as discussed below:

1. Direct Assessment (40 Marks): Direct assessment is done on the basis of continuous assessment of students through Lab Assessment Criteria (LACs) formulated on the basis of following components

- i) Punctuality
- ii) Data observation, record, calculation and data analysis
- iii) Lab record checking
- iv) Viva Voice



Total marks score by students (out of 40) in the continuous assessment process through LAC is taken as direct assessment for the attainment.

## 2. Indirect Assessment (60 Marks)

Total score obtained by students in the external exam (out of 60) is taken as indirect assessment for the attainment. Many curricula involve the conduct of practical experiments in laboratories. Viva-voce is a part of the process of evaluation in these courses.

Results declared by the University at the end of each semester are thoroughly analysed in academic audits of departments and Staff Council meetings. Results are also published in the annual report of the college.

Placements and student progression as indirect measures

Placements: Upon completion of their courses, majority of the students opt for higher studies and some pursue their professional goals, particularly through placement.

MSIT has consistently produced alumni who have distinguished themselves and are presently placed in reputed positions. Distinguished alumni are invited on annual day function for inspiring students. Such reputed alumni can be taken as an indicator of course/programme outcomes and the level of teaching learning in the institution. Students are encouraged to pursue higher studies and a number of them do so, both in India and abroad.

File Description	Document
Paste link for Additional information	<a href="#">View Document</a>

### 2.6.3 Average pass percentage of Students during last five years

**Response:** 98.16

#### 2.6.3.1 Total number of final year students who passed the university examination year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
569	552	562	570	578

#### 2.6.3.2 Total number of final year students who appeared for the university examination year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
577	568	577	574	588

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 2.7 Student Satisfaction Survey

<b>2.7.1 Online student satisfaction survey regarding teaching learning process</b>	
<b>Response: 3</b>	
File Description	Document
Upload database of all currently enrolled students (Data Template)	<a href="#">View Document</a>

## Criterion 3 - Research, Innovations and Extension

### 3.1 Resource Mobilization for Research

#### 3.1.1 Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 55.36

##### 3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
8.185	35.73	5.84449	4.64250	.96082

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>
e-copies of the grant award letters for sponsored research projects / endowments	<a href="#">View Document</a>

#### 3.1.2 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 40

##### 3.1.2.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
2	2	1	2	1

##### 3.1.2.2 Number of departments offering academic programmes

2020-21	2019-20	2018-19	2017-18	2016-17
4	4	4	4	4

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.1.3 Number of Seminars/conferences/workshops conducted by the institution during the last five years

**Response:** 122

#### 3.1.3.1 Total number of Seminars/conferences/workshops conducted by the institution year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
19	25	28	23	27

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

## 3.2 Research Publications and Awards

### 3.2.1 Number of papers published per teacher in the Journals notified on UGC website during the last five years

**Response:** 3.01

#### 3.2.1.1 Number of research papers in the Journals notified on UGC website during the last five years.

2020-21	2019-20	2018-19	2017-18	2016-17
90	104	70	67	67

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.2.2 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

**Response:** 1.86

#### 3.2.2.1 Total number of books and chapters in edited volumes/books published and papers in

**national/ international conference proceedings year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
48	75	52	42	29

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**3.3 Extension Activities****3.3.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.****Response:**

Maharaja Surajmal Institute of Technology believes in creating an ambience that encourages students regularly to serve their best efforts in the neighbourhood community and develop a sense of communal & social responsibility. Extension activities can be proven greatly effective in sensitising students to social issues. The National Service Scheme (NSS) unit, the eco-club, the drama society, and the music society timely organise several programmes to promote the concept and practice of social responsibility. Some extensive activities organised are:

- Clothes and Food donation drive
- Animal care centre visit
- Nutrition Drive
- Cleanliness/environmental awareness drive
- Blood Donation camp
- Fundraiser for underprivileged
- Road Safety drive

Extension activities not only ingrain a sense of communal duty but also widely inspire young masses to pursue humanitarian practices in several fields. Moreover, following the notion, some of our students served at various places:

- Mr Mayank Kapur (B.Tech CSE, 2018-2022), the member of Prakriti MSIT, developed a fully functional website from scratch for an NGO called "Let's Celebrate" that aims to increase the emotional quotient of marginalised children. The website helped in fund raising efforts.
- Ms Jagriti (B.Tech, 2019-2023), a content writer for a college society switched to an educational content creator for an organisation called Team Everest that aims to provide free online educational content for children who couldn't attend school due to lockdown.

**3.3.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years****Response:** 11**3.3.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

2020-21	2019-20	2018-19	2017-18	2016-17
3	3	2	2	1

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**3.3.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years ( including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)****Response:** 51**3.3.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
20	13	8	7	3

File Description	Document
Reports of the event organized	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>

**3.3.4 Average percentage of students participating in extension activities at 3.3.3. above during last five years****Response:** 38.54**3.3.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC**

etc., year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
2000	1312	718	701	100

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 3.4 Collaboration

**3.4.1 The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-job training, research etc during the last five years**

Response: 46

**3.4.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-job training, research etc year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
13	10	13	4	6

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**3.4.2 Number of functional MoUs with national and international institutions, universities, industries, corporate houses etc. during the last five years**

Response: 22

**3.4.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
17	3	1	1	0

<b>File Description</b>	<b>Document</b>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

NAAC



## Criterion 4 - Infrastructure and Learning Resources

### 4.1 Physical Facilities

**4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.**

**Response:**

Maharaja Surajmal Institute of Technology is a technologically well-equipped educational institute located in the Institutional area of Janakpuri, New Delhi. It has a campus spread over eight acres of land with beautiful eco-friendly surroundings. Institute was earlier operating from four story building of 6279 sq.m of built up area. Recently it has been shifted to a more spacious seven storeyed building with built up area of 17837 sq.m. MSIT provides the latest infrastructure and facilities that contributes to the academic growth of students and staff to use, learn and enhance their skills and knowledge in the field of computers and technology. The institute runs Bachelor of Technology in CSE, IT, ECE and EEE streams.

There are 105 well lit rooms, these are upheld as lecture hall, class rooms, tutorial rooms and laboratories.

There are 44 well equipped labs for the students of computer science, Information Technology, Electronics and Communication and Electrical sciences. Labs are also equipped for the students of 'Applied Sciences', 'Applied Mechanics' and 'Electrical Engg. In addition to a well-established labs college has specialized 'Workshop' and a well-lit 'Drawing Hall'. The six modern air-conditioned networked computers labs cover entire range of Computer Science & IT subjects like Software Engg., Network Technology, Mobile Computing, Artificial Intelligence & Robotics, Computer Graphics, Compiler Construction, Analysis & Design of Algorithms, Interface Programming, Data Structure, DBMS & Object Oriented Programming. The software is updated and upgraded frequently as per the requirements and demands of the training. High speed, around-the-clock internet access using a radio link is also available. Students are offered real software projects relating to the current industry requirements to facilitate smooth transition from academics to industrial environment. The Electronics & Comm. Engg. Department has eight modern laboratories covering all the important subjects eg. Analog Electronics Lab, Control Engg. Lab, Microwave Devices lab, Digital Image Processing Lab, Consumer Electronics Lab, Digital Circuits & Systems Lab and Microprocessors lab. Recently a VLSI Design Lab and a Satellite & Mobile Comm. Lab have been also added. Adequate licensed MATLAB tool boxes, Tanner tools as well as the kits of IPGA/CPLD microprocessors and advanced microprocessors are available to give the students clear insight into design and development processes.

Maharaja Surajmal Central Library (MSCL) was started in the year 1982 with a measure collection of Books and Journals.

MSIT has elegant four storey hostel which provides accommodation to 230 students (separately for boys and girls). The hostel provides accommodation and nutritious food at subsidized rates. The hostel has a common room, indoor and outdoor games facilities to enrich mental and physical health of the resident students/wards.

The Institute believes not only in mental growth but also physical growth. A fit mind resides in fit body. With this view, the Institute offers a sprawling playground. The lush green playground of 3 acres give opportunity to students to excel in sports of their choice such as cricket, football, badminton, Volleyball

etc. The indoor sports facility for table tennis, Chess, Carrom etc is also available.

#### **4.1.2 The Institution has adequate facilities for cultural activities, sports, games (indoor, outdoor), gymnasium, yoga centre etc.**

##### **Response:**

MSIT promotes cultural sports and other activities to enhance students creative and artistic pursuits. Mutants is the Cultural Society of MSIT that gives everyone an opportunity to grow and learn more about these cultural aspects. It's inclusive of multiple art forms like music, dance and dramatics. Each one of them revered by our institution. Through mutants we bring about these exquisite art forms in our college and subsequently represent MSIT in various competitions all across India. Mutants Cultural Society is a collective of Four Societies – OCTAVE Music Society, ? RAMBH Dramatics Society, Unity Street Dance Crew and Astitva Dance Society. All these societies work hand in hand with each other and as a part of MUTANTS always work for the betterment of the cultural scenario as well as for the upliftment of various talented students of MSIT. With a constant support and motivation from the college administration and faculty, the society aims at uplifting the cultural scenario in MSIT, by their constant hard work and dedication. From regular training and practice sessions, to each rigorous jamming periods, their determination in all their endeavors, becomes evident from the amazing energy they bring about, when these performers enter the stage. An event TEDxMSIT has opened some fresh doors for the students and showed them a world beyond the everyday monotonous life. It truly solved the purpose of its very advent and resonated the force behind all TED events, to emanate the power of ideas. Sports activities are being conducted at MSIT on regular basis under the direction of sports committee. Every year sports day meet is being organized for the students and faculties to take part in various games and awards are distributed to the winners for their motivation. More than 1500 students take part in this activity every year. The National Service Scheme (NSS) unit at MSIT, the eco-club, the drama society, and the music society timely organise several programmes to promote the concept and practice of social responsibility. Some extensive activities organised are:

- Clothes and Food donation drive
- Animal care centre visit
- Nutrition Drive
- Cleanliness/environmental awareness drive
- Blood Donation camp
- Fundraiser for underprivileged
- Road Safety drive

Extension activities not only ingrain a sense of communal duty but also widely inspire young masses to pursue humanitarian practices in several fields. Maharaja Surajmal Institute of Technology has always fostered an environment keeping gender equity as one of its forefront values and hence arms students with values that contribute in their social development by taking initiatives for the same.

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>

**4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)****Response:** 45.24**4.1.3.1 Number of classrooms and seminar halls with ICT facilities**

Response: 19

**File Description****Document**

Institutional data in prescribed format(Data template)

[View Document](#)**4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)****Response:** 8.06**4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

2020-21	2019-20	2018-19	2017-18	2016-17
4.32017	30.08951	52.97379	44.47162	35.82434

**File Description****Document**

Institutional data in prescribed format(Data template)

[View Document](#)**4.2 Library as a Learning Resource****4.2.1 Library is automated using Integrated Library Management System (ILMS)****Response:**

Maharaja Surajmal Institute's Library has a well-stocked fully computerized library with latest editions of books by eminent authors & is having a huge collection of books on education, management & commerce, computer science, engineering, science and humanities to cater to the needs and requirements of the faculty as well as students.

**Library Facility**

1. Fully Air-Conditioned Reading Rooms with seating capacity of 150 students.
2. Wi-Fi enabled Library & Book-Bank.
3. Dedicated room for computer facility at central library and book bank with 28 computers out of which 18 are for library users with headphones with internet connectivity.
4. Huge Collection of Rare Research Books on Humanities.
5. Book-Bank Facility wherein students get books for one semester.
6. Open Access System having Books arranged according to Call No. /subject (i.e. as per DDC).
7. Fully computerized Library since June 2006 and operates with AFW LMS.
8. Access to Online/E-Journals, NPTEL, NDLI (Institutional and Club member), Subject Notes, Previous Year Question paper and other useful E-Resources.
9. WebOPAC: All the books/journals/CDs, etc. are searchable by Author, Title, Subject, Keyword. Accessible over Intranet as well as Internet.
10. Online document Reservation System through WebOPAC.
11. 2 printers and 1 scanner are also available. Photocopy facility is also available at campus.
12. Inter-Library Linkage Facility: Rare Books may be borrowed on loan from other libraries through DELNET Institutional Membership.
13. Besides personal assistance, special facility for *divyang* students.
14. Eight qualified Library Staff having Post-Graduate degree in Library and Information Science.
15. Up-to-date Library Website linked to Institute's website.
16. ISO 9001: 2015 certified library.

### **Library's Services**

1. Subscription to IEEE, Springer Nature 3, Elsevier's ScienceDirect & sage Online/E-Journals & E-Books.
2. Library Patrons can borrow the Documents on loan from central library for a specific period.
3. Scanning & Reprographic Facility.
4. Library Orientation Facility.
5. Current Awareness Service (CAS).
6. Selective Dissemination of Information (SDI)
7. Document Delivery Service (DDS).

Yes, we are having fully automated library. All the processes like Management (Record of users and books), Cataloguing, Circulation, Periodicals, Barcoding, Web-OPAC Search etc. are fully done with the help of library management software "Alice for Windows" provided by Softlink Asia Pvt. Ltd (Since 2006).

#### **4.2.2 The institution has subscription for the following e-resources**

- 1.e-journals**
- 2.e-ShodhSindhu**
- 3.Shodhganga Membership**
- 4.e-books**
- 5.Databases**
- 6.Remote access to e-resources**

<b>Response:</b> A. Any 4 or more of the above	
<b>File Description</b>	<b>Document</b>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

#### 4.2.3 Average annual expenditure for purchase of books/e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

**Response:** 22.83

##### 4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
20.44201	20.49479	41.43013	0.13570	31.64379

<b>File Description</b>	<b>Document</b>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>

#### 4.2.4 Percentage per day usage of library by teachers and students ( foot falls and login data for online access) during the last completed academic year

**Response:** 7.22

##### 4.2.4.1 Number of teachers and students using library per day over last one year

Response: 200

<b>File Description</b>	<b>Document</b>
Details of library usage by teachers and students	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 4.3 IT Infrastructure

#### 4.3.1 Institution frequently updates its IT facilities including Wi-Fi

**Response:**

Maharaja Surajmal Institute of Technology is technologically well-equipped educational institute in terms of IT infrastructure. It is making extensive use of ICT resources and makes them available to the students for better learning their courses. There is an adequate access to computers and internet facilities to the students and faculty.

**The college has following Licenced list of Software:**

LIST OF SOFTWARE S.No	Software	Department
1	MAYA 14.0	IT/CSE
2	VStudio .NET Pro 2003	IT/CSE
3	SQL Server 2000	IT/CSE
4	Windows Server 2003	IT/CSE
5	Oracle 9i Standard Edition	IT/CSE
6	DigSilent Power Factory	EEE
7	Office Pro 2003	IT/CSE
8	Rational Software Architecture	IT/CSE
9	MATLAB 2016 (b)	EEE
10	Tanner Tools	ECE
11	Office Professional Plus 2010	For all Deptt. (Unlimited use)
12	Office Professional Plus 2013	For all Deptt. (Unlimited use)
13	Office Professional Plus 2016	For all Deptt. (Unlimited use)
14	Office Professional Plus 2019	For all Deptt. (Unlimited use)
15	Office 365 Education open student/faculty	For all Deptt. (Unlimited use)
16	*Forefront End Point Protection 2010 with updated Rollup1	For all Deptt. (Unlimited use)
17	Smartbear QAcomplete	CSE
18	*Windows 10	For all Deptt. (Unlimited use)
19	*Windows 8.1	For all Deptt. (Unlimited use)
20	*Windows 7	For all Deptt. (Unlimited use)
21	Turbo Assembler 5.0	IT/CSE
22	AUTOCAD 2004	Applied Science
23	Orell Digital Language Software	Applied Science
24	Tally 9.0	Accounts
25	eTimeTrack-Lite (Bioinformatics System)	Admin.
26	Adobe Design and web premium CS6 6.0	All Deptt.
27	MATLAB 7.0	ECE
28	Microsoft Teams	All Deptt.
29	iThenticate Plagiarism Software by Turnitin	All Deptt.
30	Cross C Compiler	ECE Deptt.
31	Microsoft Teams	All Deptt.

Overall Technology Upgradation details are given below.

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Availab band (MGBP)
Existing	513	307	All	20	60	9	106	100MB
New		70						
	583	377	All	20	60	9	106	100MB

Bandwidth available of internet connection in the institution is 100MBPS/GBPS. Econtent facilities like videos media center and recorded facilities are available at **Moodle** www.moodle.msit.in and Microsoft Teams

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

**Response:** 5:1

#### 4.3.3 Bandwidth of internet connection in the Institution

**Response:** A. 750 MBPS

### 4.4 Maintenance of Campus Infrastructure

#### 4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years (INR in Lakhs)

**Response:** 91.94

##### 4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year-wise during the last five years (INR in lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
405.12528	430.18973	366.98449	339.32500	385.61196

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

#### 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.

**Response:**

The college is having policies for maintenance and operation of infrastructure and other facilities. Institute assigns enough funds towards maintenance and repairing. Allocated funds are utilized towards maintenance and repairing. Staff committees are established for decision-making in order to upgrade and maintain of the same. Various committees like purchase committee, repair and maintenance committee, sports committee, library committee are for the maintenance of policies under college premises.

There is a stock register and departmental stock register to record every item after physical verification. These records are audited annually. Regular maintenance of computer laboratory equipment are done by technical staff along with laboratory attendant headed by the lab In charges.

Outsourcing is done for maintenance and repairing of IT infrastructure such as computers, internet facilities including WiFi and broadband. Updating of software is done by its assistants. Outsourcing is done for the maintenance of wooden, furniture, electrification and plumbing. Regular maintenance of water cooler and water purifier is done by outsourcing agents. The maintenance of reading room and stock verification of library books is done by library committee.

Overall campus development is done by the infrastructure committee of the college. Regular cleaning of the water tank, paper garbage disposal, pest control, land scaping and maintenance of lawns is done by the institute caretaker and associated cleaning staff. The caretakers are responsible for general maintenance of classrooms and the auditorium.

Lab and Internet facilities are maintained by computer lab-in-charge. A logbook for auditorium reservation was maintained. In case of malfunctioning projectors, the College Purchase Committees authorise the repair. Notices are displayed outside classrooms to maintain silence in the corridors and to avoid loitering. Electrical equipment are switched off after use and classrooms/labs are locked in the evening. Students are entertained to take care of the college property. Computers are password protected and are to be used only for academic purposes. Computers are shut down after use. Laptops/desktops, licensed software, CCTVs, and ACs are maintained/upgraded based on annual maintenance contract. Teachers-in charge/committee conveners/office administration gives the requirement for furniture to the Purchase committee and purchase is done after necessary review. Maintenance of the same is done annually.

Bank of India branch is in the college premises that caters to all students, present employees. Facility of banking is used for fee payment and other transactions. The college has a medical center in the premises for students and staff members. The residential complex is maintained by the college. There is a photocopy stationary facilities available in the college. Codes of conduct are also displayed on the website and at the entry gate.



## Criterion 5 - Student Support and Progression

### 5.1 Student Support

#### 5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 5.61

##### 5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
309	90	108	87	101

#### File Description

Institutional data in prescribed format

#### Document

[View Document](#)

#### 5.1.2 Average percentage of students benefitted by scholarships, freeships etc. provided by the institution / non- government agencies during the last five years

Response: 0.18

##### 5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
3	6	5	4	4

#### File Description

Institutional data in prescribed format

#### Document

[View Document](#)

#### 5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the following

1. Soft skills
2. Language and communication skills
3. Life skills (Yoga, physical fitness, health and hygiene)
4. ICT/computing skills

**Response:** A. All of the above

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

#### 5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

**Response:** 11.62

##### 5.1.4.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
250	300	300	250	300

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

#### 5.1.5 The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

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

**Response:** A. All of the above

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<a href="#">View Document</a>
Details of student grievances including sexual harassment and ragging cases	<a href="#">View Document</a>

## 5.2 Student Progression

### 5.2.1 Average percentage of placement of outgoing students during the last five years

**Response:** 68.22

**5.2.1.1 Number of outgoing students placed year - wise during the last five years.**

2020-21	2019-20	2018-19	2017-18	2016-17
350	472	397	291	395

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**5.2.2 Average percentage of students progressing to higher education during the last five years**

**Response:** 27.56

**5.2.2.1 Number of outgoing student progressing to higher education.**

Response: 159

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**5.2.3 Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)**

**Response:** 100

**5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) year wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
30	44	32	30	25

**5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT,GRE/ TOFEL/ Civil Services/ State government examinations) year-wise during last five years**

2020-21	2019-20	2018-19	2017-18	2016-17
30	44	32	30	25

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

### 5.3 Student Participation and Activities

**5.3.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national / international level (award for a team event should be counted as one) during the last five years.**

**Response:** 146

**5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one) year-wise during the last five years.**

2020-21	2019-20	2018-19	2017-18	2016-17
1	55	52	22	16

File Description	Document
Institutional data in prescribed format	<a href="#">View Document</a>

**5.3.2 Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )**

**Response:**

“Education cannot be effective unless it helps a child open up himself to life”

– Maria Montessori

MSIT believes in this saying by Maria Montessori and strongly upholds that holistic growth of students is possible only when we give a student a platform to express themselves in their areas of interest other than the academic front. We have several societies and SIGs run and managed by Student's coordinator and faculty members. Students play a major role in the execution of these societies, and the role of the faculty is to mentor the student organizers. Various Societies are namely: IEEE, TechSoc, Prakriti/ NSS, Mutant, Developer Student Club. The institute of electrical and electronic engineers(IEEE) is a global professional

association of engineers from across the world. IEEE is the foremost authority when it comes to research and in any field of engineering. It provides a platform to be exposed to advancements in technologies and cultivates a spirit of innovations in them. The IEEE student branch carries out various programs within the college which entail technical project exhibitions, summer project internships, and various other such programs. Special interest groups (SIGs) wherein students educate as well as learn from their peers are encouraged and carried out by the IEEE student branch. Various seminar talks, workshops and webinars are also conducted by the student branch. IEEE MSIT believes in holistic development and hence supports and conducts cultural events and SIGs as well. TechSoc, the technical society of MSIT was formed by the amalgamation of various technical clubs pre-existent in the college. This was done to channelize the scattered efforts and to provide a common platform that catered to the technical needs of the students. TechSoc serves its audience by organizing various events in the form of speaker sessions, technical seminars, and hands-on workshops on subjects from various domains. PRAKRITI MSIT To emphasize and increase the consciousness and awareness towards the environment and ecosystem, a group of students of MSIT came together to form Prakriti- The humanitarian and environmental society of MSIT. Established on 3rd March 2010 and since then the club is constantly working to make the mass youth aware of the ecosystem. Prakriti has gained a lot of appreciation and fame, even on a global level. It has provided the students with the opportunities to develop problem-solving, decision making and leadership skills. Being a not-for-profit organization, Prakriti always works to involve mass participation in planning and implementing the projects. Prakriti also stands to support various NGOs (like Goonj) and rural and urban communities (like Lion's Club) that work towards the progress of society. Developer Student Club Developer Student Club, Maharaja Surajmal Institute of Technology (DSC-MSIT) is a community of college students powered by Google. DSC MSIT helps students to grow with the latest technology trends and student opportunities. This community provides a peer-to-peer learning environment while building solutions for community and local businesses. Solutions built by a developer student club are supported by Google Developer technologies.

### 5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

**Response:** 47.6

#### 5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

2020-21	2019-20	2018-19	2017-18	2016-17
106	18	72	24	18

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

## 5.4 Alumni Engagement

### 5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

#### Response:

MSIT registered its Alumni Association under the Societies registration act with Registration No. S/ROS/DW(SW) in 2019. The association consists of faculty members from all departments including Dr. Puneet Azad (Convener), Ms. Sonika Malik, Ms. Jyoti Khurana, Ms. Sonia Goel, Ms. Shaily Malik, Mr. Ravi Choudhary, Ms. Saba Khanum, Ms. Gunjal Beniwal, and six founder students Mr. Rishabh Mathur (ECE), Mr. Siddharatha Kukreti (CSE), Ms. Pragati Sharma (CSE), Ms. Priya Sharma (ECE), Mr. Siddharth Sharma (ECE) and Mr. Rahul Rajpal (IT). The association started its operation with the conduct of its first session on “Carrier Guidance” on 5th, October 2019. All the founder students presented their talks and guided the students in choosing their careers in various fields including Software, Management, Electronic design, Higher studies, PSUs, etc. To continue the rhythm, Mr. M.V. Priyank, and Alumni (IT 2007-11 batch) was invited to deliver a session on “Journey into Sound Healing for Relaxation and Well Being” on 21.11.2019 for the faculty and students of MSIT. After transitioning from being IT Entrepreneur to Wellness Entrepreneur, Priyank is now on a mission to Educate and Empower people to lead Healthy, Wealthy, and Prosperous life. Priyank specializes in utilizing modern technology integrating them with energy science and using them for exploration, which makes people understand as well as explore the knowledge with a logical explanation. Further, to ignite the spark of Entrepreneurship, an engrossing talk on “Building an Entrepreneurship Ecosystem” was arranged for the students. Renowned Prof. Rajesh Nair, Director and Professor of Practice, Innovation and Entrepreneurship Centre, Asia School of Business | MIT Sloan, and Visiting Scholar Massachusetts Institute of Technology (MIT) was invited to present the talk. The session was organized on 20th February 2020 in MSIT and attended by Sh. Kaptan Singh (President, SMES), Prof. Ashok Oberoi (Director Placements, SMES), Prof. K.P. Chaudhary (Director, MSIT), Prof. Poonam Bansal (Dy. Director, MSIT), Alumni Association members, faculty, and a large number of students. He emphasized realizing our power of imagination and use our creativity, technical skills and focus on learning and encouraged the audience of this generation to try out new crazy things in their lives. Recently, MSIT Alumni Association conducted Alumni Meet 2021 (online) on February 27, 2021. The meet was attended by Sh. Kaptan Singh, Prof. A.K. Singh (Director, MSIT), Prof. K.P. Chaudhary, Prof. Ashok Oberoi, Alumni Association team members, faculty members, Alumni of the past eight batches, and students of MSIT. It was a great opportunity for the students to interact with the Alumni of MSIT who are working with some big corporate giants like Google, Microsoft, Intel, Cadence Design, Infosys, Freescale, Calypto Design, Nokia Siemens, Ericsson, Facebook, Cognizant, Synopsis, Accenture, HCL & CSC, etc.

MSIT Alumni Association is committed to bringing together the alumni community on a common platform to foster stronger relations between alumni and others connected with the Institute. Apart from serving as a base for information about the alumni, it initiates programs and organizes events important for students, alumni, their alma mater, and the national interest.

### 5.4.2 Alumni contribution during the last five years (INR in lakhs)

Response: D. 1 Lakhs - 3 Lakhs

## Criterion 6 - Governance, Leadership and Management

### 6.1 Institutional Vision and Leadership

#### 6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

##### Response:

The Vision and Mission statement of the institution are defined in terms of addressing the needs of students and society it seeks to serve.

The Vision is:

To become one of the most admired centers of academic excellence in the field of Engineering & Technology for all-round professional development of students to enable them to meet the growing technological needs of the country.

The Mission is:

Developing new paradigm in imparting education in the fields of Engineering and Technology and to imbibe national values leading to student's empowerment, with a view to prepare them to meet the national and global challenges.

The college recognizes the potential of teachers to be important stakeholders in the translation of the vision and mission statements and hence ensures that the faculty becomes a part of each academic and administrative body at one level or the other.

A team of teachers form the Academic Affairs Committee, Anti Ragging Committee, Student Affairs Committee, Internal Complaints Committee, Grievance Committee, Examination Committee, Research Committee, Library Committee, and are engaged in policy formulation, planning, execution and monitoring of the various activities in the institution.

This type of governance reflects administrative team lead by a leader with honed out of years of experience. A well-organized structure which includes participative leadership from all its stakeholders at different levels enables the successful accomplishment of its perspective plans envisaged every year and in maintaining the quality of the institution.

The Management ensures that its policies, programs, governance and leadership manifest the guiding principles enshrined in its vision and mission.

Seminars and workshops are conducted for the faculty and students so that they stay updated with the latest invention and technology . Students are also provided with study material that is available on MOODLE.

Every department prepares a roadmap for the upcoming semester in terms of infrastructural and academic growth. Departmental budget is prepared by taking suggestions from Head of Department, Class Coordinator and faculty representative.

The outcome of this has positioned the college to be unique and recognized as one of the leading institutions in this part of the region.

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

#### **Response:**

The well-defined systems and organizational structure of the institute leads to effective leadership at various levels be it at the management level or the staff. The various management bodies for development of policies , forming their guidelines, their implementation and regulation and timely monitoring are:

1. The Governing Body
2. Academic Council
3. Finance Committee
4. Anti-ragging/Discipline Committee
5. Disaster Management Committee

The various bodies headed by the faculty are :

1. Discipline Committee
2. Exam cell
3. E-cell
4. Grievance cell
5. NSS/ Prakriti
6. Unnat Bharat Abhiyan
7. IEEE

The institution practices a fine decentralized and participative management approach towards all its activities and initiatives. All these teams include Deans, In-charges, Heads of the departments and faculty members and students at all possible levels to imbibe a sense of leadership among them.

- Teachers form a core part of all the committees that fulfil academic or workload /admission requirements of the college.
- The dean of the institute forms the academic calendar which lists dates of teaching periods, examination, holidays, health programs, sports and cultural activities
- Committees for development and purchase, discipline and code of conduct such as the General Purchase Committee, the Anti-Ragging Cell, the Discipline Committee are also headed by the faculty members to help the students at every point of time.
- Faculty members also develop discipline, equality and community spirit in the students through committees such as the Prakriti, the National Service Scheme (NSS). Other committees like the Cultural Committee, the Placement Committee, and the E- Cell also function under the supervision



of teachers.

- Teachers are appointed as representatives in the Governing Body so that they can act as a bridge between the faculty and the management.
- Head-of the Department (HOD) of individual departments is appointed to manage the administrative requirements of their respective departments. HOD consultation and discussion with the Principal, the IQAC, the Vice Principal, and with related staff council committees and work in consultation with the rest of the department over matters such as discipline papers to be taught, schedule of the internal assessment, department events, assessment of students' performance, and so on.
- We have flexibility at departmental level also as class coordinator or faculty members can suggest and implement curriculum enrichment and enhancement. Faculty members prepare their subject notes and Lecture plan, which are upgraded every semester
- A students' representative is nominated for the executive bodies of various departments, societies and committees. They are assigned responsibilities of leadership, and management of department/committee fests, seminars, webinars, arranging sponsorships etc.
- A student representative and faculty in-charge (proctor) is selected for each class to manage the duties related to that class.
- A faculty in-charge (mentor) is appointed on a group of students for their 4 years in college to guide and mentor them during
- Placement coordinators at both faculty and student's level is appointed to keep a track on all the placement activities taking place at college and off campus level.

File Description	Document
Upload any additional information	<a href="#">View Document</a>

## 6.2 Strategy Development and Deployment

### 6.2.1 The institutional Strategic / Perspective plan is effectively deployed

#### Response:

- Curriculum Development

Since, affiliated Institutions are not allowed to design their own curriculum a senior faculty members from our college have been a part of the curriculum development committee formulated by University and have contributed to curriculum development. For every semester subject coordinators are selected from affiliated Institutes. The curriculum and lesson plan of each subject is uploaded by faculty members in Moodle and is made visible to all the students.

- Teaching and Learning

Teaching and learning methodology includes brainstorming, presentations, quizzes, hands on activities etc. We provide Computer Laboratories with latest configuration hardware and original licensed software. Wide access to internet facility in labs, browsing centres and library to inculcate online learning management resources. Campus is Wi-Fi enabled which provides facility for students to use internet as a resource in their studies.

- Examination and Evaluation

As per University rules, there is one Midterm examination conducted in a semester by the institution and End Term Examination is conducted by University by the end of each semester, which in turn is a centralized procedure? We at MSIT follows disciplined strategy for evaluating our students. Continuous evaluation is done through class tests, assignments, viva and presentations.

- Research and Development

Library of the Institute has subscription for various online research journals and books to provide latest resources for the faculty members. Almost all faculty members are provided with personal computer /library to carry out their research work. The institute motivates the faculty members to attend research-oriented seminars/workshops/conferences, etc., by providing special duty leave. The Institute encourages faculty members to pursue Ph.D programmes in reputed universities and also supports them by providing high end computing facility with necessary software and with modern equipment. Institute recognizes and awards faculty publishing in reputed journals.

- Library, ICT and Physical Infrastructure / Instrumentation

The library materials via Web- OPAC library has also subscribed for online databases that can be browsed. Each terminal is having internet facility. Library is having reprographic facility within the institute's campus. Detailed list of currently subscribed journals is also uploaded on library website (printed online). Library also maintains the CD's received along with the books.

- Industry Initiative/Collaboration

The Institute has constituted Institute Industry Cell for better collaboration between Institute and industry. The cell arranges internship programmers for students. This provides a unique opportunity to students to apply the concepts practically. The students are encouraged to visit top industries to provide them an insight on the working models and latest technologies used in corporate world. Faculty members are also sent for industrial visits to promote research on latest technologies.

## **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.**

**Response:**

- The Governing Body constitute of 21 members. They under the leadership of the Chairman look into the matters of administration and decision-making, finances and regulation, purchases and development, and quality assurance of the college. The Governing Body also appoints the director and deputy director of the institute.
- The Director of the institute supervises and manages the overall functioning of the college.
- The Head of the department work in collaboration with its staff members to manage the overall functioning of the department.
- The senior accountant manages the matters related to internal finances and financial audit of the college. Financial decisions are taken by the senior accountant and the director in consultation with the Governing Body.
- The library is headed by the Librarian who supervises the library assistants and attendants in maintaining the upkeep of the library. The librarian also works with the Library Committee in upgrading the academic resources and facilities in the library.
- The Administrative Staff of the college is also well-defined, with positions according to the University rules and the UGC. The administrative decisions are implemented through the Administrative Officer, who is assisted by a team of section officers from the administration and the accounts section.
- The caretaker supervises the maintenance of the infrastructure and the working of housekeeping staff, electricians, gardeners, etc.
- Notice display system for students and other stakeholder on website. Regular display of audited balance sheets on website. Automation software available in Library.
- Fully computerized office and accounts section. Maintenance the college accounts through Tally.

File Description	Document
Paste link for additional information	<a href="#">View Document</a>

### 6.2.3 Implementation of e-governance in areas of operation

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

**Response:** A. All of the above

File Description	Document
Screen shots of user interfaces	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

## 6.3 Faculty Empowerment Strategies

**6.3.1 The institution has effective welfare measures for teaching and non-teaching staff****Response:**

The following are the welfare measures extended to the teaching and non-teaching staff of the Institute:

**Teaching Staff**

- Personal computers are provided to individual faculty members
- All the regularised teaching staff members are covered under the Employees Provident Fund Scheme and Group savings linked insurance scheme (GSLI).
- Maternity Leave for female staff members and paternity leave for male staff.
- Special casual leaves are sanctioned for attending conferences and workshops
- Study leave is granted for higher education and qualification improvement.
- Incentives for R&D activities Seed Money for Initiating Research Work Incentives for publication in Journals and Conferences
- Recognition of the faculty with "Best Teacher Award"
- A college-appointed counselor is there for faculty and students.
- There are staff quarters within the college campus to provide accommodation for the faculty.

**Non-teaching staff**

- Maternity Leave for female staff members and paternity leave for male staff.
- Recognition of the staff with "Best employee Award"
- All the regularised teaching staff members are covered under the Employees Provident Fund Scheme and Group savings linked insurance scheme (GSLI).

**6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years.**

**Response:** 10.48

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

2020-21	2019-20	2018-19	2017-18	2016-17
9	20	12	19	9

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

### 6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 307

#### 6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
18	615	495	165	242

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

### 6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course ).

Response: 46.53

#### 6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

2020-21	2019-20	2018-19	2017-18	2016-17
55	74	64	75	37

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

### 6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

Appraisal for the teaching staff:

Appraisal for teaching staff is based on the Annual Performance Report (APR) proforma filled and submitted by individual faculty. Every teaching staff member of the institute fills the prescribed proforma for self-appraisal. The proforma provides details about individual teacher's performance in teaching-learning and evaluation related activities along with research and academic contributions and administrative support and contribution in extra- and co-curricular activities. The filled proforma is then reviewed by the HOD, and the director of the institute. The final performance functioning status of the faculty is set up and confidentially maintained in the office of the institute.

Apart from the annual appraisal provided to the faculty, a best faculty award is also given to a faculty on the annual day. The faculty is selected from the annual progress report provided by each faculty where they mention all the academic, administrative and research work they have contributed to the institute. The faculty is given a best faculty certificate and a cash amount to encourage others for doing the same.

To encourage the research in faculty members, they are provided with Rs 5,000 for each SCI/ SCIE publications.

Appraisal for the non-teaching staff:

Appraisal for non-teaching staff is based on the Annual Performance Report (APR) proforma filled and submitted by individual non-teaching staff. Every non-teaching staff member of the institute fills the prescribed proforma for self-appraisal.

Every year a best faculty (teaching) award and the best employee (non-teaching) award are given to the staff.

## 6.4 Financial Management and Resource Mobilization

### 6.4.1 Institution conducts internal and external financial audits regularly

#### Response:

In our Institute both the audits i.e. Internal as well as External/Statutory audit was carried out on monthly and yearly basis. The Internal audit is being done on monthly basis wherein each and every voucher, ledger, bank book, cash book, etc is checked in depth. In this audit the statutory dues and their challans is checked to see that all the statutory requirements are met on time. Monthly reconciliations of bank, cash and ledgers is being done under this audit. All the fee receipts are checked with the strength of the students. In this audit, a special separate audit was conducted in the month of December every year wherein all the stocks and fixed assets are checked and verified. The External/Statutory audit is being done on annual basis. This is basically a Balance Sheet audit wherein the basic vouching is checked on random basis and the main stress was on the Statutory Compliances. In this audit it is to be seen that all the accepted accounting standards are being followed and are to be shown in the Balance Sheet. The auditors have to see that the Balance Sheet and Income Expenditure account gives a true and fair view of the accounts. The

final Balance Sheet is signed by the statutory auditors.

#### 6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

**Response:** 1.52

##### 6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year-wise during the last five years (INR in Lakhs)

2020-21	2019-20	2018-19	2017-18	2016-17
0.65	0.3	0.15120	0.28380	00.13664

File Description	Document
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>

#### 6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

**Response:**

The institution has classified each department as a separate cost center and all the expenses incurred are debited. In the beginning of each year, every department furnishes revenue and capital budget which will be reviewed and approved by the management Governing Body. Budget is reviewed by treasurer, secretary and director on a quarterly basis. Whenever any deviation occurs in the budget, respective HODs have to address the issue and give justification so that subsequently the same will be approved. Following this procedure, unnecessary purchases are avoided and the available funds are effectively utilized. Funds are provided for best faculty awards and research awards. Funds are also provided for the annual technical and cultural fests. Students generally finds sponsors for various events. Library and laboratory are regularly updated by purchasing various items by the purchasing team. Faculty is provided with financial aid to attend conferences and workshops. All financial bills and relevant documents are reviewed by the accountant. Transparency is maintained during the entire process.

## 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

**Response:**

Three practices with IQAC initiatives are: (i) Academic and Administrative Audit of Departments and (ii)

Acquiring Targets and Objectives for setting up strategies (iii) Feedback mechanism.

#### 1. Academic and Administrative Audit (AAA):

- An Academic and administrative audit by ISO is carried by internal and external auditors for maintaining records of all academic and administrative matters of every department.
- The IQAC initiated the Academic and Administrative Audit (AAA) primarily to take account of teaching-learning processes in all disciplines .
- The internal academic audit is conducted by ISO in charges every semester for fulfillment of IQAC-driven practices toward quality assurance. The process requires a self-regulated assessment of teaching-learning processes and a systematic management of documents of every department of the institute.
- The academic coordinators and HODs assess the preparation of academic calendar; selection of papers to be taught( based on choices by the students) ; timely distribution of time table; submission of lesson
- Teaching methodology, use of ICT facilities, and opportunities for experiential learning are also apprised of at the audit meeting.
- Documents of internal assessment, policy for moderation of marks, steps taken to assist slow learners, and analysis of the results of end-semester examinations are examined meticulously as part of the audit process. It also assesses if the teacher-student mentoring programme, which provides a meaningful platform for engaging with students and addressing their concerns, takes place regularly. The auditors also determine if the laboratories in the college follow proper organisation and management procedure; conduct stock verification of laboratory equipment and consumables; examine the status of the AMC of equipment; and check if biochemical, chemical and other laboratory waste are segregated and disposed of as per guidelines. Documentation of faculty achievements (paper presentation/participation in faculty development courses, publications, honors and distinctions) is also registered at the audit

#### 1. Acquiring Targets & Objectives

- Defining clear objectives and targets is a critical first step in making decisions about the quality education system; enabling setting up strategies, plans and policies, relatively minor regulatory and governance reforms or large-scale infrastructure investments.

#### 1. Feedback mechanism:

- The College has implemented a feedback system for students based on institutional parameters such as infrastructure and facilities, curriculum delivery and pedagogy, discipline and environment, staff and support, and so on.
- The feedback is taken online through MOODLE/MS Teams.
- The feedback submitted online are anonymous and hence generally fair. The feedback analyzed, and measures are taken for reform and redressed.
- Feedback from the stakeholders (students, faculty, alumni, industry experts, and parents) is also taken for consideration.



**6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities ( For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives )**

**Response:**

- The seminars and workshops conducted for the faculty for physical and mental health development
- Examining students by conducting internal, pre-final and external test assessments
- Organizing industrial visits and seminars for the students.
- Arrangement of remedial classes, doubt clearing classes for weak students by the respective subject teacher.
- Increased usage of ICT tools in teaching learning process
- Preparation of course plan at the beginning of every session and circulating it among the students.
- Regular Parent Teacher Meetings are held.
- Parents are cordially invited for Orientation Programme of their wards on their first Day of College every year.
- Parents are invited in Stakeholder's Meeting.
- Parents are invited for Appreciation Ceremony of Meritorious Students on Annual Day
- Encouraging Innovation Cell activities
- Promoting Faculty Student Entrepreneurship
- Promoting research work by awarding faculty for research projects, publishing in SCI indexed journals

**6.5.3 Quality assurance initiatives of the institution include:**

- 1.Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements**
- 2.Collaborative quality initiatives with other institution(s)**
- 3.Participation in NIRF**
- 4.any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)**

**Response:** A. All of the above

<b>File Description</b>	<b>Document</b>
Upload e-copies of the accreditations and certifications	<a href="#">View Document</a>
Institutional data in prescribed format(Data template)	<a href="#">View Document</a>
Paste web link of Annual reports of Institution	<a href="#">View Document</a>

NAAC

## Criterion 7 - 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 last five years.

##### Response:

Maharaja Surajmal Institute of Technology has always fostered an environment keeping gender equity as one of its forefront values and hence arms students with values that contribute to their social development by taking initiatives for the same.

The institute handles gender-based challenges and its related issues by providing different facilities on the campus like self-defense training programs, CCTV surveillance, constitution various committees like anti-ragging, discipline.

The anti-ragging and discipline committee is to assure safety and to protect the rights of students. In addition to the facilities, several extracurricular activities have been organized by the MSIT to transform the gender-equal society.

##### Gender sensitization through extracurricular activities

- Advocating the need for safety for women, a yearly self-defense workshop is conducted to arm female students with the means to defend themselves if the need arises, while emphasizing the measures that can be used by them to escape.
- Believing in safety above all else, a breast cancer awareness seminar was held to spread awareness regarding symptoms, diagnoses, and treatment to ensure that the students do not ignore early signs while de-stigmatizing seeking help for the same.
- Even in the age of the internet, positive knowledge on sex education remains clouded and to clear this ambiguity, a sex education webinar was conducted and delivered by Ms. Pallavi Barnwal. About more than 100 students got the opportunity to clear any misinformed notions they harbored and were encouraged to normalize open discussion regarding the topic.

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

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

Response: C. 2 of the above

File Description	Document
Geotagged Photographs	<a href="#">View Document</a>

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

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

#### Response:

- E- waste management
- Institute has a scheme by which Electronic and computer accessories which are declared “Obsolete” are exchanged with new equipments under old buy back scheme.
- Institute has also donated old computers to a school in Shyamli.

#### Hazardous waste management

- There is no hazardous waste material produced in the institute except in laboratories like chemistry. Adequate exhaust provisions are made in these laboratories to drive out acid fumes.

#### Other Waste management

- Paper waste is regularly sold to outside agency. The answer sheets are shredded and sold to licensed purchaser.
- Chemical fire extinguishers are charged periodically from outside licensed agency.
- The institute has taken initiatives to make the system paperless. E-documentation policy is promoted in administrative office and other departments.
- Group E-mail services.
- The papers are reused for printing.

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

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

**Response:** A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>

#### 7.1.5 Green campus initiatives include:

1. Restricted entry of automobiles
2. Use of Bicycles/ Battery powered vehicles
3. Pedestrian Friendly pathways
4. Ban on use of Plastic
5. Landscaping with trees and plants

Response: Any 4 or All of the above

File Description	Document
Geotagged photos / videos of the facilities	<a href="#">View Document</a>

#### 7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

Response: D.1 of the above

File Description	Document
Certification by the auditing agency	<a href="#">View Document</a>

#### 7.1.7 The Institution has disabled-friendly, barrier free environment

1. Built environment with ramps/lifts for easy access to classrooms.
2. Disabled-friendly washrooms
3. Signage including tactile path, lights, display boards and signposts
4. Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment
5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	<a href="#">View Document</a>
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>

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

**Response:**

Maharaja Surajmal Institute of Technology firmly believes and fosters the idea of linguistic and cultural unity and celebrates unity and diversity through its various initiatives and programs.

- The institution values each individual's identity. It successfully conducted a campaign on social change by participating in Pride March to celebrate the people and the community of LGBTQ+. Around 113 students participated with full zeal and vigor and spread the idea of togetherness and love.
- To aware the youth, a sexual assault awareness campaign was organized which helped students in understanding their rights, how to get out of the trauma if one experiences such a thing, and how to look after the people who need help. It also de-stigmatized the pre-conceived notions about how it's the victim's fault always.
- Maharaja Surajmal Institute of Technology truly believes that what brings us all together are our festivals and leaves no stone unturned in celebrating them. From cracker-free Diwali to streaming carols on Christmas, it celebrates the essence of every festival and kindles brotherhood by breaking the shackles due to religious boundaries.
- An app and website have been developed by UBA students of MSIT for COVID-19 in 2020.
- The UBA Cell team has strived to include all the students and teachers from various departments of the institute by organizing talks and brainstorming sessions to plan activities and discuss solutions to the village problems.

**7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens (within 500 words).**

**Response:**

Maharaja Surajmal Institute of Technology keeps the feeling of patriotism and sovereignty at the top. Through the National Service Scheme (NSS) and its various other programs, it instills the idea that duty to the country should be one's utmost priority. Programs instilling citizens' responsibilities are:

- "Cleanliness is next to Godliness", believing in this motto, the institution promotes Swachh Bharat Abhiyan and has organized many cleanliness drives inside and outside the college premises. An oath ceremony was also conducted to reinforce that cleanliness. With more than 200 student volunteers, the institute thrives for a clean and green India.

- MSIT annually organizes Blood Donation Camp in collaboration with blood banks to render community service. Every year Blood Donation Camp witnesses 200+ students, teachers and volunteers outside of college.
- With the sudden surge of the second wave of Covid in India. Students and faculty of MSIT lend helping hands to people in need. On various social media platforms, curated and shared Covid Resources among the masses.
- UBA cell MSIT has adopted 5 villages namely Asalatpur, Dabri, NangliJalib, Nangal Raya, and Tihar Gaon with motive to identify their problems and suggests them with innovative solutions.
- MSIT has conducted several activities like awareness programs like plantation drive, seminar and rallies to promote the environmental preservation.

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

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

**Response:** A. All of the above

<b>File Description</b>	<b>Document</b>
Code of ethics policy document	<a href="#">View Document</a>

**7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).**

**Response:**

Maharaja Surajmal Institute of Technology focuses in creating an ambiance that encourages students to celebrate national and international commemorative days, events and festivals. The Institute truly believes that what brings us all together are our festivals and leaves no stone unturned in celebrating them. From cracker-free Diwali to streaming carols on Christmas, it celebrates the essence of every festival and kindles brotherhood by breaking the shackles due to religious boundaries.

Every year, the team of Prakriti MSIT along with many other volunteers conduct a campus-wide rally on the occasion of Diwali to educate the students and everyone around about the harms of bursting crackers while celebrating Diwali. The students chant slogans encouraging others to celebrate a Crackers free Diwali. All the students dress in Ethnic-wear to celebrate and enjoy with their peers on the special occasion of Diwali.

This year in 2021, NSS MSIT in collaboration with Prakriti MSIT has celebrated the Tree Festival,

popularly known as Van Mahotsav from 1st to 7th July 2021. The celebration was an ideal opportunity to instill the value of social responsibility towards safeguarding trees, forests and various other activities for the green environment.

The IEEE MSIT as a part of the International IEEE celebrates IEEE Day every year celebrated on the first Tuesday of October. The idea is to make the members and other students aware about the role of IEEE, its importance and the benefits it brings to its members. It is discussed how IEEE, the world's largest technical professional organization, helps shape the futures of its members by providing them with umpteen opportunities in the field of Science and Technology.

In 2020, the aim was at fusing imagination and technology to come up with brilliant ideas for ways to avoid touching surfaces, in order to protect and elevate society from the shades of this global pandemic. Several ideas were registered ranging from innovative ways of protection from the unhygienic elements and potential transmission sources; to ideas for elevating everyone as a society and building this new world sustainably.

The theme of the 4th IEEE PES DAY was “**Clean Energy Revolution**”.

Considering the advisory given by IEEE and WHO, keeping in mind the health of the people, PES Day 2021 was **strictly a virtual event**. With this theme in mind, MSIT IEEE PES has conducted an Expert Talk on “Green Hydrogen from Renewable Energy” : Technology Outlook for the Energy Transition by the Speaker “**Anupma Thakur**”-DST-INSPIRE Senior Research Fellow CSIR-CSIO, Chandigarh, India.

Every year, MSIT celebrates festivals and commemorative days by conducting several activities like awareness programs, plantation drive, seminar and rallies to promote the cultural and environmental preservation.

File Description	Document
Geotagged photographs of some of the events	<a href="#">View Document</a>
Annual report of the celebrations and commemorative events for the last five years	<a href="#">View Document</a>

## 7.2 Best Practices

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

**Response:**

**Title of the Best Practices- NBA accreditation in all courses**

- Objective of the Practice –The Context-** The purpose of NBA accreditation is to ensure excellence in technical education and focus on outcome based education. The institute effectively implements the guidelines prescribed by NBA which enhances student satisfaction and adapts various measures for continual improvement of the system.



**2. The Practice** – Collaborative and independent learning among the students is promoted. Chalkboard and audio visual aids are in use for interactive learning. To enhance the learning experience of students, numbers of experiments beyond the minimum specified by the university are also performed by individual students to encourage learning beyond curriculum. Technical and non-technical societies for students in the supervision of faculty are established, for exploring the leadership, creative thinking, life-long learning and innovation ideas among students. In this regard, workshops, seminars are conducted by Special Interest Groups to motivate the students and enable them to explore new technical areas. In addition, in-house training facility is provided to the students during summer vacation. These steps ensure outcome based quality technical education. Regular audits are conducted internally to guarantee proper maintenance of NBA norms and quality education standards.

**3. Evidence of Success** –In Institute received NBA accreditation initially for two departments (CSE & IT) in 2016 which was valid for 3 years. In 2018, the Institute successfully received NBA accreditation for the remaining two departments (ECE & EEE) (validity extended till 2022). In 2019, the department of CSE& IT received reaccreditation from NBA (valid till 2022).

#### **Title of the Best Practices- ISO 9001:2015**

**1. Objective of the Practice –The Context-** ISO 9001:2015 is a quality management system which helps an organization to organize its processes, improve the efficiency of its processes and continually improve the processes. MSIT has adopted this international quality standard in order to demonstrate its ability to consistently provide educational services that meet customers' & applicable statutory and regulatory requirements. The institute effectively implements this quality system which enhances customer satisfaction and implements various processes for continual improvement of the system.

**2.The Practice** – In ISO, every year two internal audits are conducted, one in each semester. These internal audits take care that all the processes are smoothly running in the institute and if there are certain issues regarding the smooth conduct of these processes the process owners are given time by the auditors to resolve the issues and a management review meeting is held after each internal audit to review the findings of the internal audits. Every year, one external audit known as surveillance audit is also conducted by the external agency providing the certification.

**3. Evidence of Success** – This quality system is perfectly implemented every year. All the records of internal audits and MOM's of management review meeting are maintained with Quality System Coordinator (QSC).

In addition, Maharaja Surajmal Institute of Technology promotes quality and artistic renewal of students, to experience cultural and participation in educational programs. These activities are an integral part of all round development of the students. Students from various institutes in and around Delhi participate to showcase their talents and skills besides, in this high-tech word every student wants to acquire knowledge in every field stay updated.

Salient features of this society are:

- To create awareness about the latest updates
- To encourage those students who have shown excellence in academics
- Promoting public awareness of the long reaching effects of engineering
- Energizing the abilities
- Enhancing the personal of every individual
- To advance global prosperity

There are various technical and cultural societies wherein series of activities throughout the year are undertaken. The purpose is to generate interest and inculcate certain values and skills which students otherwise are unable to learn such as –leadership, team work, communication, organizing, creativity etc.

Various societies are

- **IEEE**
- **TechSoc**
- **Prakriti/ NSS**
- **Mutant**
- **Developer Student Club**
- **VEDA**

These societies are managed by student representatives under the guidance of the faculty incharge. Apart from these societies annual event Tedx is gaining popularity as it welcomes world renowned personalities from global fields.

Also, every year the institute conducts five day Fests comprising of Technical Fest (Avensis), Environmental Fest (ENVA), Cultural fest (Genesis), to motivate and promote creativity , scientific thinking and environment awareness among students. This also encourages the concept of self learning and improves the confidence of the students.

The Institute also has a unique **Book Bank facility**. All the students joining the institute are being given a set of text books (one book per Theory Subject). Book-Bank books are issued every semester and have to be returned similarly. This has come as a boon to the students who do not have to buy costly books for their academic preparations.

All the students of MSIT have an insurance cover which is a unique practice comprising of Accidental cover @ Rs. 50,000/- per student and Mediclaim Rs. 50,000/- per student from “Star health and Allied Insurance Co. Ltd.” (Policy no. P/16118/02/2021/0003641).

File Description	Document
Any other relevant information	<a href="#">View Document</a>
Best practices in the Institutional web site	<a href="#">View Document</a>

## 7.3 Institutional Distinctiveness

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

**Response:**

This AICTE approved Institute under GGSIP University is ideally located in the Institutional area of Janakpuri, New Delhi. It has a campus spread over eight acres of land with beautiful eco-friendly surroundings. The Institute operates in spacious seven storeyed building with built up area of 17837sq.m The institute has over a short span of time acquired and developed impressive infrastructure, expertise and resources for imparting high quality engineering education. The institute runs four courses providing Bachelor of Technology in CSE, IT, ECE and EEE streams.

### Teaching Methodology

The institute has a well-qualified and experienced faculty. The most contemporary teaching methodology at MSIT provides ample opportunity for students to develop into all round professionals by keeping abreast of the ever changing technologies. The Institute aims to achieve and excel the high standards set by premiere technical institutions of the country. The traditional classroom teaching is supplemented by regular tests, tutorials, group discussions, extensive lab work, projects, seminars and industrial exposure by way of industry visits and summer training. Eminent academicians & professionals are invited as visiting faculty to teach & guide specific courses. While teaching engineering fundamentals, keeping pace with the evolving definitions and concepts, a sincere effort is also made to cover the latest in each subject area. The classroom atmosphere is synergetic with interactive and participative sessions. This makes learning proactive and instills in the students a sense of team spirit, responsibility and professional integrity. It helps in building a healthy student-faculty bond, which develops students to their fullest potential and harnesses the best in the teachers.

### Infrastructure

The infrastructure consists of well-lit lecture halls, fully furnished labs, seminar halls, staff rooms, a large size playground etc. For the fresh students there are well equipped labs for 'Applied Sciences', 'Applied Mechanics' and 'Electrical Engg. Lab' in addition to a well-established 'Workshop' and a well-lit 'Drawing Hall'. The six modern air-conditioned networked computers labs cover entire range of Computer Science & IT subjects like Software Engg., Network Technology, Mobile Computing, Artificial Intelligence & Robotics, Computer Graphics, Compiler Construction, Analysis & Design of Algorithms, Interface Programming, Data Structure, DBMS & Object Oriented Programming. All labs have licensed software such as Visual Studio, Ms Teams, Auto Cad 2004, MS Office Professional 2016, Oracle 9i, TASM, Orcad, Windows 10. The software is updated and upgraded frequently as per the requirements and demands of the training. High speed, around-the-clock internet access using a radio link is also available. Students are offered real software projects relating to the current industry requirments to facilitate smooth transition from academics to industrial environment. The Electronics & Comm. Engg. Department has eight modern laboratories covering all the important subjects eg. Analog Electronics Lab, Control Engg. Lab, Microwave Devices lab, Digital Image Processing Lab, Consumer Electronics Lab, Digital Circuits & Systems Lab and Microprocessors lab. Recently a VLSI Design Lab and a Satellite & Mobile Comm.

**Lab have been also added. Adequate licenced MATLAB tool boxes,Tanner tools as well as the kits of IPGA/CPLD microprocessors and advanced microprocessors are available to give the students clear insight into design and development processes. Faculty is supported by a well trained technical staff. A full backup power supply is available for the campus round the clock.**

### **Social Awareness**

Maharaja Surajmal Institute of Technology believes in creating an ambiance that encourages students regularly to serve their best efforts in the neighborhood community and develop a sense of communal & social responsibility. Extension activities can be proven greatly effective in sensitizing students to social issues. The National Service Scheme (NSS) unit, the eco-club, the drama society, and the music society timely organize several programs to promote the concept and practice of social responsibility. Some extensive activities organized are:

- Clothes and Food donation drive
- Animal care center visit
- Nutrition Drive
- Cleanliness/environmental awareness drive
- Blood Donation camp
- Fundraiser for underprivileged
- Road Safety drive

File Description	Document
Appropriate web in the Institutional website	<a href="#">View Document</a>

## 5. CONCLUSION

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### **Additional Information :**

The evidence of the success of the institute is seen in achieving the targets/benchmarks/distinctions mentioned below:

- The initiatives and measures are taken by the institute help students to upgrade their technical and non-technical skills improving the employability of students/ promote them to pursue higher studies.
- Better placement records.
- Word of mouth publicity through successful Alumni.
- Achievements' of University ranks by a good number of students
- High pass percentages and fewer cases of dropouts are reported.
- Better performance in national level competitive exams like GATE, GRE, CAT etc.
- The Institute has emerged as a trusted name for discipline and value-based /holistic education.

### **Concluding Remarks :**

Maharaja Surajmal Institute of Technology emphasizes developing a conducive environment encouraging academic excellence and extracurricular accomplishments. Various international and national activities are conducted to ensure students develop the ability of self-reliance, self-learning with a strong affinity towards community services. This balance in curricular and extension activities promotes the holistic development of students.

Despite the challenges of being a self-financed institute, MSIT strives to offer great prospects endowed with the state of the art facilities in its pursuit of excellence. The faculty members and students coherently work towards achieving the mission of the institute.