



# **SELF STUDY REPORT**

**FOR**

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

**M. S. ENGINEERING COLLEGE**

**M S ENGINEERING COLLEGE, NAVARATHNA AGRAHARA, SADAHALLI  
POST, OFF INTERNATIONAL AIRPORT ROAD**

**562110**

**[www.msec.ac.in](http://www.msec.ac.in)**

**Submitted To**

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL**

**BANGALORE**

**August 2021**

# 1. EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

**M. S Engineering College** (MSEC) was established in **2002** as a private self- financing Engineering college in North Bangalore and is promoted by “**M. S. Educational Trust.**”, a registered trust founded by philanthropist Shri.Muniswamy Raju and maintained by Shri. Sudharsan Raju, Secretary, MSET. The college is offering **UG** programme in **five** branches with an intake of **300**, **three PG** programmes with an intake of **30** and has VTU approved **Research Centres** for **four branches**. The college has UGC (2F) status since 2015 and consistently been upgrading itself in terms of academics, research, industrial interaction, etc. amply putting in endeavours to conform to and evolve as envisaged by the Vision and Mission of the institution. The College has a lush green campus sprawling around **13.28 acres** with **25869 Sq.m** of built up area, meeting all the norms of AICTE.

The college is located in Doddajala Panchayat, a suburb of **Bangalore City** near to the National Highway No.44, and is located at 13 km from the Yelahanka Railway Junction, and 07 km from **Kempegowda International Airport, Bangalore**. M. S Engineering College is affiliated to VTU, Belagavi and approved by AICTE and accredited by NAAC **B++** with **2.85 CGPA** and this is valid for **5 years (Up to 2021)**, It is an **ISO 9001:2015 Certified Institute**.

MSEC maintains good relationship with industries and has signed MoU's with various Industries and Corporates. It is an authorized **Pearson VUE Test Center**, CISCO Networking Academy and has **Blue Prism RPA** Center of Excellence. Recognized by **Infosys(Campus Connect)** as **Member Partner Institute** in the year 2018. **M. S Engineering College** has established **Institution Innovation Council (IIC)** as per MHRD, GoI in 2018.

MSEC nurtures research culture among students and faculties through **R&D** by **Applied Research** leading to Ph.D by means of **Funded Projects**. 152 Lakhs of funds has been sanctioned through Projects from various funding agencies. MSEC trusts in innovation and hence it has established **Innovation and Incubation Centre** on its campus. It has an Entrepreneur Development Cell for Skill development. MSEC had **filed 32 Patents**, with **4 Commercialised**.

### Vision

M. S. Engineering College shall blossom into a technical institution of national importance with global network.

### Mission

- To inculcate best engineering practices among students through quality education, creativity, innovation and entrepreneurial skills.
- To provide conducive environment for experiential learning of engineering concepts to solve real life problems.
- To imbibe curiosity and problem driven learning to create value addition and competitiveness.
- To develop and strengthen entrepreneurial quality among students.

- To generate knowledge through research, to address societal needs

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

### Institutional Strength

MSEC is enriched with passionate team of human resource from diverse backgrounds, which contributes “Enduring Excellence in Education”. In the light of ethics the given under are the SWOC of the college.

#### Strengths:

- Dynamic and visionary management committee for MSEC.
- The college is situated in a spacious 13.28 acre campus, Strategically located near Bengaluru International Airport in Bengaluru city.
- Good governance driven by the expertise and wisdom of eminent personalities from academic and industry serving on the board of Governing Body.
- Academic excellence as exemplified by excellent faculty members and backed by infrastructure.
- Infrastructure meets the academic research and student support needs. The college is second to none with the state-of-the-art laboratories, well equipped library and universal access to Wi-Fi facility
- The College is initiated spoken tutorial by IIT Bombay – MHRD, Government of India for implementing spoken tutorial Programme.
- The college has entered into MoUs with leading industries that included INFOSYS,CISCO, which are being pursued actively.
- Center for Excellence established by the college in collaboration with CISCO and BluePrism. The students are involved to carry out industry specific computer Networking training and get certified towards Internship. In house faculty members will act as mentors along with the experts from the respective organizations stationed on the campus.
- Good and Efficient Mentoring system in place.

### Institutional Weakness

- Limited and no scope for starting new programmes due to the prevailing regulations of AICTE .
- Lack of funding from national organization for nurturing advanced research.
- The industry – institution interface can be enhanced further.
- Faculty with industrial experience are less in number.
- Communication skill of ? 15% students needs to be improved.
- The college could not utilize to potential to the fullest extent in terms of research and development.
- Lack of structured entrepreneurship promotional activities on the campus.
- Participation of alumni in the overall development of the college is less.
- Library to be expanded to cater to growing research needs.

### Institutional Opportunity

- The college can emerge itself as a role model in the fields of engineering education adopting the best pedagogical tools.

- The college management committee enjoys a strong relationship with the local entrepreneurs and is leveraging the same towards realizing the objectives and the characteristics expected of a higher educational institution.
- The strong alumni base of the college can be involved to contribute to the institution towards excellence and to help in the journey of being listed in one of the best colleges of the state.
- Taking the socio – economic background of the student community there is a scope to focus on pedagogy for seamless transfer of knowledge from the faculty to the students.

### **Institutional Challenge**

- Coping with rapid changing in technology and the industrial requirements to improve the employability of the students are the biggest challenge for an Institution affiliated to an University.
- The institution is not being able to pursue cutting edge research due to limited resource funding from national funding agencies.
- There is a need for a change in approach strategies and process for improving the results of the students.
- Poor schooling of the students and lack of basic knowledge on some subjects create a problem in the progress of the curriculum.
- Enhancing the communication and employability skills of the students has become a major challenge in the present day industry requirements.
- Declining supply of quality faculty, doctorates as well as exposing the teaching faculty to the Industrial scenario and get them trained in an industry is another challenge.
- Flourishing of many private Universities in the proximity of the College
- Reduced interest of Students in Engineering Courses and hence reduced admissions.

## **1.3 CRITERIA WISE SUMMARY**

### **Curricular Aspects**

M.S Engineering College is affiliated to Visvesvaraya Technological University (VTU) and the college follows the curriculum given by the university. The curriculum is designed & framed by the Board of Studies (BoS) of the University and approved by the Academic council of the VTU Belagavi.

The Curriculum is designed to ensure that the students have the required domain knowledge, skills and attitude. The quality of classroom teaching is enhanced by good pedagogical teaching learning method, blooms taxonomy and Outcome Based Education (OBE) through workshops and faculty development programs conducted in the department and Institute.

Based on the VTU academic calendar, college prepares the academic calendar with date of commencement of the academic semester, duration of semester, period of internal assessment tests, event organized by all department, and HOD meetings. With respect to academic calendar, each department prepares calendar of events, which include faculty meetings, class representative meetings, class-teacher meetings, cumulative syllabus coverage, departmental events etc.

In the beginning of the academic year, academic calendar is published by the University for Respective Course. The M.S Engineering College ensures effective time management and strictly follows timelines given by the affiliating university.

## Teaching-learning and Evaluation

M. S Engineering college, Bangalore serves students of different backgrounds and abilities, through effective teaching-learning experiences. M. S Engineering college is equipped with well-qualified faculty members with experience in the Teaching learning process. We have shown a consistency in students' enrollment to the various courses offered by the institute in which a substantial number of students are from socially weaker sections of the society.

The Institute fosters an independent learning environment that contributes to the academic and personal growth of all levels of Learners. The learning level of the students is assessed frequently and meticulously after the Internal assessment and classifies learners.

Different strategies like Bridge courses, remedial classes, Industrial visits, field visits, Mentoring, etc adopted for considering slow learners. Advanced learners are encouraged to publish research papers, apply for funded projects, and participate in Online certification courses.

The Institute provides a well-planned academic calendar based on the university calendar before the commencement of the academic session. Department prepares course plan and distributes to students community at beginning of the semester. Student-centric teaching methods are adopted by the college for the effective communication of the subject knowledge to the students. Classrooms are equipped with ICT tools, the use of ICT is integrated into the teaching-learning process.

The Evaluation process is transparent. Students are evaluated in a continuous assessment system, comprising written examinations, class seminars, assignments, and quizzes. The consolidated marks are published to students for verification and transparency. The teaching-learning process is outcome-based. Each department of the institute has defined its Vision, Mission, Programme Education Objects, Programme outcomes, and Course Outcomes in connection with college Vision and Mission and which is shared with the student community. PO's and CO's related to subjects are assessed immediately after the completion of the course by the faculty and making sure that the skills, knowledge associated with the subjects are delivered. Institute has an online student feedback system. Feedback is obtained from students and analyzed to ensure that teaching is student-centric.

## Research, Innovations and Extension

M.S Engineering College, Bangalore has been striving hard to excel in the sphere of research steered by well-defined R&D and Consultancy Policies, and Code of Ethics. The institution has been executing multidimensional endeavours such as providing seed money, incentives to faculty publications, and conducting workshops on IPR by consulting retired scientists from various Research Organisations as advisors.

College has received Rs.152 Lakhs research grants from Govt. & Non- Govt. funding agencies and Rs.20 Lakhs of revenue through consultancy including few Corporate Training programs in last five years. College has 15 MoUs with National/International organizations for academic and research collaborations and established Collaborative Labs and COEs in association with Pearson, Infosys, Cisco, Blue Prism, National Instruments, DST and Innovation & Incubation centers in all departments.

Faculty and Students of the college have published around 200 research papers in Peer Reviewed / SCOPUS /

SCI Journals, books and conference proceedings and also 32 patents were filed in last five years. Four Engineering Departments are recognized as Research Centres by VTU, Belagavi with 8 Faculty guiding scholars for PhD and 5 scholars are being guided under their guidance in the last 5 years.

Students are made aware of the moral and social obligations through the NSS and EWB units such as AIDS Awareness, Medical camps, in addition to technical exhibitions. College has received awards and recognitions from the Government and recognized bodies for extension activities. More than 20 extension programs like plantation, Swatch Bharath, blood donation camps, Environmental Awareness workshops, teaching underprivileged, etc. were conducted in the last five years.

### **Infrastructure and Learning Resources**

M.S Engineering College, Bangalore has planned the infrastructure requirements as per the statutory body norms. It has a lush green campus sprawling around 13.28 acres with 25869 Sq.m of built up area. The institution has well-furnished classrooms with ICT facilities, well-equipped laboratories, computing facilities and seminar halls for effective teaching and learning. The college has a huge playground with facilities for outdoor games such as Cricket, Football, Volleyball, Ball badminton, Tennis and Basketball. The activities like indoor games, cultural activities, and facilities like gymnasium and yoga centre are satisfying the curricular and co-curricular requirements.

The residential facilities are provided for boys and girls with recreational facilities, internet and Wi-Fi facilities etc. The purified drinking water facility and security round the clock are provided. CCTV surveillance is available in the campus. The college is having a health care facility attached to the hostel, also, it has a MoU with super specialty Baptist hospital for regular and emergency needs. The college has provided the hygienic Canteen and Mess facility for the students.

The college has well planned spacious library with large number of books, e-journals and digital materials along with browsing centre. The training and placement cell is well established with GD, Interview rooms and seminar halls. The Institute continuously upgrades IT facilities with sufficient number of computers connected with LAN and Wi-Fi to enable all the stakeholders to have better access to all the learning resources & ICT services in the campus. The Institute provides 24×7 internet facility with 60 Mbps leased line bandwidth. The Institution takes care of all physical, academic, IT and other facilities with effective maintenance support allocating appropriate budget for optimum utilization of the resources. The equipments, furniture, computers and generator are well maintained to satisfy the needs.

### **Student Support and Progression**

M S Engineering College support the merit students by giving benefits like fee concession, fee wave off, and scholarship providing by the institution. Thereby, students try to get required marks to achieve scholarship by management. Computer skills are imparted through special courses intended to make students tech friendly. Remedial coaching is always made available every semester to students who are identified as slow learners through internal assessments. To enhance the skills of students the institution has taken initiatives by organizing guest lectures, training programs in soft skills, communication skill, technical skills, and career counselling, so that students get benefited to crack the interview during placement and qualified in higher education.

The college has training & placement officer. TAPC has organized campus drives from Mindtree, HP, TCS,

IBM, Cloudthat Technologies, HCL, Trend Micro, Amazon, Mahindra & Mahindra, Murugappa, ABB, etc. The students attend the placement interview organized within campus and other institutions. The institution provides a facility to student participate in various event, activities organized by VTU, VTU affiliated colleges, & other universities.

The college provides self-learning resources for students like LMS, virtual lab, e-books, etc to experience different modes of learning. The college provides various certification courses from Infosys, Spoken Tutorial, Google Cloud, NPTEL, etc for students to take part in it. Students are encouraged to publish Departmental Wall Magazines, which is done with regularity.

- The college has its own annual magazine.
- The college plans to launch a research journal with an ISSN number 23956933

The institute facilitates student's representative, student committee which are engaged in various cocurricular and extracurricular activities for smooth conducting of activities/ event. Our students visit other institutions of higher learning in order to attend seminars, symposia, etc. Students from the college are provided with necessary assistance such as railway fares / conveyance allowance so that they may attend cocurricular and extracurricular activities by VTU. Students participate in the NSS camps. The student takes responsible in grievance redressal of student grievance to maintain the friendly environment with ragging free campus.

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

The institution has an effective governance mechanism in line with the vision and mission of the institution by practicing decentralization and participative management involving Management, Governing Council, Principal, Deans, Heads of Departments, Programme Coordinators and faculty in-charges. Each of the functionaries has specific roles and responsibilities. The academic policies, rules and regulations for different programmes offered by the institute are framed under the strong leadership of the Management and Principal. The institution has strategic plan with respect to certain key performance indicators to reach the goals. The statutory committees such as Governing Body, Academic Council, Boards of Studies and Finance committee and 13 non-statutory committees are constituted as per the norms of the regulating bodies for smooth and orderly functioning of the institution.

The Institution has a policy and strategy for mobilising resources. The financial transactions of the college are subjected to regular internal and external audit. Internal Quality Assurance Cell (IQAC) is responsible for the quality standards in teaching and learning, evaluation, research and environmental sustenance. Academic Audit, Curriculum Revision, Automation in the Examination Process and Online Certification Courses are some of the many IQAC initiatives which are successfully implemented.

During the preceding five years, the curriculum is revised twice with introduction of Choice Based Credit System, MOOCs courses, Open electives, Industry offered and practice oriented courses. The quality improvement in research has culminated in publication of articles in indexed journals and filing of patents. The Performance Based Appraisal System (PBAS) is in practice for encouraging the faculty for better involvement and accomplishment. The faculty are encouraged to attend FDPs, workshops, seminars and conferences by extending necessary financial support and also certain welfare measures are in place for both faculty and staff of the institution. The placement rate and highest package are increased significantly as a result of conducting focussed training activities. Many academic and administrative processes are automated through E- governance policy. Significant addition of building space and implementation of green initiatives are the other major

improvements. The results are reflected by good governance mechanism.

### **Institutional Values and Best Practices**

The college is sensitive to gender equity and promotion. Appropriate programs are organized regularly. Counseling facilities and common room are provided to female students with adequate safety and security and the campus is monitored through CCTV surveillance. The institution has commitment to differently abled students and provides facilities such as ramps and washrooms etc.

The college from the inception has been very conscious about environmental and green initiatives. The rain water is diverted into harvesting percolation pits constructed at various locations in the campus. The campus is well covered with plants and greenery. Solar roof top heaters are installed, caters to the supply of the hot water needs of the Institute.

Majority of the students of the college make use of public transportation which helps towards achieving carbon neutrality. Also, the college has restricted the entry of Automobiles during the working hours. The college maintains complete transparency by involvement of all stakeholders in financial, academic, administrative and auxiliary functions. Separate code of conduct is followed for students, teachers, faculty, and administrators. The college celebrates all important national festivals and organizes number of activities to promote universal values.

The college has adopted many best practices out of which two practices which stand out are Performance Based Appraisal System (PBAS) for faculty and Technical Model Development for students. The Institute has a distinctiveness of setting up of considerable number of industry collaborative labs and COEs under Industry Institute interaction initiative for training, skill up gradation and placement of students in thrust areas. Battery powered 3 – Wheelers and bicycles are available for the students for Last Mile Connectivity as an Green Campus Initiative by Department of Mechanical Engineering, MSEC.



## 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College	
Name	M. S. ENGINEERING COLLEGE
Address	M S Engineering College, Navarathna Agrahara, Sadahalli Post, Off International Airport Road
City	BANGALORE
State	Karnataka
Pin	562110
Website	<a href="http://www.msec.ac.in">www.msec.ac.in</a>

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	Badarinarayan K S	080-41215454	9480182396	080-41137900	principal@msec.ac.in
IQAC / CIQA coordinator	Narayan H M	091-9916799909	9916799909	-	narayan.hm@msec.ac.in

Status of the Institution	
Institution Status	Private and Self Financing

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

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of establishment of the college	27-05-2002

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

State	University name	Document
Karnataka	Visvesvaraya Technological University	<a href="#">View Document</a>

**Details of UGC recognition**

Under Section	Date	View Document
2f of UGC	10-02-2017	<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>	15-06-2020	12	The details of AICTE approval pertaining to the year Two Thousand and Twenty is being provided

**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?	No

<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	M S Engineering College, Navarathna Agrahara, Sadahalli Post, Off International Airport Road	Urban	13.28	23179

## 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	BE,Artificial Intelligence And Machine Learning	48	PUC HIGHER SECONDARY INTERMEDIATE	English	30	0
UG	BE,Computer Science And Engineering	48	PUC HIGHER SECONDARY INTERMEDIATE	English	180	49
UG	BE,Civil Engineering	48	PUC HIGHER SECONDARY INTERMEDIATE	English	30	0
UG	BE,Mechanical Engineering	48	PUC HIGHER SECONDARY INTERMEDIATE	English	30	0
UG	BE,Electronics And Communications Engineering	48	PUC HIGHER SECONDARY INTERMEDIATE	English	30	3

PG	Mtech,Computer Science And Engineering	24	B.E B.TECH	English	18	0
PG	Mtech,Mechanical Engineering	24	B.E B.TECH	English	9	0
PG	Mtech,Electronics And Communications Engineering	24	B.E B.TECH	English	12	0
Doctoral (Ph.D)	PhD or DPhil,Computer Science And Engineering	48	MASTERS DEGREE IN ENGINEERING	English	12	0
Doctoral (Ph.D)	PhD or DPhil,Mechanical Engineering	48	MASTERS DEGREE IN ENGINEERING	English	12	0
Doctoral (Ph.D)	PhD or DPhil,Electronics And Communications Engineering	48	MASTERS DEGREE IN ENGINEERING	English	15	0
Doctoral (Ph.D)	PhD or DPhil,Electrical And Electronics Engineering	48	MASTERS DEGREE IN ENGINEERING	English	5	0

### 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	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	6				7				46			
Recruited	4	2	0	6	3	4	0	7	21	25	0	46
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				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				14
Recruited	7	7	0	14
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	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				6
Recruited	5	1	0	6
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.	4	2	0	0	0	0	0	0	0	6
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	3	4	0	21	24	0	52

<b>Temporary 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.	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

<b>Part Time 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.	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

<b>Details of Visting/Guest Faculties</b>					
<b>Number of Visiting/Guest Faculty engaged with the college?</b>	<b>Male</b>		<b>Female</b>		<b>Total</b>
	0	0	0	0	0

**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	21	20	0	0	41
	Female	8	3	0	0	11
	Others	0	0	0	0	0
PG	Male	0	1	0	0	1
	Female	0	0	0	0	0
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0



**Provide the Following Details of Students admitted to the College During the last four Academic Years**

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	8	4	8	13
	Female	6	2	5	2
	Others	0	0	0	0
ST	Male	5	2	2	4
	Female	3	0	2	3
	Others	0	0	0	0
OBC	Male	47	34	63	82
	Female	28	23	32	43
	Others	0	0	0	0
General	Male	24	49	49	43
	Female	10	9	11	18
	Others	0	0	0	0
Others	Male	0	2	2	2
	Female	0	0	2	0
	Others	0	0	0	0
Total		131	125	176	210

## Extended Profile

### 1 Program

#### 1.1

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

2019-20	2018-19	2017-18	2016-17	2015-16
371	414	474	451	434
File Description		Document		
Institutional data prescribed format		<a href="#">View Document</a>		

#### 1.2

Number of programs offered year-wise for last five years

2019-20	2018-19	2017-18	2016-17	2015-16
12	12	12	14	14

### 2 Students

#### 2.1

Number of students year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
501	610	722	854	875
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

2019-20	2018-19	2017-18	2016-17	2015-16
97	97	124	166	166

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

2019-20	2018-19	2017-18	2016-17	2015-16
150	157	235	212	224

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

2019-20	2018-19	2017-18	2016-17	2015-16
64	75	120	127	127

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

2019-20	2018-19	2017-18	2016-17	2015-16
111	128	120	182	131

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: 62**

**4.2**

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

2019-20	2018-19	2017-18	2016-17	2015-16
4015	420	488	477	440

**4.3**

**Number of Computers**

**Response: 346**

NAAC

## 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 curriculum is designed & framed by the Board of Studies (BoS) of the affiliating University and approved by the Academic council of the Visvesvaraya Technological University (VTU), Belagavi.

- M S Engineering College, affiliated to Visvesvaraya Technological University (VTU) and the college follow the curriculum given by the university.
- The Curriculum is designed to ensure that the students have the required domain knowledge, skills and attitude.
- University provides the opportunity to students to link studies with their career plan and personal goal by using combination of compulsory credits, optional credits for curricular and extracurricular activities.
- First and foremost the requirement of subject content for various programme are suggested by Board Of Studies(BOS), after passing through approval of academic senate, curriculum of different courses are developed by the committee comprising of senior professors from the institutes and industries and will be distributed to all colleges.
- VTU organises workshops to understand the new subjects, where all the staff members of various colleges participate which helps in planning curriculum for those subjects. Formal yet Brainstorming discussions are held in workshops conducted for discussing the need, applicability and scope of various courses proposed for various programmes.
- The quality of classroom teaching is enhanced by giving faculty awareness about pedagogical teaching learning method, blooms taxonomy and Outcome Based Education (OBE) by various workshops and faculty development programs conducted in the department and Institute.
- The college has MoU with various companies and encourage the Students to take up projects and Internship programmes.
- Based on the VTU academic calendar, college prepares the academic calendar with date of commencement of the academic semester, duration of semester, period of internal assessment tests, event organized by all department, and HOD meetings. With respect to academic calendar, each department prepares calendar of events, which include faculty meetings, class representative meetings, class-teacher meetings, cumulative syllabus coverage, departmental events etc.
- The Department allocate subjects to teachers and prepare timetable. The teachers prepare the complete lesson plan, which includes Teaching materials, Question bank, Assignment questions, NPTEL videos for better understanding.
- The teaching process is comprised with e-learning, webinar, case studies, Industrial Visits, Soft Skill Training, Pre-Placement Training, projects and mini projects are organized in order to enhance their Professional Skills.
- The Library Information centre is well equipped with a rich database catering to the needs of students and faculty. They can access E-book and E-journals like IEEE, Springer(<http://link.springer.com> ), Taylor & Francis (<https://www.tandfonline.com> ),

www.crcnetbase.com), Delnet, ProQuest – Management, Knimbus (https://mecb.new.knimbus.com/user#/home), Emerald, British council library and IET Digital Library under VTU consortium.

- We have Innovation Hub, Counselling Cell etc., for the better performance of the students. In addition to this the students are provided with various certification programmes like Spoken Tutorial by IIT Bombay, Infosys Campus Connect Foundation programme which helped the students in developing their programming skills and to excel in academics.

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:

- In the beginning of the academic year, academic calendar is published by the University for Respective Course. The M.S Engineering College ensures effective time management and strictly follows timelines given by the affiliating university. The institute prepares its own COE which includes Internal Assessment dates and co-curricular activities which are common to all the departments. This allows the teachers and the students to space out their teaching and learning and regular assessment of the same.
- The departmental activities such as Induction program, Continuous internal evaluation (CIE) schedule, Project / Internship / Technical Seminar evaluation schedules, Student Counselling, Seminar/Technical talk/ Guest Lecture schedule and Student Feedback are considered.
- The academic activities of the department start with subject allotment process . The time table is prepared and circulated. The teacher plans the curriculum delivery, mode of delivery and study materials and prepares the lesson plan along with COPO Mapping.
- At the beginning of the semester, Student counselling is done to understand the problems & difficulties of the students. CIE is conducted and evaluated as per the calendar of events. Remedial classes will be conducted for slow learners and improvement tests will be given.
- Feedback from the students will be collected at the end of the semester and necessary instruction will be given to the faculty to improve the quality of teaching. To enhance the knowledge and skills of the students, Seminars/Workshops/Technical talks will be conducted on the latest technologies.
- The performance as well as curriculum gaps of the student is continuously evaluated with respect to Theory, Laboratory, Project, Seminar and Internship courses.
- For each course, evaluation will comprise of two components: Continuous Internal Evaluation(CIE) and Semester End Examinations(SEE), the weightage is 40% and 60% respectively from 2017 onwards..
- For 2015 scheme, internal evaluation was conducted for 20 marks. An average of best two tests is considered out of three conducted tests for 30 marks. These marks were scaled down to 15 and the remaining 5 marks were awarded by conducting quiz or assignments. For 2017 and 2018 scheme internal evaluation is for 40 marks. Average of all three tests of 30 marks each and the remaining 10 marks will be awarded by conducting quiz/assignments/seminar.

- The syllabus is covered in-line with Course Outcome, Program Outcome and Revised Bloom's Taxonomy. The HOD and IQAC member scrutinize the question paper.
- The faculty will evaluate the answer books as per the scheme and solution and marks sheet is submitted to the HOD.
- This Internal Assessment for Laboratory component includes write up, design, execution, observation, analysis, modification and viva-voce. The marks will be allotted as per rubrics framed by the course coordinator.
- To assess the Technical seminar, Internship and Project, the rubrics are framed. In the U.G. program, the project groups are formed with a maximum of 4 students per group. In P.G. program, individual student will carry out the project. The project work will be evaluated by conducting multiple reviews at different phases of the project.

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:** C. Any 2 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>
Any additional information	<a href="#">View Document</a>
Link for Additional information	<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:** 66.67

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

Response: 8

File Description	Document
Minutes of relevant Academic Council/ BOS meetings	<a href="#">View Document</a>
Institutional data in prescribed format	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

Response: 7

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

2019-20	2018-19	2017-18	2016-17	2015-16
3	1	1	1	1

File Description	Document
List of Add on /Certificate programs	<a href="#">View Document</a>
Brochure or any other document relating to Add on /Certificate programs	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Link for Additional information	<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: 10.7

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

2019-20	2018-19	2017-18	2016-17	2015-16
112	66	66	40	57



File Description	Document
Details of the students enrolled in Subjects related to certificate/Add-on programs	<a href="#">View Document</a>
Any additional information	<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 Institute has made all efforts to build healthier and harmonious working environment with respect to issues related to Gender, Environment and Sustainability, Human values and Professional Ethics into the curriculum.

#### 1. Gender:

- To prevent sexual harassment at workplace and to empower the women employees, the Institute has constituted 1) Grievance Redressal Committees 2) Women Sexual Harassment Squad 3) Women Sexual Harassment Committee 4) Anti Ragging Committee to effectively curb any unhealthy working condition for the women employees and to increase their morale & empower them.
- Equal opportunities are extended to all in every aspect of teaching and learning in the Institute as it believes that gender discrimination is a crime.
- Students of both genders holistically participate in various co-curricular activities organized in house & outside the Institute.
- Students of both genders are encouraged to participate and organize extracurricular events such as sports & cultural activities without any discrimination.
- Every year the Institute is organizing woman's day celebration to respect the women force at all levels, all administrative bodies of the Institute have women coordinators/members.

#### 2. Environment and Sustainability

- The University has made it compulsory to study "Environmental Science & Engineering" in their regular curriculum to create awareness related to various environmental issues the world is facing.
- Students are given ample opportunity to learn about the climate change and potential hazards of climate change.
- Various extension programmes are being organized by the Institute through NSS unit to create awareness among the rural community with respect to ecological balance and its importance.
- Students are motivated to take up projects related to environmental issues to overcome the identified problems.

#### 3. Human Values and Professional Ethics

- The University has made it mandatory to study the “Constitution of India and Professional Ethics” to provide basic information about Indian constitution, to identify individual role and ethical responsibility towards society and to understand human rights and its implications.
- This course helps the students to gain knowledge , legal literacy and thereby to take competitive examinations. It helps the students to understand state and central policies, fundamental duties, electoral process, and functions of municipalities, panchayaths and co-operative societies.
- The Institute regularly organizes birth anniversaries of great personalities, National & State festivals, World Yoga day, etc. to boost morality and awareness among the staff & students.

<b>File Description</b>	<b>Document</b>
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>
Any additional information	<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:** 3.05

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

2019-20	2018-19	2017-18	2016-17	2015-16
13	13	13	13	13

<b>File Description</b>	<b>Document</b>
Programme / Curriculum/ Syllabus of the courses	<a href="#">View Document</a>
MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship	<a href="#">View Document</a>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	<a href="#">View Document</a>
Any additional information	<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:** 29.74**1.3.3.1 Number of students undertaking project work/field work / internships**

Response: 149

File Description	Document
List of programmes and number of students undertaking project work/field work/ /internships	<a href="#">View Document</a>
Any additional information	<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:** D. Any 1 of the above

File Description	Document
Any additional information (Upload)	<a href="#">View Document</a>
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management (Upload)	<a href="#">View Document</a>
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:** C. Feedback collected and analysed

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:** 31.36

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

2019-20	2018-19	2017-18	2016-17	2015-16
131	125	176	210	228

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

2019-20	2018-19	2017-18	2016-17	2015-16
390	420	540	720	720

#### File Description

#### Document

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

#### 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:** 63.2

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

2019-20	2018-19	2017-18	2016-17	2015-16
62	59	87	99	102

#### File Description

#### Document

Average percentage of seats filled against seats reserved

[View Document](#)

Any additional information

[View Document](#)

## 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:

Once, a student joins the program after admission, the institution has been practicing to identify the learning levels of the students through the following methods:

**1. Continuous Assessment(CA):** Continuous Internal Assessment and Semester End Examinations (SEE) provide the means to assess the learning levels of the students in all courses and slow/fast learners are identified to take up further measures.

**2. Interaction in classrooms and laboratory:** To assess the strength in basics, understanding and articulation abilities, etc.

The Institute fosters an independent learning environment that contributes to the academic and personal growth of all levels of Learners.

#### Advanced learners:

- They are encouraged to present their project/research findings at conferences
- They are encouraged to read journals available in the institute.
- Do online certificate courses from NPTEL/Coursera etc to strengthen their knowledge levels
- They are encouraged to utilize the internet facility to take online tests and watch videos related to advanced topics.
- They are encouraged to work on industry defined problems and participate in competitions
- Encouraged to attend competitive events conducted by other colleges
- They are encouraged to take up competitive exams such as GRE, GATE, CAT, MAT, etc.
- Spend their eighth semester doing internships/project works in industries.
- They are encouraged to answer special quiz programs developed exclusively for them

#### Slow Learners:

The identified slow learners in the above methods will be considered for Remedial classes/Tutorial classes. To support and motivate the slow learners, the following measures are taken.

- **Remedial Classes:** Remedial Classes are conducted for slow learners as additional classes in the required courses to reach the expected learning level. Separate hours are allotted for Remedial classes in the class timetable.
- **Bridge courses:** The leap from Pre-University to Professional Education comes with a sudden blank spot for some of the students; bridge courses are conducted in required subjects to provide confidence among the students that they can learn the subjects better and excel in them.
- **Mentors-Mentee Interaction:** Counseling Sessions are conducted regularly by allotting an hour in

the timetable allotting 20-25 students to a faculty member. Faculty maintains individual proctor diaries for each student to record the regularity, student academics, extra and co-curricular activities. Apart from counseling, expert lectures in personality development are conducted regularly to counsel the students on placements, higher studies, and stress management.

- Students who are at risk of dropout are given special attention and are advised to take the most appropriate decision depending on the number of arrears subjects.
- **Scholarships:** The socially and economically disadvantaged students are supported with scholarships, fee reimbursement, and concession facilities as per government rules.
- **Audio-Visual Media:** Students having different abilities and interests are given extra focus by ICT Usage like showing YouTube videos, Movie screening with subtitles, and reading a book simultaneously. Students struggling with inferiority complexes, hearing difficulties, language acquisition difficulties, stammering are exposed to this method which makes the learning more fun and effective.

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

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

**Response:** 7.83

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

## 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:**

Student-centric teaching methods are adopted by the college for the effective communication of the subject knowledge to the students. Students are taught with the mission that fosters a learning environment that nurtures exploration of various skills and critical thinking about the subject.

#### **EXPERIENTIAL LEARNING:**

1. **Internships:** Through MOUs with the Local/National/Multi-National premier institutions and

industries, the institute facilitates student internships and industry-related projects.

2. **Collaborative Laboratories:** The Institute collaborated with Infosys, Bombay Spoken Tutorial, NPTEL, CISCO, Blue Prism Company, Google Cloud, MuleSoft, etc. software companies to train the faculty and students in the industry need-based technologies and practices.
3. **Bridge Courses:** Bridge courses in basic sciences are conducted for first-year students at the beginning of first-year classes, as per the AICTE norms.
4. **Field Visits/Industrial visits:** The Institute gives top priority for technical visits at industries as a value-added learning method for students every year.
5. **LMS:** The College made the LMS – uacademi ([www.uacademy.com](http://www.uacademy.com)) as one of the best practices to cover various learning levels such as asynchronous discussions, group tasks, home assignments, video lectures, demos, PPT illustrations, case studies, etc.
6. **Virtual Labs:** The concept of a virtual laboratory is to provide students a chance to perform experiments using the internet. The Virtual lab program presents a unique opportunity to boost the quality of engineering education, make a stronger understanding, and provide the necessary practical skills to young engineers through cost-effective outreach and distance learning activities.
7. **Research Project:** Final-year students have the opportunity to complete their projects at the Research and Development Centre of the institution.

#### **PARTICIPATIVE LEARNING:**

1. **Seminars/Workshops:** Students are trained regularly in modern trends and innovative technologies by organizing workshops/seminars inviting experts from the industry.
2. **Group Assignments/Mock Interviews:** Group discussions/tasks are conducted from the second year onwards in soft skills courses. Mock interviews are conducted before the campus placements, to improve confidence levels in the student.
3. **Case studies:** Academic projects are being implemented.

#### **PROBLEM-SOLVING LEARNING:**

1. **Open-ended problems in Laboratories:** In addition to the regular laboratory experiments, the goal of the student in labs is also targeted to develop hands-on and feasible solutions for open-ended problems given in the laboratories using current technologies.
2. **Tutorials:** Intended to have individual attention to develop better problem-solving skills.

**3. Developing innovative models:** Take up some real-world problems for developing new products/models with novelty in perspective of meeting challenges in the industry, government, and academia.

**4. Mini and Major projects:** Work done in the earlier semester through field visits and information gathering in Term paper/EPICS is continued for development and implementation.

**5. Individual or small group-based assignments:** tasks on case study problems, current technologies, and industry need-based problems are assigned for individual students and groups of students to address and develop feasible solutions.

**6. Hands-on training programs:** in every semester, training activities covering advanced courses, industry/latest trends are held for students to explore and practice current technologies.

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

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

#### Response:

Each classroom is well-equipped with an LCD projector and screens. The college issued a separate Laptop/PC to each department with the printer. The college has installed a Wi-Fi unit for the students inside the campus. Further, it has a computer lab and language lab with internal LAN. Broadband Internet connection is available to function all the above devices very speedily.

All staff is familiar with all the latest ICT tools. Regular training was conducted for faculties for training them to use LMS(uacademi.com), Google Classroom, Canvas, youtube channel, etc. Currently, All teachers are conducting webinars via google meet and google classroom, Canvas, etc. Softcopies of all teaching notes, PPTs, Question Papers, Laboratory Manuals, and Video lectures are sharing with students via google classroom, canvas, etc. All these multimedia preparing to simplify the topics to be studied by the students in a more meaningful way.

A Virtual Laboratory facility developed by the college helps the students to motivate them to do online laboratories from Home and it is available on the college website for public access. Students can execute the experiments of various laboratories of Computer science and Engineering and Electronics & Communication Engineering by using VirtualLab.

The college has a separate Language lab running under the supervision of a Language teacher is very useful and supportive to our students for enhancing their communication skills and soft skills.

An NPTEL local chapter running in College and students are motivated to undergo NPTEL certifications via NPTEL chapters. To keep our students and teachers pace with the changing scenario, the library is



regularly updated with online resources, VTU Consortium, NPTEL Swayam Online Courses. Our library consists of a good number of educational CDs and DVDs. The

recorded video lectures of teachers are uploaded on the college youtube channel as well as personal youtube channels of Teachers. Social media is skillfully used by the college through its Whatsapp group, Facebook, Twitter, Instagram accounts, and all these links are visible on the front page of the website.

The institution encourages teachers to attend training programs, workshops, seminars, and conferences related to ICT use or innovation in teaching-learning. The college is affiliated with IIT-Bombay spoken tutorial.

ICT resources in the college helped our teachers and students to realize new dimensions of learning. The college promotes blended learning in all aspects to prepare the teachers and students for the new competitive world.

The college has 21 Classrooms having ICT facilities(Attached with Projectors, Computer, Wi-Fi Internet Connection) in various departments.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Provide link for webpage describing the ICT enabled tools for effective teaching-learning process	<a href="#">View Document</a>

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

**Response:** 13.18

#### 2.3.3.1 Number of mentors

Response: 38

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll.	<a href="#">View Document</a>
mentor/mentee ratio	<a href="#">View Document</a>
Circulars pertaining to assigning mentors to mentees	<a href="#">View Document</a>

## 2.4 Teacher Profile and Quality

**2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years****Response:** 76.6

File Description	Document
Year wise full time teachers and sanctioned posts for 5years(Data Template)	<a href="#">View Document</a>
List of the faculty members authenticated by the Head of HEI	<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:** 8.33**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**

2019-20	2018-19	2017-18	2016-17	2015-16
6	5	9	9	14

File Description	Document
List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template)	<a href="#">View Document</a>
Any additional information	<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:** 3.44**2.4.3.1 Total experience of full-time teachers**

Response: 220

File Description	Document
List of Teachers including their PAN, designation, dept and experience details(Data Template)	<a href="#">View Document</a>
Any additional information	<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:

The rules and regulations for internal assessment are formulated by the affiliating University and are communicated to students through Scheme and syllabus copies supplied at the beginning of their academic program. Three university schemes(2015, 2017, and 2018) are offered to students depending on their admission year.

The schedules of all internal assessments are communicated to students and faculty at the beginning of each semester by circulating the institute academic calendar. Which is prepared on par with the University academic calendar published in the students' notice board in each department and in the WhatsApp group of students.

Question papers are set based on Course outcomes of the subjects and are approved by heads of the department/Internal Quality Assurance Committee(IQAC) of the respective departments. Scheme and Solution are prepared by the faculty on completion of the assessment. Evaluation of blue books is based on scheme and solution by the faculty. The blue books are given to students after the completion of the evaluation for verification of the marks.

#### Theory subjects assessed based on:

- Three internal tests
- University Semester End Examination
- Assignments/Unit tests/Quizzes

#### Practical subjects assessed through:

- Weekly evaluation by the completion of the execution of each experiment
- One Final internal tests
- University external lab exam
- Mini projects

#### Major Projects work assessment:

The project work starts at the end of the sixth semester. Senior faculty members, HOD, and Project Coordinators select projects for each group considering the quality, relevance, University norms. Each project group consists of a maximum of 5 student members. Projects are selected in line with the Department's mission, vision, PEO, PO, and PSOs. Students submit project abstracts to the department project coordinator along with their project group members and area of interest. The list of previous year's projects is displayed on the notice board as well as the department library which ensures no repetition of project work and also encourages students to enhance the previous works. Faculty members encourage students to do in-house projects. They will be provided with necessary hardware and software support.

#### The project was assessed based on:

- Three Internal project reviews for Phase 1 and Phase 2 each
- Final external university project review

We also encourage them to publish their project ideas in conferences and also publish papers in Journals. Those projects having working models to display were displayed in the Department Project exhibition.

#### **Seminar Assessment:**

In the final year, students have a seminar in their curriculum. The students have to select a recent and innovative topic and present it in front of an evaluation panel coordinated by the seminar coordinator, and their class students.

#### **The seminar presentation was assessed based on:**

- Rubrics were used for the transparent evaluation of the seminar. Which prepared based on the relevance of the Topic, Presentation styles, involvement of discussion, Knowledge, and Reports preparation

#### **Internships:**

Students studying two schemes (2017 and 2018) should undergo internships with Industry. Internships will help the students to gain skills that can apply to future jobs.

<b>File Description</b>	<b>Document</b>
Any additional information	<a href="#">View Document</a>
Link for additional information	<a href="#">View Document</a>

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

##### **Response:**

The college follows strictly the guidelines and rules issued by the affiliating university while conducting internals and semester-end examinations. An examination committee, comprising of a HOD as coordinator and other teaching members, is constituted to handle the conduct at the department level.

Three internal assessment tests are given during each semester, Time table for which is prepared well in advance and communicated to the students earlier. Seating plan and table marking are followed even for internal assessment tests and it is displayed on the notice board and shared among the students in their WhatsApp groups along with the Internal assessment timetable.

The evaluation of all test booklets is based on the scheme of evaluation prepared by the teacher and approved by IQAC. After evaluation of internal assessment answer scripts, the scripts are given to students to have an idea of their performance in the test. If they come across any doubts, clarification is given which enables them to perform better in the future. Once the Marks are finalized by the faculty, they could enter them into the software within the scheduled time. The consolidated Marks as progress reports are sent to the parent of respective students and the same is visible to the student in their login. By adopting the criteria as per the direction of affiliating university, complete transparency is maintained in internal assessment tests. Students and faculty members are made aware of the transparency to be maintained in the system of assessment.

All the experiments of the various practical subjects are evaluating after the completion of the execution of the experiments. The marks awarded for experiments are written by the faculty in the respective experiences in the record books. So the grievance related to Laboratory marks is resolved from the lab itself during the conduction. The final marks of practical subjects are also uploading in software for students per-view.

After preparing the assessment report it is shown to the students, if any grievances are there they can be resolved immediately and submitted by the concerned faculty to the department, the copy of the same is uploaded in the VTU at the end of the semester. The printout of finalized consolidated marks list obtained from the university portal is signed by the students and circulating among students.

Any grievances related to university question papers like out-of syllabus repeated questions, and improper split of marks, marks missed, wrong question numbers during semester exams are addressed to the principal and communicated to VTU.

If a student has any grievances related to the evaluation of university answer scripts, are addressed by the university by revaluation option. Based on the university scheduled time students can apply online for answer scripts revaluation, in which the re-evaluated marks can be obtained during the announcement of revaluation results of the same semester. To maintain transparency, students can apply for a photocopy of their answer script and they may decide on re-valuation/re-totaling.

File Description	Document
Any additional information	<a href="#">View Document</a>
Link for additional information	<a href="#">View Document</a>

## 2.6 Student Performance and Learning Outcomes

**2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.**

### Response:

The college is adopting Outcome-Based Education(OBE) in its teaching-learning process based on the university curriculum. The College Vision, Mission, Quality Policy are clearly stated and displayed. The

learning effectiveness of any program and course depends on the Vision, Mission, Program Educational Objectives(PEOs), POs, PSOs, and COs of the department. Derived from Vision, Mission, and Quality Policy of the College and that are drafted following discussions with all the stakeholders.

Each faculty who are responsible for subjects prepare a course file that contains Lesson Plan, Attendance, Question Banks, etc. The Lesson plan prepared by the faculty contains course objectives, course outcomes, CO-PO mapping, Modules-wise plan, Assessment plan, Teaching-learning tools, reference material, the total number of teaching hours and Question Banks, etc. COs of the different courses are first presented in the meeting with HOD and IQAC members. Once approval has been given the course file is communicated to the students via Introduction class of the subjects, the course portal, and social media.

While addressing the students, the HODs create awareness on POs, PSOs, and COs. The faculty members, class teachers, mentors, course coordinators, program/ISO coordinators also inform the students and create awareness and emphasize the need to attain the outcomes.

Course outcomes of each subject disseminated by the faculties through Introduction class via PPTs. Course outcomes of the same subjects are also available on the course web page of their online classes.

File Description	Document
Upload COs for all Programmes (exemplars from Glossary)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Past 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:

#### Attainment of Outcomes:

The Program Outcomes (POs) and Program Specific Outcomes (PSOs) are accomplished through the delivery of the curriculum. Course Outcomes (COs) are defined for each course and they are mapped to POs and PSOs. A set of performance evaluation criteria is used for quantitative assessment of COs Thus the attainment of COs provides evidence of attainment of POs and PSOs.

Following are the different methods for Assessment, Evaluation, and Measurement of POs/PSOs

- Direct Assessment Methods
- Indirect Assessment methods

#### Direct Assessment methods:

- COs of theory subjects are assessed through

- Three Internal Tests
- Assignments/Unit Test/Quizzes
- External Semester End Examination

The CO is mapped against each question and CO analysis is carried out by faculty for each course and documented in the Subjects Course File. The contributions of COs are assessed in high, moderate, and low levels, towards the attainment of Pos/PSOs.

Semester-End Examination of Theory Subjects: The questions in semester-end examinations are tested about all COs, in varying Blooms' Taxonomy Levels.

- COs of practical subjects are assessed through
  - Weekly Assessments of each experiment to be conducted
  - Final Internal Practical Laboratory Test
  - External Semester End Examination

Laboratory Records: Weekly Assessments of each experiment to be conducted used for both continuous Assessment and Semester-End Examinations are conducted to test the CO's attainment.

- Cos of Projects/Seminar/Internships are assessed through
  - Project/Internship/Seminar Review meeting/Presentation
  - Final Presentation
  - Report Writing

#### **Indirect Assessment Methods:**

- **Program – Exit survey:** This survey taken from the final year students after their B.E program stands as the comprehensive feedback for the PO/PSO assessment
- **Alumni Survey:** This survey is conducted annually through Google link with the Alumni to obtain the inputs and suggestions on PO attainment in the real-time societal environment
- **Employer Survey:** This survey is taken from the employer to measure the PO attainments.

#### **The mechanism for the attainment of each CO of a subject:**

1. Set the target level (threshold) to be achieved based on the course analysis and past performance.
2. Calculate the maximum marks of activities (Test Questions, Assignments, Quizzes, Elaboratory Experiments, Project review, etc) mapped to a particular CO.
3. Calculate Marks scored by each student involved in the activities listed in Step 1 and that are mapped to the CO
4. Compute Step 3 divided by Step 2 for each student involved in the assessment process.
5. Calculate the percentage of students who scored above the target level set. If percentage obtained above 80% then the attainment Level is 3, above 70% and below 80% then attainment level is 2, above 60% below 70% then attainment level is 1

#### **The mechanism for the attainment of each PO of a subject:**

1. Define the CO-PO mapping of the Subject
2. Calculate the attainments of each Cos
3. Calculate the Weighted average of each PO which are mapped to COs of the subjects with the values obtained from Step1 and Step 2

The total attainment of PO's of different subjects is calculated as the average of Directed Assessment and Indirect Assessment.

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

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

**Response:** 91.14

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

2019-20	2018-19	2017-18	2016-17	2015-16
139	147	220	200	192

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

2019-20	2018-19	2017-18	2016-17	2015-16
149	163	235	224	215

File Description	Document
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste link for the annual report	<a href="#">View Document</a>



## 2.7 Student Satisfaction Survey

### 2.7.1 Online student satisfaction survey regarding teaching learning process

**Response:** 2.67

<b>File Description</b>	<b>Document</b>
Upload database of all currently enrolled students (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>

NAAC

## 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, Chairs in the institution during the last five years (INR in Lakhs)**

**Response:** 14.35

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

2019-20	2018-19	2017-18	2016-17	2015-16
1.0	3.24	0	10.11	0

**File Description**

**Document**

List of endowments / projects with details of grants

[View Document](#)

e-copies of the grant award letters for sponsored research projects / endowments

[View Document](#)

**3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)**

**Response:** 7.81

**3.1.2.1 Number of teachers recognized as research guides**

**Response:** 5

**File Description**

**Document**

Institutional data in prescribed format

[View Document](#)

Any additional information

[View Document](#)

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

**Response:** 6.82

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

2019-20	2018-19	2017-18	2016-17	2015-16
1	1	0	1	0

### 3.1.3.2 Number of departments offering academic programmes

2019-20	2018-19	2017-18	2016-17	2015-16
8	8	8	10	10

File Description	Document
Supporting document from Funding Agency	<a href="#">View Document</a>
List of research projects and funding details	<a href="#">View Document</a>

## 3.2 Innovation Ecosystem

### 3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

#### Response:

The Institute has created an ecosystem for innovation, creation and transfer of knowledge by establishing R&D cell, Incubation Center , MOU's and Entrepreneurship Cell. The faculty members are empowered to take up research activities by utilizing the existing facilities. The college has a Research and Development Cell to motivate the faculty members and research projects from various funding agencies like DRDO, DST,AICTE , DBT ,KSCST , VGST, etc,. And also helps to create research culture among faculty members and students. The framework is structured to nurture innovative thinking amongst all students.

Technical events such as techniude, project exhibition and paper presentations are organized to tap the talents of students. Physical infrastructure comprising well equipped laboratories with modern simulation tools and equipment for carrying research activities is provided. MSEC is a member of Cisco Networking Academy and has CISCO Center of Excellence Lab in the Campus. The institute has has received Govt. of Karnataka's most prestigious grant from VGST, for "Centre of Excellence-Underwater Sensing" and "Centre for Innovation-Real Time Virtual Lab".

Research and Development Cell facilitates for creation and transfer of knowledge by conducting technical workshops, seminars, industrial visits, Training programs, National and International Conferences, Technical presentations by faculty members and also provides mechanism for submission of minor and major research proposals for funding by Institute/University and other funding agencies

M S Centre for Innovation Incubation and Entrepreneurship (MS CIIE) is established in the year 2018 is envisioned to nurture young scholars to develop industry related knowledge by synergizing and leveraging

strands of innovation, incubation and entrepreneurship by facilitating industrial interactions, accelerating creativity and commercialization of products in rural technologies, industrial sectors of agriculture and medical and social impact. The center supports MSEC students, staff members, alumni, faculty, R&D partners and regional innovators. The innovations, incubation and entrepreneurs developed at MS CIIE will contribute to solving socio-economic development challenges and complement the central and state government's effort of transforming the national economy through employment and wealth creation.

The faculty published their research papers in the various journals as well as conferences at national & international level. College is committed to nurture the students to be next generation leaders and also team players consistent with the dynamic requirements of the Corporate World.

College has four research centers in the department of computer science, Electronics and Communication , Electrical and Electronics and Mechanical engineering and are approved by VTU.

R&D has filed 32 number of patents and has grants more than 1Cr from government agencies.

R&D also have consultancy in developing AARON software.

The college is with firm conviction that the Ecosystem Framework encompasses all facts of the holistic development of students, who would contribute to the country's growth as socially responsible citizens.

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

### 3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

**Response: 2**

#### 3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
0	2	0	0	0

File Description	Document
Report of the event	<a href="#">View Document</a>
List of workshops/seminars during last 5 years	<a href="#">View Document</a>

### 3.3 Research Publications and Awards

#### 3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 1.11

##### 3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

Response: 10

##### 3.3.1.2 Number of teachers recognized as guides during the last five years

Response: 9

#### File Description

List of PhD scholars and their details like name of the guide , title of thesis, year of award etc

#### Document

[View Document](#)

#### 3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 0.51

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

2019-20	2018-19	2017-18	2016-17	2015-16
4	16	18	6	8

#### File Description

List of research papers by title, author, department, name and year of publication

#### Document

[View Document](#)

#### 3.3.3 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: 0

##### 3.3.3.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
List books and chapters edited volumes/ books published	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4 Extension Activities

#### 3.4.1 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:

The institution extends research culture through college neighborhood network to fulfill social responsibility. Issues related to Environment and Sustainability are taken care in the curriculum through courses such as Environmental Studies.

- Students are motivated to do innovative projects which solve social problems and meet the essential needs with academic projects.
- As a part of the extension activities which emphasizes community services, N.S.S. Unit provides free medical aid; supplies food for the people who are affected during natural calamities like flood, heavy storm, etc. NSS unit has undertaken the variety of Activities which directly benefit the Society and the people. We have our NSS unit with 100 enthusiastic volunteers who are always ready to take up any Service Activity.
- Apart from this, our NSS unit is organizing Swachh Bharath and Plastic Free Campus activities in and around the college campus and also in adopted village. Under 'Swachh Bharat Abhiyan', Students initiate drives to create awareness about overflowing garbage bins, cleanliness of roads by having rallies with posters and placards. To make the students and the community focus on sanitation, various Swachh Bharat programs are organized in the campus and neighborhood community.
- Blood donation camps in collaboration with Lions Club, and Indian Red Cross Society are a regular feature.
- Students participate in many of the socially sensitizing programmes related to Tree Plantation, Yoga.
- Women's Day, Teachers' Day, Engineers' Day are celebrated to promote the Universal and human values, national integration and communal harmony among the students.
- M S Centre for Innovation Incubation and Entrepreneurship (MS CIIE) is established in the year 2018 is envisioned to nurture young scholars to develop industry related knowledge by synergizing and leveraging strands of innovation, incubation and entrepreneurship by facilitating industrial interactions, accelerating creativity and commercialization of products in rural technologies, industrial sectors of agriculture and medical and social impact.
- The college is with firm conviction that the Ecosystem Framework encompasses all facts of the holistic development of students, who would contribute to the country's growth as socially responsible citizens.

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

### 3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

**Response: 0**

#### 3.4.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

<b>File Description</b>	<b>Document</b>
Number of awards for extension activities in last 5 year	<a href="#">View Document</a>
e-copy of the award letters	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4.3 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: 15**

#### 3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
3	4	2	6	0

File Description	Document
Reports of the event organized	<a href="#">View Document</a>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

### 3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

**Response:** 49.9

#### 3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

2019-20	2018-19	2017-18	2016-17	2015-16
213	575	277	635	0

File Description	Document
Report of the event	<a href="#">View Document</a>
Average percentage of students participating in extension activities with Govt or NGO etc	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

## 3.5 Collaboration

### 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

**Response:** 0

#### 3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0



File Description	Document
e-copies of related Document	<a href="#">View Document</a>
Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/ internship	<a href="#">View Document</a>

### 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

**Response: 2**

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

2019-20	2018-19	2017-18	2016-17	2015-16
1	0	0	0	1

File Description	Document
e-Copies of the MoUs with institution/ industry/corporate houses	<a href="#">View Document</a>
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	<a href="#">View Document</a>

## 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:**

The College has adequate infrastructure sprawling around 13.28 acres Green campus with 6 blocks and a total build up area of 22000 Sq.m, 2225 Sqm of Administrative area, 6100 Sqm of Amenities area, Carpet area of 11944 Sq.m and Circulation area of 5600 Sqm at par with the standards and norms of AICTE, VTU, with respect to human resources, laboratory equipment, built-up place & learning resources. The Policy regarding the infrastructure requirements are planned accordingly.

- To plan for class rooms as per the requirements.
- To establish laboratory as per the syllabus.
- To have seminar halls & board rooms.
- To provide amenities like canteen, transport, playgrounds etc.
- To establish class rooms and laboratories for departments.
- To include infrastructure to accommodate the increase in student strength in the existing departments.
- To purchase books in central library and departmental library to meet the requirements.

Budget estimation for every AY is submitted by HoD's to Principal during June/July. Every purchase will be made after severe scrutiny at various levels.

**Details of class rooms, tutorial rooms, seminar halls and laboratories**

Type	Details	Area in Sq.m
Class Room	70	3300
Laboratories	42	4620
Workshops	01	400
Tutorial Room	10	462
Computer Center	01	150
Library & Reading	02	700
Medical Room	01	100
Digital Library	70	3300
R & D Block	01	4400
Placement Cell	01	100
EDP Cell	01	100
Seminar Hall	02	1452
Language Lab	01	40
Internet Center	01	100
Common Room Boys	01	100
Common Room Girls	01	100

**Classrooms:**

The institution has sufficient number of well-furnished, well ventilated, spacious classrooms for conducting theory classes.

#### **Laboratories:**

All laboratories are well equipped, and well maintained not only for carrying out curriculum oriented lab practical's but also to carry out research activities.

#### **Technology enabled learning rooms:**

Each department in the college is provided with LCD projector.

#### **Seminar Halls:**

- College has two seminar halls with 200 Seating Capacity to conduct conferences, workshops and symposia for students and faculty of the departments and one seminar hall for each department equipped with LCD projector, white board and Public addressing System.

#### **Tutorial classrooms:**

- Each department has tutorial classrooms to conduct tutorial classes to address the personal level doubts and queries of the students.
- Tutorial class is equipped with glass board, wooden benches, fans, lights and windows.

#### **Specialized facilities and equipment for teaching, learning and research:**

- The college has exclusive language lab attached with audio, video facility.
- Apart from the central library, each department is having separate departmental Library with reference and text books.
- E-learning facility is provided which covers a wide set of applications and including computer based learning and virtual labs learning.
- College has also subscribed to VTU e-learning Consortium and NDLi of GoI.
- For self learning, reference books for all the subjects are available in the central library.
- Computing facilities for the Students in the ratio of 1:4 for UG and 1:2 for PG is maintained in every department along with Printers & Reprographic facilities
- Common Room for Boys and Girls are available in the campus.

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

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

**Response:****Sports (outdoor and indoor games), gymnasium:**

- Students are encouraged to take part in sports activities after the college hours.
- College teams are formed to take part in VTU competitions and other intercollegiate competitions.
- Sports event competitions are conducted in the interdepartmental level in a academic year and the winners are awarded.
- Qualified Physical Director has been appointed to look after the day to day games and sports activities of the college
- The outdoor games such as Ball and shuttle badminton, volley ball, throw ball, cricket, football, kabaddi, Kho Kho, Basket ball and hand ball etc. are available.
- A separate indoor games facility for playing table-tennis, caroms and chess and Gym is provided and it is being used by the students regularly.
- College has exclusive grounds for every sport ( Cricket Ground, Volley Ball Court, Badminton Court, Basket Ball Ground and an Yoga Centre)

**Auditorium:**

- The college has an open auditorium with a seating capacity of 1000. All the college events are regularly conducted in this auditorium.

**Cultural activities:**

- Students are encouraged to participate in the cultural events in the college day program.
- Interdepartmental academic competitions are conducted to enhance the talents of students.
- Annual techno cultural festival Nakshatra is conducted every year in the college to showcase the Talent of the students, students are honoured with prizes and awards. Since it is an Inter College festival students from various parts of Karnataka will participate and showcase their Talents.
- International day for Yoga is celebrated every year in the Campus.

**Communication Skills Development:**

- All the branches of first year students are taken care by our placement cell by conducting classes weekly one hour to improve their communication skills.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for 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:** 30.65

## 4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 19

File Description	Document
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<a href="#">View Document</a>
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

## 4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)

Response: 3.19

## 4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

2019-20	2018-19	2017-18	2016-17	2015-16
0	22.43	22.07	28.98	0

File Description	Document
Upload Details of budget allocation, excluding salary during the last five years (Data Template)	<a href="#">View Document</a>
Upload audited utilization statements	<a href="#">View Document</a>

## 4.2 Library as a Learning Resource

## 4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

College Central Library has a spacious built up area of 700 sq.mts, with sitting capacity of 125 members with a qualified senior Librarian, Asst. Librarians and supporting staff. It has two separate Newspaper reading rooms for boys and girls The Library works from 08:00 AM to 08:00 PM on all working days and from 09:00 AM to 01:00 PM on the holidays. It has an Digital Library.

The Library has 98493 volumes with 24985 titles of books and about 9186 Titles of Reference books. The Library also has 32226 e-books as on date. It also consists of 110 Titles and 21900 back volumes of Journals and 9980 e – Journals. A separate reference section is maintained with Handbooks and General knowledge books. Interlibrary loan facility is available through DELNET. Central Library supports

departmental libraries in all departments.

The Library follows open access system encouraging the user to browse freely in the stock area. It is fully automated using the following Integrated Library Management System:

- Name of the ILMS software: Libsoft
- Nature of automation (fully or partially):Fully
- Version:9.8
- Year of automation: 2010
- Online Public Access Catalogue +(OPAC) :Open for all students and staff through remote access throughout the campus.

The institution library was fully automated in a Single Stretch. Online Public Access Catalogue: It enables the library users

- To know the bibliographic records of presently available books within library
- Computerized Catalogue facility for the available book Search Services through the OPAC interface.
- The bibliographic record can be searched through this interface.
- Books are bar-coded.
- The computers provided in the library are connected on LAN.
- Wi-Fi enabled.

#### **Digital library:**

- The institute has a digital library with 05 computers in the main library and 03 computers in the hostel.
- It has collection of e-journals like IEEE, ASCE, ELSEVIER, DELNET and JGATE publications and e-books.
- The digital library is available on LAN.
- Previous years question papers, NPTEL videos, e-books, GATE Papers and e-journal articles are made available in the digital library for easy access through Intranet.
- Two kiosk machines are available in the campus for OPAC services.

#### **Book Bank Facility for SC/ST students:**

The Book bank facility is available for SC/ST students with a separate collection of few thousands of volumes along with general library books.

#### **Repo graphic Facility:**

Printing, Scanning & copying facilities are available in the library.

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

#### 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

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

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details of subscriptions like e-journals, e-ShodhSindhu, Shodhganga Membership , Remote access to library resources, Web interface etc (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:** 2.46

##### 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)

2019-20	2018-19	2017-18	2016-17	2015-16
1.81683	1.91453	2.24552	5.09279	1.21149

File Description	Document
Details of annual expenditure for purchase of books/e-books and journals/e-journals during the last five years (Data Template)	<a href="#">View Document</a>
Audited statements of accounts	<a href="#">View Document</a>
Any additional information	<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:** 35.4**4.2.4.1 Number of teachers and students using library per day over last one year**

Response: 200

File Description	Document
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:**

The college campus has a well-established state of the art IT-infrastructure and facilities. The campus intranet with 1 Gbps multimode fiber optic backbone network supplemented with Wi-Fi support various services such as website,campus management software, library information system, MOOCS courses, CCTVs, biometric devices, Learning Management System (LMS), online assessments, access to online learning resources and so on. The data center has 24 hours power backup and standby facilities to provide 24/7 services.

The details of up gradation that has taken place over the last five years (2015 -20) are shown below:

20 No. of Dell Optiplex 3040 Intel core i5/ 4GB RAM/ 500 GB HDD was procured in the year 2016 - 17 and 20 No. of Dell Optiplex 3040 Intel core i5/ 4GB RAM/ 1 TB HDD was procured in the year 2016 - 17.

22 No. of Intel Core i3 Processor 6th Generation, 4 GB HDDR3 were upgraded for DESKTOP Computers in the year 2017 - 18. 4GB DDR4 RAM were upgraded in the year 2017 - 18. B/W Prints Canon Laser jet printer 3010MF was procured in year 2017 - 18.

XP Pen Deco 01 Digital Graphics Drawing Pen Tablet was procured during 2018 -19 for Digital Interactive Boards for smart class rooms. Replaced 25 unmanageable basic network switches to Cisco manageable L2 switches in 2018 - 19.

Closed Circuit Cameras (CCTV's) with 32 Channel Cameras and 1 TB DVR were installed during 2018 -19. UPS Backup power was enhanced for an longer backup period during 2018 -19. Routers and Network Switches were frequently upgraded to provide better WiFi Connectivity.

Internet Bandwidth was increased from 25 Mbps to 50 Mbps during the year 2019 -20. Sophos Firewall subscription was done during 2019 -20, XG135 UTM (Users 100): 8GE Port, SSD+ Base Licence for 3



Years. SI No: HSN Code: 8517.

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

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

**Response:** 1.45

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

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

**Response:** A. 250 MBPS

File Description	Document
Upload any additional Information	<a href="#">View Document</a>
Details of available bandwidth of internet connection in the Institution	<a href="#">View Document</a>

### 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:** 19

##### 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)

2019-20	2018-19	2017-18	2016-17	2015-16
98.44	108.37	123	105.24	85.7

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<a href="#">View Document</a>
Audited statements of accounts	<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 institution has defined procedures for maintaining physical, academic and support facilities as per the maintenance policy.

##### **MAINTENANCE SECTION:**

There is a centralized maintenance section which is headed by a Maintenance Incharge and supported by skilled technicians. This section takes care of maintenance of infrastructural facilities which includes plumbing works, electrical, carpentry, masonry and sewage works. The section receives maintenance requirements from the departments and other sections and undertakes the necessary work following internal operating procedures under the directions given by the concerned head of the department.

##### **INTERNAL OPERATING PROCEDURE:**

- Any problem that persist in a department is represented to the maintenance in charge through a letter/mail
- The in charge deputes a skilled person/technician to attend the problem
- The skilled person will resolve the problem on site if no additional material is required.
- In case of material requirement, it is received from the maintenance section through an indent.
- If the material is to be procured from outside, permission is to be obtained from the maintenance incharge / Head of the Institution and arrange for procurement of material to resolve the problem.

##### **1. Physical Facilities**

##### **Electrical Maintenance:**

- Monthly monitoring of electrical equipment such as Generator, UPS, and Batteries is done and its Status is entered in the Log/Stock Book. The suppliers/service providers are approached in case of any major fault.
- For replacement of any part, quotations are invited and part is procured as per the centralized purchase procedure.
- The work done by the service provider will be verified by the respective authorities and a report on completion of work is submitted to the Principal.
- Annual inspection of Electrical installations maintenance and safety of Electric supply is done by

BESCOM.

### **Building Maintenance:**

- A Civil Engineer and a Supervisor are responsible for new construction works and the civil maintenance of buildings including laying and maintenance of the plumbing, water pipe lines, and sanitary fittings following the internal operating procedure.
- Annual inspection is done for Fire Safety by concerned authorities.
- Pest Control maintenance is done periodically.

### **Furniture Maintenance:**

- The Department of Mechanical Engineering maintains the central workshop facility which provides the services including custom fabrication of cabinets, desks, counter tops, installation of doors and windows, and frames for displaying banners.
- The internal operating procedures are followed for maintaining the furniture in the institution.

### **Network / Wi-Fi Maintenance:**

- The functioning of college intranet and internet facility is monitored and maintained by the hardware technicians in association with Network administrator of CSE Department.
- Fiber Optic cable issues are maintained with the support of AMC.
- Any up gradations or modification of the existing Network Model will be carried out by inviting quotations from external agencies following central purchase procedure.
- Issues related to Telephone & intercom will be serviced by the technician from ECE department.

## **2. Academic Facilities:**

### **Library:**

- Equipment in the laboratories is maintained regularly.
- The in-house maintenance and repairs are addressed by the respective department technicians who are qualified and trained.
- Major problems and repairs will be attended in consultation with the suppliers following the central purchase procedure.

### **Class Rooms:**

- Every Department has a faculty in-charge who will periodically check the condition of class room/laboratory amenities like benches, chairs, black boards, fans, lights and LCD's.
- The in charge will resolve the problem through the Head of the Department following the internal operating procedure.

### **Computer Facilities:**

- Around 600 computers, 32 printers and sufficient scanners are available for the staff and students.
- Computers and software in the laboratories are maintained by computer hardware technicians under the supervision of a senior faculty.

### 3. Supporting Facilities:

#### Sports:

The playground and sporting equipment including Gym facilities are regularly available and maintained under the supervision of Physical Director.

#### NSS:

- The College encourages the students to participate in social and nation building activities..
- It aims to motivate the students to identify the needs and problems of the community and involve them in problem solving process.

### 4. Other Facilities:

- The Institute has RO plant, which provides 24X7 drinking water facility. Sufficient number of water coolers is available in the departments to provide clean drinking water. Periodically the quality of water is tested in the Environmental Engineering laboratory.
- As the Institute is located near to National Highway, public transport (BMTC) buses are available for the students and faculty. In addition, the Institute provides Five buses which are used for transportation of students and Staffs.
- Adequate man power is employed to maintain cleanliness of the campus, Classrooms, Staff rooms, Seminar halls and Laboratories, etc. Wash rooms and rest rooms are well maintained.
- The Green Cover of the campus is well maintained by full time gardeners.
- The campus security is monitored through surveillance Cameras and is maintained by supplier under AMC.
- The college reprographic facilities are maintained under AMC. Photo copying charges is fixed at a nominal rate just enough to support the operational costs.
- Qualified Medical Doctor visits and conducts required medical checkups for the students.
- The college has Canteen facility where subsidized food is available for staff and students.
- State Bank of India ATM is located inside the campus to facilitate transactions.

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

## 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:** 38.22

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

2019-20	2018-19	2017-18	2016-17	2015-16
185	228	315	341	291

#### File Description

#### Document

upload self attested letter with the list of students sanctioned scholarship

[View Document](#)

Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template)

[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

##### 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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

#### File Description

#### Document

Upload any additional information

[View Document](#)

Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template)

[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:** B. 3 of the above

File Description	Document
Details of capability building and skills enhancement initiatives (Data Template)	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>
Link to Institutional website	<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:** 23.21

**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**

2019-20	2018-19	2017-18	2016-17	2015-16
167	170	150	135	160

File Description	Document
Number of students benefitted by guidance for competitive examinations and career counselling during the last five years	<a href="#">View Document</a>
Any additional information	<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:** B. 3 of the above

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>
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:** 26.98

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

2019-20	2018-19	2017-18	2016-17	2015-16
34	65	45	67	45

<b>File Description</b>	<b>Document</b>
Upload any additional information	<a href="#">View Document</a>
Self attested list of students placed	<a href="#">View Document</a>
Details of student placement during the last five years (Data Template)	<a href="#">View Document</a>

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

**Response:** 9.33

#### 5.2.2.1 Number of outgoing student progression to higher education during last five years

**Response:** 14

File Description	Document
Upload supporting data for student/alumni	<a href="#">View Document</a>
Details of student progression to higher education (Data Template)	<a href="#">View Document</a>
Any additional information	<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: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)**

**Response:** 60.67

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

2019-20	2018-19	2017-18	2016-17	2015-16
2	1	1	1	1

**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**

2019-20	2018-19	2017-18	2016-17	2015-16
10	3	2	1	1

File Description	Document
Upload supporting data for the same	<a href="#">View Document</a>
Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template)	<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: 8**

**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.**

2019-20	2018-19	2017-18	2016-17	2015-16
6	1	1	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year	<a href="#">View Document</a>
e-copies of award letters and certificates	<a href="#">View Document</a>

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

**Response:**

M S Engineering has a good practice of involving the student members in various administrative, academic, curricular, and extracurricular activities. The students are enthusiastic and effectively participated in the various activities of the committees.

**1. Professional Bodies:** In professional bodies like IEEE, ISTE, CSI, etc. student representatives actively participate by conducting Student conventions, forums, chapters, technical events & quizzes, etc. with the help of faculty members. The ISTE chapter is approved in 2013, 27 faculty have registered. The Computer Society of India student chapter membership number is I01877, 180 students of CSE registered. The coordinators Mrs. Vijayalakshmi and Suraj S organized a technical event and guest lecture program. The IEEE student chapter coordinator Prasanth, Nikitha, and Dr. Anand Kumar.

**2. Cultural Committee:** The institution celebrates the college annual fest Nakshatra, with the help of the Cultural committee Nisha Choudhary, Bharath, Finance Committee are Dr. K S Badarinayan, Madhusudhan, Rajath, Prem Sagar, Bhargav, Joshua James, Student Modulization committee are Vidyashree, Anusha, Ramcharan, Promotion & Publicity committee Archana and team, Event Management committee Nisha Choudhary, Shreya and team. The reception committee is Miss. Vandana, Mrs. Mangala Gowri, Mrs. Anusha, Vanitha, Nayana. They help the faculty in charge of organizing the events.

**3. News Letter / College Magazine Committee:** Student's representatives Vanitha, Pallavi, Raveena,

Pooja help to collect articles, poems, drawings, etc from students. They compose, edit and take initiative in printing the newsletter and magazine. Faculties Krishan Kumar, Sowmya, of the editorial board will guide them in the entire process of printing and releasing the magazine.

4. **Department Event:** There are department associations where students take part in various academic and co-curricular aspects. The conducting event within the department's coordinators are Pooja, Ashwini, Prashanth K P, Bhavana

5. **Student Clubs:** MSEC takes pride in having clubs that cater to every student's needs and promote extracurricular activities. Cultural and Technical clubs play a vital role in the overall development of a student's career. MSEC has many student clubs namely, ROTARY CLUB faculty coordinator Mr. Venkateshappa and Student, LEO CLUB faculty coordinator Mrs.Sumangala. G.Patil and students Shresha and team.

6. **Sports Committee:** The Sports committee aims to conduct various sports events such as cricket, throwball, table tennis, badminton, carom, chess, etc. Every year, MSEC Sports meet will be organized team events and individual events and student volunteers Vinod Kumar, Nishanth, Niranjana, Prasanth, Chandra Shekar will help Physical Education Director Mr.Amarnath T M., The sports committee also recognizes the students eligible for various sports events and sponsors them to take part in various sports activities held outside the college.

7. **Women Grievance Redressal Cell:** The student members of Grievances are Arushi Priya. Chandana. The academic-related issues will be brought to the notice of committee members. If any grievances are reported, then the faculty member who is the Coordinator of this committee will bring them to the notice of higher authorities.

8. **Anti-Ragging Committee:** The faculty Mr. Narayana H M and Student member Ms.Sanjana, will play a major role in informing ragging cases, helping to create harmony, and curb ragging.

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

### 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:** 4.8

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

2019-20	2018-19	2017-18	2016-17	2015-16
5	2	4	5	8

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Report of the event	<a href="#">View Document</a>
Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template)	<a href="#">View Document</a>

## 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:

M S Engineering College Alumni Association was founded in the year 2006 immediately after the first batch of students graduated from the university. The objectives of the Alumni Association is to promote and foster a relationship between alumni and the institute actively and constructively participate in the wellbeing of MSEC, by utilizing the goodwill, rich experience, and services of the alumni Institute scholarships, prizes/medals, etc., For deserving students of MSEC Maintain continuous interaction between the past and present students by publishing a newsletter, holding periodical alumni day celebration Contribute towards improving entrepreneurship development activities, campus placements, library, and center of excellence at MSEC, Arrange lectures by eminent alumni and other eminent personalities for the benefit of students and alumni. MSEC has more than 3000 alumni and a growing strong community of engineers. The MSEC community can be a powerful asset to help build a professional network or it can simply be a great way to remain connected to friends, classmates, and professors who have made an impact in life. MSEC makes sure to keep in contact with the alumni to update and receive the latest alumni news, events, volunteer opportunities, and benefits and services.

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

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

Response: E. <1 Lakhs

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

## 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:

In order to achieve excellence in the operation of the institution requires effective leadership. This leadership is provided by the Management, Board of Governing Council, Principal, and HODs. The MS Educational Trust headed by Sri Muni Swami Raju President supported by M Sudarshan Raju Secretary has a greater vision in promoting MS Engineering college to produce useful engineers for society.

The **Vision** of the college is: M. S. Engineering College shall blossom into a technical institution of national importance with a global network.

**Mission** statements are.

- To inculcate best engineering practices among students through quality education, creativity, innovation, and entrepreneurial skills.
- To provide a conducive environment for experiential learning of engineering concepts to solve real-life problems.
- To imbibe curiosity and problem-driven learning to create value addition and competitiveness.
- To develop and strengthen entrepreneurial quality among students.
- To generate knowledge through research, to address societal needs.

Quality Policy of the college is.

- Striving for Excellence in Quality Engineering Education.
- Our commitment is to comply with mandatory requirements.
- Continuous improvement of the quality management system.
- Our commitment is to achieve student satisfaction by assuring successful completion of the degree with skill sets to solve engineering problems.
- By providing training at all the levels with placement assistance.
- By imparting research and entrepreneurial skills to meet the rapidly changing needs of society.
- Use of modern technology and its up-gradation.
- Participation of all the stakeholders to achieve the vision of the institution.

The Management and Principal actively participate in the formulation of the policy statements and action plans for the attainment of the Vision and Mission of institute. The display of Vision and Mission boards in prominent areas like Principal's room, HOD's room, laboratories, blue books, brochure are ensured to create awareness amongst the stake holders.

The Principal creates action plans, in consultation with faculty members, for assessment of outcomes from

the alignment of action plans through meetings.

The action plans are formulated in line with quality policy and the same are incorporated into strategic plans for effective implementation. The calendar of events of VTU and MSEC ensure that the action plans are implemented with time schedules patterns.

The Principal ensure that all stakeholders are involved in different activities. Parents-Teachers meeting is held in a semester and the induction program for the first year students and the feedback session for the higher semester students are arranged in order to involve stake holders. The Annual alumni meet and the Industry Expert interaction also helps in revising and evolving strategies for implementation of the vision and mission of the institution.

For the reinforcement of cultural excellence, the Vision, Mission, short term and long term goals, Quality policies are kept wide open to all stakeholders for their suggestions.

The perspective plan for next five years of the includes Accreditations, Research centre, Autonomy, Centre of Excellence and Collaborations for higher studies and student placement.

Through participative management, the faculties are involved in various decision-making bodies of the institute.

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

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

#### **Response:**

The institution has a practice of Participative Management. The college provides the better opportunity to all the staff members to participate in the decision-making process, the college administrative and academic structure is in a manner to make the decision by participative arrangement.

MSEC maintains an organizational structure where President is the supreme authority of the organization who appoints the Principal. Principal of the college is the highest administrative and academic Head authority responsible for the all the administrative academic process. Governing council is responsible for deciding the rules and regulations and forward the rules through principal.

The Dean Academics is responsible for guiding all the academic activities. The Dean R and D is responsible for Research related Activities. Academic committee Coordinators are at the institute level and the HODs at the department level for the academic activity.

HODs have operational autonomy at their department level to conduct various academic activities, which

reflects into their departmental academic calendar. Every department also has independent autonomy to improve their department in teaching and learning process, industry institution interaction and research development, introduction of new Certifications and Programmes, interaction with various industries to fill gap between industry and Academics.

The meetings of the department are held often, the recommendations are sent to the principal, the principal in consultation with all department heads takes the final decision.

On administrative ground the Principal is followed by the Accounts superintendent and office superintendent. The college follows all such norms laid down by the Government of Karnataka, AICTE, VTU, UGC for all Academic and administrative Aspects.

**The case study related to such Participative management is stated as follows:**

A) During affiliation process all departmental heads are requested to send their proposals for commencement of new courses and they are inculcated affiliation date.

B) The college prepare financial budget at the beginning of the year. This is prepared by the office administrative head and is with consultation of all departmental Heads. Accordingly, it is verified by the college principal and is sent for sanction to the trust. The trust approves the budget and implementation is carried out.

C) The examinations are carried out periodically throughout the year for which there is separate examination department. The Chief Superintendent is in charge of examination department assisted deputy Chief Superintendent, room Superintendents. They conduct regular meetings and approved by principal thus the participative arrangements is being followed in decision making.

**Decentralization and participation management in College level committee are as follows:**

1. Antiragging committee
2. Academic monitoring committee
3. Internal Assessment Conduction Committee
4. Sports Committee
5. Cultural Committee
6. Placement Committee
7. Transport Committee

All the stakeholders have equal participation in order to achieve the vision of the institution and express their views. Stakeholders have been represented at all the level of organization.

Faculty members are participating from top level as Governing Council Member to department level Committee Coordinators. Faculty meetings with principal and also management are organised on regular basis to discuss the feedback, evaluation reports and views on developing institution and its activities.

File Description	Document
Paste link for 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:

Strategic and long term plans are made in the institution in consultation with the Management and Experts. The strategic plans had to be formulated in terms of action plan and it is deployed by the Principal, Departmental committees, HODs, Deans of academic and R&D.

Broadly MS Engineering College focus on the following strategic plan of action

- Development of Educational Certification Programmes
- Establishment of Industrial Partnership
- Self-Enhancement and Personality Development of students and staff
- Development of R&D in niche areas
- Training and Development of placement skills for students
- Training and Development of knowledge for staff in contemporary areas

Strategic Planning is essential to achieve excellence in Teaching Learning Process, enhancing research capabilities and Outcomes, enable Comprehensive and sustainable institutional progress, expanding opportunities for societal services, encouraging students in research and extra-curricular activities.

1. Effective teaching tools are used to educate students through ICT, Google Classroom, Canvas, etc for the effortless inculcation of new pedagogies.
2. Set targets to achieve programme and course outcomes
  - Practical learning, Internships, Workshops
1. Encouraging faculties for enhancing their excellence
  - Subject Specializations, FDP, Industry Training etc.
1. Students are encouraged to participate actively in Regional and National level competitions

#### Enhancing Research Capabilities & Outcomes

- Student participation in research activities

- Organization of various Technical Events based on recent trends.
- Expand Funding base, Incentivize faculty
- Faculty engagement in consultancy projects
- Projects for public issues in technology areas security, agricultural growth, technology for challenged, water purification, sewage treatment, energy management, waste recycling, e-governance and urban poverty etc.

### Enable Comprehensive and Sustainable Institutional Progress

- The institution believes establishment of new UG in interdisciplinary emerging branches and PG in niche areas and is successful in achieving the new branch of Artificial intelligence for the academic year 2020-2021, and looking forward for the branches robotics, data sciences and 3D printing and design.
- Encouraging students for better career opportunities by facilitating them with technical skills and hands on training for better placements.
- Institute has established an effective Students Mentoring System and a Grievance redressal committee which is quite robust and responsive in nature which ensures better mentoring and well-being of the student.
- The Institute constantly interacts with its alumni by organizing interaction sessions to maintain a cordial relationship with its alumnus.

### Milestones to be Achieved

- Starting Inter-disciplinary Programmes
- Enhancing Research Capabilities and Outcomes
- Strengthening collaboration with Industry in Research, Consultancy, Training & Internships
- Inculcate UG & PG courses in Emerging Areas of Technology
- To improve Placements and Entrepreneurship
- Enhanced Community Engagement
- Faculty Competency Building in areas of New Age Technologies & Research
- Enhance Industry Associations
- Commercial Patent Launches of Incubation Centre's
- 70 % Faculty Members with Doctoral Degree

File Description	Document
Upload any additional information	<a href="#">View Document</a>
strategic Plan and deployment documents on the website	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>

**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:****Governing Body**

A well-defined structure of organization is established to ensure proper decision making in direction of eminent governance and management. The chief bodies that are comprised under the Governing Council for the formation and implementation of policies and strategic plans are based on its Vision and Mission. The Governing Council of the college has 15 members in all as follows:

- Twelve members from the M.S Enggineerig College, Bangalore
- Three External members also the members of M.S Enggineerig College, Bangalore
- Two Ex-officio members from AICTE & DTE

**Administrative Set-Up:**

The Secretary and the Principal forms the core of the administration with the former having the ultimate right in all matters.

The Principal distributes all college responsibilities and curriculums among the HODs, Deans, and Committee members. HODs further redistribute the tasks amongst teaching and non-teaching faculty members that directs the work-through from top to bottom in the college academic administration.

The Principal also investigates the college curriculum at various levels that includes Academics, Examination Committee, Admin, Non-Academics with the complete assistance of teaching and non-teaching faculties. All financial projects and the endorsements are well investigated by the Principal and the same are formulated by the Secretary.

The Principal endures the responsibility of the day-to-day routine of the college.

He consults and accordingly gives direction to his team of Deans, Departmental Heads, the IQAC Coordinator, and the Admin in order to deploy his deeds towards organizations in an appropriate and effective manner.

**Service Rules, Procedures, Recruitment, and Promotion Policies:**

The Institutes follows all the service rules and norms of the KSRP, the college also keeps track of all the amendments done in the rules and regulations made by AICTE and UGC, the same inculcated from time to time.

In view of the above the service rules and procedures, recruitments, and promotions for the teaching and non-teaching staff are implemented in accordance with the VTU Norms and Standards affiliated to AICTE.

The recruitment procedures and promotional policies for the teaching staff and non-teaching staff are as per the AICTE regulation Notification F.No.37-3/Legal/2010 in complete reference to eligibility criteria prescribed by the UGC.

**Grievance Redressal Mechanisms:**

There are several Grievance Redressal Mechanisms including its Internal Complaints Committee; the Anti-Ragging Committee; Grievance Redress Committee meets regularly to look into the complaints. The mechanism to analyse the grievances is given below:

- The grievances/complaints can be given to the Grievances Redress Cell.
- Segregation of the grievance/complaint received is done based on its nature
- A report is submitted by the Cell to the Principal
- As per the cell report, the action is taken thereon.
- If required, the Principal set up an inquiry committee to study and resolve the matter.
- The college has Mentor-Mentee Scheme for a group of students who looks into the various issues of the respective students and provides redress.
- We have kept suggestion/complaint boxes at prominent places in the college premises to provide easy access for staff and students to put forth their issues and promptly redressed.

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Paste link for additional information	<a href="#">View Document</a>
Link to Organogram of the Institution webpage	<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:** B. 3 of the above

File Description	Document
Screen shots of user interfaces	<a href="#">View Document</a>
Details of implementation of e-governance in areas of operation, Administration etc	<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:

Yes, the institution has welfare measures for both teaching and non-teaching staff.

In our Organization Well-being of Staff is one of the prime importance aspects. Hence, the welfare measure for teaching and non-teaching staff comprises of following benefits:

- Benefits in Health insurance.
- Maternity leaves and Medical leaves
- On Duty, Leaves are made available to Faculty members
- Nominal Transportation charges are availed to Faculty members
- The institution is always forward in showing its interest in extra-curriculum activities namely cultural events, a celebration of festivals, etc.
- Sponsorships to attend and present papers in conferences both in India.
- In campus, a canteen and a bakery have been opened up which are accessible by faculty members during the working and extended hours.
- Institution Campus avails Internet and free Wi-Fi facilities for staff
- Various tour and sports activities are arranged for the staff Teaching and Non-Teaching Staff.
- A separate cabin and system with the internet are made available to each of the faculty members to ensure a good working atmosphere.
- Faculty members are given Summer and Winter Vacations
- Various faculty development programs(FDP) for faculty members are organized around the year
- Skill enhancement courses for non - teaching staff.
- All the faculty members are awarded by management and institute via an incentive scheme every year to those who prove themselves to be outstanding in their research work during the academic year. May it be quality publications, funds from organizations, faculties having 100% results for their respective subjects, etc.
- Provident Funds for the non-teaching employees of the institution.
- All the staff members are treated on par with each other in obtaining benefits from the institution.
- To understand and depict the bond between an organization and its employees both instinctively and quantitatively worker's involvement must be the prime perspective, that which is followed by the institution.
- Motivation through counseling is also available for staff members to create a healthy working environment. This not only increases the work-life balance of the employee, it also helps us in increasing productivity and allows our staff to work effectively with complete satisfaction.
- Women Empowerment Cell is established for creating venues for women members to flourish and gain momentum.

The Institution strives hard to keep our staff happy and healthy.

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

### 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: 0

#### 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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details of teachers provided with financial support to attend conference, workshops etc during the last five years	<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: 2

#### 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

2019-20	2018-19	2017-18	2016-17	2015-16
2	0	2	6	0

File Description	Document
Upload any additional information	<a href="#">View Document</a>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff	<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:** 5.76

#### 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

2019-20	2018-19	2017-18	2016-17	2015-16
3	6	8	12	0

File Description	Document
Upload any additional information	<a href="#">View Document</a>
IQAC report summary	<a href="#">View Document</a>
Details of teachers attending professional development programmes during the last five years	<a href="#">View Document</a>

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

**Response:**

The college monitors the performance of teaching and non-teaching staff using an organized Performance Appraisal System. Teachers are evaluated primarily based on their teaching skills, research activities then after they are evaluated based on their participation in various development activities that may contribute for the college well-being. The institution evaluates non-teaching staff based on performance in technical work and administration related activities, co-curricular, professional, development related activities, academic contributions, general conduct and qualities.

#### Teaching Staff

In view of above, college has implemented an evaluatory performance-based appraisal system for each of faculties. Each of the faculty is evaluated under this appraisal system at the end of each academic year. A well-defined “**Self-Appraisal Form**” is designed, wherein each of the faculty has to fill in the details of against each of the parameters assigned by the department /college. This system evaluates the performance for 100 points in the following criteria.

- 1.Results for the previous two semesters
- 2.Student’s feedback for the previous two semesters.
- 3.Research contribution in terms of International/National Journal, International / National Conferences, Workshop/Seminars/FDPs attended or conducted. Each of the faculty must attempt minimum one of each activity to gain the points.

4. Contribution to the institution in terms of:

- Designing of new experiments in lab related to course outcomes
- Counselling of students
- Content beyond the syllabus
- Guidance in Career-orientation Remedial and bridge courses
- Participation in curriculum development
- Self-enhancement through online certification courses.

This parameter is to be evaluated by the Principal.

1. Departmental feedback for the previous two years. This parameter is to be evaluated by the HOD based on the performance in the department.
2. Punctuality, Discipline and Dedication towards the allotted task for the previous two semesters.
3. Points are awarded for the number of years of experience at MSEC.
4. Any other achievement this is to be evaluated by the principal.

As tradition, at the end of the academic year each of the faculty has to give the facts and figures against all the parameters stated in the Self – Appraisal form and each of them will be evaluated accordingly.

Other areas of enhancement where the faculties are expected to participate and contribute are:

- Participating and organizing conferences/workshops and Guest Lectures
- Arrangement Industrial tours for the students.
- Proper Guidance in student's innovative activities
- Outstanding Performance in Research & Development niche areas.
- Upgrade themselves by acquiring Higher education PhDs and Post PhDs
- Academic Administration:
- Contribution towards Departmental and Institutional level administration tasks. Organization of events at Departmental and Institutional Level Participation in Sports, Other service activities
- Coordinating in the various portfolios in the departmental and institutional level.

**Non-Teaching Staff:**

A feedback report for non-teaching staff will be submitted to the Principal by Heads of the departments on the basis the following parameters:

- Punctuality, Discipline, Performance
- Acquiring higher qualification
- Working skills
- Learning new tools and procedures
- Availability for over-time tasks when required
- Documents maintenance

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

## 6.4 Financial Management and Resource Mobilization

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

#### Response:

Every year, the college conducts both internal and external audits. The financial accounts and transactions are adequately maintained under the supervision of the Chief Accountant on regular basis. Beside all the financial transaction are well prepared, formulated, audited and submitted to all statutory bodies like AICTE, UGC and State Government as and when required.

#### Internal Audit:

Internal Audit Committee comprises of the Principal along with the committee members. The audit is conducted to verify the transparency of the financial affairs of the Institution by having an insight of all the transactions and statements. The Committee verifies Cashbook, Bank accounts, bills, Vouchers, and statement of cash position and liquidity on the heads of various accounts, External Audit:

Professional auditors conduct the audits for the Institution. An annual external audit is conducted, and the reports are submitted to the management. The Finance Committee ratifies these reports. Audit of funds received from Government and Non-Government research funding agencies and Consultancy is duly done as per the guidelines of the funding agencies as and when required and submitted. Financial audits are taken up by the chartered accountants at the end of each financial year. Last audit was done in the assessment year 2019-2020.

The auditors will visit to college at regular intervals, they will verify all financial transaction with the supporting documents and approves financial transaction. The financial transactions are accounted in Tally ERP in the college. They plan and perform procedure to obtain the reasonable assurance about whether the financial statements are free from material misstatements. Auditor will examine on a test basis the evidences and supporting documents for the audited amount in the financial statements. Based on such audit, the external auditor will issue audit report for True and Fair view on the financial statements.

#### Audit procedures:

##### 1. Source of income verification:

Auditor verifies the fee collections of list of students. This list includes the first year CET admissions, list of the first year management admissions, eligibility list of students approved by VTU for higher semester students. Sources of other incomes are verified for the transparency through receipts books. Fees to be received and amount received are cross checked.

2. Any discrepancies will be analysed discussed and solved in consultation with the management.

3. All financial transactions and statements of the particular AY are audited at the end of the financial year.

4. All the financial statements will be signed and approved by Auditor and Management.

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

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

**Response:** 0

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

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

File Description	Document
Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years	<a href="#">View Document</a>
Any additional information	<a href="#">View Document</a>

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

**Response:**

The institution has the following resources of funds:

##### 1. Tuition Fee

Tuition Fee is the major source of funds collection. As per the norms of Fee Regulatory Authority of Govt. an appropriate fee is fixed for the student's admission in the college. Fee is also collected for various other services from the students: Fines from the students, ID card loss, hall ticket loss, fee receipt loss, Collections for workshops, internships and skill development activities



## 2. Research Funds and Grants

Research funds and grants are the minor source from where the college generate funds. College is successful in acquiring few of sponsored research projects from National funding agencies such as DST, UGC, AICTE, etc. and Non-Governmental agencies and donations from M S Educational Trust.

The institution has deployed a certain modes of resource mobilization that will emphasize on transparency in the finances of the college.

### Optimal Utilisation of Resources

The following are the different ways of optimal utilisation the funds in the Institution.

1. Used for the monthly salaries of staff, campus maintenance, human resource training, lab consumables, library books purchase, expenses for workshops, events, club activities, student skill development programmes, admission process, staff welfare, college promotional expenses, Industry Collaborative Labs, Library, R & D, incentives, etc.

2. According to financial requirement of each department, budget amount will be allocated annually. This budget will be discussed and monitored for the establishment of the infrastructure, purchase of equipment's for various labs, purchase of educational technology aids.

3. Financial requirements for Skill Development and Innovation, Training & Placement Services, Software procurement, up-gradation and maintenance of Wi-Fi, Internet & Networking were met using the resources stated above.

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

## 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:

1. **Online Student Feedback System.**
2. **Online Student Mentorship**
3. **ISO 9001-2015 Certification**

#### 1) Online Student Feedback System

IQAC has taken the initiation and successfully implemented an online student feedback system. Initially, the institute implemented a manual process for receiving feedback from the students. Over time IQAC put forth the idea of improving this manual process later it was modified and implemented as an online

portfolio. The feedback system was implemented in March 2020.

This system allows each of the students to feed in his or her opinion facts regarding the courses assigned in their programme curriculum. Here, the students are asked to rate their opinion fact on each of the courses based on the parameters such as objectives accomplishments, relevance to the subject, teaching methodologies, connectivity, innovative practices, availability of learning resources, etc.

IQAC has introduced this online feedback system to provide a quality measure to the college curriculum and also to make student's feedback system more operational, flexible, and efficient. As the feedback system is introduced on the online platform, it is in a way available for all the students anytime-anywhere for access. This will bring an improvement to the curriculum of their studies and efficiency in the teaching and learning process.

At the end of the semester, the online feedback system extends a feedback form to the dashboard of each of the students with respect to their programmes and courses assigned to them. Students are required to provide feedback on every course that they pursued in their respective programme on the scheduled duration without fail.

The student's feedback is conveyed to all the teachers on their MSEC portal on the courses they taught so that they bring improvement in their teaching and strengthen it. Nevertheless, the student's identity remains hidden from the teachers.

## **2) Online Student Mentorship**

The student Mentorship is an initiative inculcated for the overall development of the student's holistic, knowledge and personality advancement.

Mentor roles are:

- 1) career-related incorporating advice to enhance the mentee's professional performance and development
- 2) psychosocial function establishes the mentor as a role model and mental support system.

With Mentor-Mentee implementation students were motivated and encouraged to seek guidance from the mentor. In light of effectiveness of a mentorship only 25 or less students are included under the guidance of a single mentor.

Mentor needs to keep track of the students regarding their attendance, behaviour, overall performance, mental and physical health, redressal of the grievance with weekly Mentor-Mentee Meet.

Mentor is responsible for the encouragement of the mentee in terms of communication skills, teamwork, innovative behaviour, personal engagement, participate in various activities throughout the academic session. Hence, all the teaching staff and students are involved in successfully conducting the various academic and cultural event.

Mentor provide suggestions for further improvement of the student performance, thereby the performance of the institute as a whole.

**3) Institution has obtained ISO 9001-2015 certificate from Inertek Services Ltd through which quality improvement of the system is enhanced by proper documentation.**

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

**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:**

IQAC recommends various innovative activities and reforms. The improvements based on recommendations are:

**A) IQAC periodically reviews the teaching-learning process, structures & methodologies of operations, and learning outcomes:**

VTU Academic Calendar provides details regarding the commencement of the course, last working day, commencement of practical and theory exams, vacations, etc. The college academic calendar is prepared forehand before the commencement of the academic session considering the VTU guidelines. The calendar is well designed to accommodate both the regular teaching-learning process as well as for conducting various events like seminar/ workshops and many more. The academic calendar is displayed, circulated and strictly followed.

For each of the course a lesson plan is prepared by the respective faculty members that includes the detailed information associated with the teaching curriculum. Faculties need to submit the details of the activities performed on their dashboards in order to keep a track of activities they perform.

In view of Student learning outcomes students are monitored regularly based on the following parameter:

- Continuous evaluations: internal tests, assignments, quizzes, etc.
- Semester system examination
- Question banks
- Lecture notes through online portal
- Timely Redressal of grievances
- Compulsory 85% Attendance as per VTU.

Student's performance is well analysed after the announcement of the semester results. If the overall performance of the students is found to be unsatisfactory, necessary steps are initiated to find out the

reasons. Also, the concerned faculty members are counselled and motivated to work towards improvement.

All newly admitted students have to compulsorily attend the Orientation Programme, they are made aware of the philosophy, uniqueness of Education system, teaching learning process, continuous evaluation process, compulsory core courses, various co-curricular activities, discipline and culture of the Institute. All students are also given a guided tour of the campus and the various facilities.

### **B) Institute maintains an effective internal examination and online evaluation system[CIE Marks]**

The institute maintains online internal marks evaluation system. The online evaluation system works as follows:

- Marks for each of the students for all the subjects are feeded in the online evaluation system for the written internal exams.
- Marks for the assignments and quizzes also feeded in the same way.
- Then the final internal marks are evaluated automatically and are reflected in the system.
- Marks are also reflected to students in students portal.

IQAC initiated with the above mechanism to maintain:

- The transparency in evaluation system.
- Avoid the common human errors.
- The evaluation process is carried out periodically in time throughout the semester.

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

### **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:** C. 2 of the above

<b>File Description</b>	<b>Document</b>
Upload e-copies of the accreditations and certifications	<a href="#">View Document</a>
Upload details of Quality assurance initiatives of the institution	<a href="#">View Document</a>
Upload any additional information	<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:

Gender Sensitization is a critical issue which needs to be addressed at various levels. The Institute organizes programs and events at regular intervals in order to spread awareness about this issue. It is recognized that gender discrimination is a part of gender sensitization. Gender equity is attained by conducting programs like seminars, debates, group discussions for both boys and girls on a single platform. The very aim of gender sensitization program is to bring definite orientation in the thinking practices and approach of individuals concerning gender. The program deals with issues pertaining to the relationship between men and women, struggles with discrimination, sexual harassment, new forums for justice.

Women empowerment is a key issue in today's world. The institute has constituted various committees with senior female faculty/staff members like **Anti-harassment Committee, Women Redressal Cell , Internal Complaint Committee (ICC) and Anti-ragging committee** as per rules and regulations of Statutory Authorities like AICTE, UGC & VTU etc. These committees are formed

1. to promote gender equity and also to deal with related issues of safety and security of girl students and female faculty/staff members of the Institute and

2. to suitably redress the grievances of lady students/faculty members on gender sensitization and attempts to resolve them in a time bound manner and provide proper guidance/counselling. Counselling of girl students is conducted in a regular manner by the lady faculty members of the above mentioned Committees. Classes related to gender, women's rights and women empowerment are taken for students by the departmental faculty members, NSS, and the Women's Cell.

In collaboration with police officials of local area, Chikajala and the bangalore district, **Awareness programme on women's empowerment and gender sensitivity, cyber security and women day celebration** was conducted in the college premises is organized.

The Institute follows "**No Discrimination Policy**" for the students in class rooms, in laboratories, in allocation of projects and mini-projects as well as for the staff members in various posts of departmental forums. The entire college activity functions with co-existence and performance of all the students and the faculty members without any discrimination.

Various committees constituted during last few years are well represented by women faculty for example, Welfare Association, Alumni Committee, IQAC, Library, Training & Placement and Cultural Function committee.

Various cultural activities are conducted regularly by the students as well as faculty member without any gender discrimination. For example, women's day celebration, national festivals are celebrated by one and all.

File Description	Document
Link for annual gender sensitization action plan	<a href="#">View Document</a>
Link for specific facilities provided for women in terms of: a. Safety and security b. Counselling c. Common Rooms d. Day care center for young children e. Any other relevant information	<a href="#">View Document</a>

### 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:** D. 1 of the above

File Description	Document
Geotagged Photographs	<a href="#">View Document</a>
Any other relevant information	<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:**

#### **Solid waste management:**

With smart initiatives like Go Green Campus Model, Waste Management is helping our college, to achieve a higher level of environmental performance. Solid waste collected from the campus is being dumped in a compost yard available inside the campus. All the waste from the campus's college, canteen and hostel is collected and segregated into wet, dry and plastic waste.

- Biodegradable materials such as Food waste from college hostel and canteen are converted into manure in compost pits which are used as an organic fertilizer for the garden and feeding the pigs in the farms.

- Non-biodegradable materials such as paper and plastic waste are segregated and resold by the college. The waste is collected through by the three tired vehicles sponsored by M S Engineering college to Dodjala Gram panchayat.

#### Liquid waste management:

#### Working Principle of Sewage Treatment Plant

- The sewage water from entire college and hostel is received through the underground pipe lines.
- The waste water is then collected from canteen in a sump and the water is pumped to the entire college garden through overhead tank and sprinkles.

#### E-waste management:

- All e-waste is disposed to the Municipal Corporation.
- The non-working computer spare parts and other non-working equipment are safely disposed .
- The cartridge of laser printers is refilled inside the college campus.
- UPS Batteries are recharged / repaired / exchanged by the suppliers.

#### Hazardous Waste Disposal in Chemistry & Chemical Engineering Lab, DG Yard

- Disposal of chemical waste is carried out.
- The Covid precautions measures for disposing mask, PPE kit & gloves is taken care.

File Description	Document
Any other relevant information	<a href="#">View Document</a>
Link for Geotagged photographs of the facilities	<a href="#">View Document</a>
Link for Relevant documents like agreements/MoUs with Government and other approved agencies	<a href="#">View Document</a>

#### 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:** D.1 of the above



File Description	Document
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>
Link for any other relevant information	<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:** B. 3 of the above

File Description	Document
Various policy documents / decisions circulated for implementation	<a href="#">View Document</a>
Geotagged photos / videos of the facilities	<a href="#">View Document</a>
Link for any other relevant information	<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
Reports on environment and energy audits submitted by the auditing agency	<a href="#">View Document</a>
Link for any other relevant information	<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:** D.1 of the above

File Description	Document
Geotagged photographs / videos of the facilities	<a href="#">View Document</a>
Link for any other relevant information	<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:**

M S Engineering College (MSEC) is well known for its endeavour towards academic excellence but also because of its HR policies of empathy, societal consciousness, and harmonious relationship with its ambient culture and sensitivities.

Culturally, MSEC has always been a melting pot. Not only are our students from different parts of India, but our Faculty and Staff Members are, as well. We celebrate each other's' festivals, music, and art. Posters and banners reflect diversities in languages; College bands reflect diversities in musical preferences. We wish each other on our respective religious and social occasions. Typically, our **Orientation Programs** have some artistic offering from every section of our students' home states! MSEC celebrates traditional occasions and birth anniversaries of stalwarts with appropriate cultural fervour in the campus through cultural programs, speeches, and talk sessions. In a salute to our traditional spiritual norms of mental and physical wellbeing, MSEC also holds regular Yoga Camps and Workshops for its collective in campus. **National Yoga Day** is also observed with enthusiastic participation from all.

Regional concerns are factored in for policy framing. Holidays and vacations are formulated keeping in mind regional occasions. A student from a particular region of the country is encouraged to discuss about his/her life experiences with others and share festivals along with special food brought from home.

Linguistic differences are assimilated by ensuring a common professional language during working hours - **English**. However, care is taken to ensure no one, Teacher, Staff, or Student, is made to feel marginalized because of any linguistic insufficiency. The Office culture is to support and encourage before censuring.

Communal divides are rare in MSEC. Castes, Creeds, and Religions melt into each other as the MSEC collective mingle to work, play or celebrate. MSEC has a robust and long-standing commitment to its social responsibilities. The NSS Cell of the college, operational since 2007, has undertaken many a socially responsible drive in the areas of charity initiatives towards the underprivileged in society.

Socio-Economic divides are undoubtedly existent. Not everyone belongs to the same social or economic strata. However, while at work, these divides blur as we become MSECians joined together for a common cause on a common platform. Our goals homogenize us. Our economics are directly proportional to the

organization's.

The other inclusivity credentials that MSEC celebrates are a conscious sensitization to 'different / differently-abled' persons. Differently-abled students, staff, or teachers are supported with ramps facilities.

File Description	Document
Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution)	<a href="#">View Document</a>

### 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:

MSEC undertakes different initiatives by organizing various activities to sensitize students and employees to the constitutional obligation: Values, Rights, Duties and responsibilities of the citizens. On 27th March 2019, Institute has organized a talk on values, rights duties and responsibilities by Justice N. Santhosh Hegade, former judge of supreme court of India, former solicitation of India, former Lokayuktha of Karnataka. He narrated the fundamental rights, Duties, Values and responsibilities of citizens as stated in Constitution of India. He explained what citizens must do when the bureaucrats and politicians steal the rights of citizens.

The whole country is government based on the rights and duties enshrined in the Constitution of India. VTU has introduced a compulsory paper on the Constitution of India at Degree level across all engineering disciplines to create awareness and sensitizing the students and employees to constitution obligation. As a part of strengthening the democratic values.

Every year Republic Day is Celebrated on 26th Jan by organizing activities highlighting the importance of Indian Constitution. Independence Day is also celebrated every year to highlight struggle of freedom and importance of Indian constitution.

Various programs are organized every year by the Institute to empower women as a part of women's day celebration.

File Description	Document
Link for details of activities that inculcate values necessary to render students in to responsible citizens	<a href="#">View Document</a>

**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:** C. 2 of the above

<b>File Description</b>	<b>Document</b>
Details of the monitoring committee composition and minutes of the committee meeting number of programmes organized reports on the various programs etc in support of the claims	<a href="#">View Document</a>
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:**

The Institute is committed to promote ethics and values amongst students and faculty to encourage the same, college organizes National festivals as well as birth anniversaries of the great Indian personalities.

Our students are on a mission towards better India by breaking the boundaries of religion and caste. Thoughts of great Indian personalities sowed into the young minds through the exhibitions and programs conducted on these days. The institution practices pluralist approach towards all religion functions and encourages the students and faculty to showcase the same. Staff and students get to know the importance of national integrity in the country in general and their role in it in.

The Institute celebrates the Engineers Day on 15th September every year to recognise the efforts of engineers and their innovations. It is celebrated to mark the birth anniversary of Bharat Ratna Mokshagundam Vishweshvaraya, who was born in 1860.

Teacher's Day is an event held annually to honour and appreciate teachers and recognize their contributions to education and society and the lives of their students. We celebrate Teacher's day on 5th September every year. Our former President Dr. Sarvepalli Radhakrishnan was born on 5 September 1888, so Teachers' Day is celebrated on his birthday due to his love and affection for the teaching profession.

Practicing yoga is one of the ways to grow into a better human being with a sharp mind, a good heart and a relaxed soul. Our institute celebrates International Yoga Day is celebrated on the 21st of June each year.

International women's Day is one of those occasions that give an opportunity to celebrate the velour of

women and her inner strength. We celebrate women's Day on 8th March with zeal by organizing various events, competitions to honour women.

File Description	Document
Link for Geotagged photographs of some of the events	<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:**

### BEST PRACTICE 1

#### 1. Title of the Practice "Mentoring System"

#### 2. Goal The objectives of the practice followed by the Institute are:

- Improvement of teacher student relationship
- Counselling students for solving their problems and provide confidence to improve their quality of life.
- Guiding students to choose right career path for job, higher studies, Entrepreneurship, etc.

#### 3. The Context

The following are the issues which motivated the college to implement the mentoring system.

- The pressure to perform in current competitive world and to face the challenges of the society, students need mentoring support to achieve academic excellence.
- The scheme aims at addressing conflicts in attitudes, habits, and knowledge of the

students towards learning practices.

- Many other supporting methods have been introduced for better coordination of lectures, tutorials and practical classes. Advanced tutorials are arranged by the mentors in association with the respective subject teachers and experts who focus on problem based learning of modern technology.
- Towards the end of semester, students work collaboratively on assignments in small groups in their practical classes.

#### **4. The Practice**

- The Practices that may be unique in the higher education and constraints or limitations faced during their implementation are described here. MSEC CAMPUS AUTOMATION SOFTWARE (MSEC-CAS) have been introduced as a record keeping document for the students under the mentors for monitoring and analysis of the practice on regular basis.
  - Batches of 10-20 students are allotted to a mentor.
- Each mentor allotted students. Mentor has direct communication with the Class Representatives (CR).
- The Mentors meet the students associated with them once in a fortnight, The Parents/Guardians of poor attendee/performance students are called to meet the mentors and corrective and preventive measures are implemented for further improvement.
- The mentors take initiative to arrange remedial and tutorial classes for slow learners.
  - Each mentor update the entire student Information in MSEC Campus Automation Software, which is examined by the HOD and others concerned when necessary.

- During feedback given by the students, mentors take active initiative to arrange the same. Mentors meet with each group during the semester to discuss academic and non-academic issues.

The issues include:

- good and bad study habits
- study planning and techniques
- How to make the most of lectures and practical classes useful.
- distractions if any, and how to cope with them
- what to do when things go wrong
- examination preparation
- Health issues, etc.

The meetings also provide the students with a forum for discussing their own experiences and ideas, fostering networking and mutual support within the class.

In addition, mentors are available even after the college hours, so that students could consult them individually regarding exigencies they might encounter. Such consultations remain confidential on case basis.

Institute regularly arranges mentorship awareness program, mainly for newly recruited faculty members.

## **5. Evidence of Success**

Evidence of success in performance against targets and benchmarks and Review of results given below.

- Student's attendance had improved after counseling by the mentors.
- The direct communications between mentor and students have nurtured the teacher student relationship.
- Academic performances of the students have improved.
- Participation in extracurricular activities has been enhanced.

- Students become more disciplined compared to their initial sessions.
- During last few years, the Mentors have taken active initiatives and have prohibited ragging completely in the campus.

## **BEST PRACTICE 2**

### **1 Title of the Practice**

**“To encourage research activities to students and faculty members”**

### **2 Goal**

The aim of this practice is to provide necessary infrastructure, human resources and motivation to nurture the research competencies among the students and faculty members.

### **3 The Context**

The college offers UG and PG degree Programs in various engineering discipline. It is the responsibility of faculty members to inculcate effective learning methodology for students to understand various engineering concepts. To accomplish this, faculties need to be creative and innovative in their approach of teaching / learning activities and should possess holistic idea about the subjects what they taught, which requires some level of research competencies.

### **4 The Practice**

The college encourages the faculty members to visit the industry/ academia during vacation to learn the latest technology available which can be used to improve the research skill and enhance the potential of faculty members. The college also encourages the faculty members to publish the research papers, attending national/ International conferences and to carry out consultancy work. The faculty members are encouraged by providing the financial support to those who publish and present the research articles in national/ International journals and conferences. They were also sponsored to attend the national/ International conferences in India. MoUs have been signed between the College and various industries/academia to carry out the research and consultancy activities.

### **5 Evidence of Success**

The college has started M.Tech courses in three departments (ME, CS, EC). Faculty members are approved PhD Supervisors of Affiliated University. Faculty members are also members of BOS & R&D Center. College is having VTU approved research centers in various departments. The number of Ph.D. degree holders in the institution has been increased considerably. The results of above said practice also increases the number of papers published by the faculty members.

The R&D centre provides platform for students to innovate, design and prototype industry relevant products. Funds worth 65 Lakhs from DST/AICTE/ISRO/VTU/IEDC/VGST have been used to establish Centers for excellences that provide a unique opportunity to students to work on industry standard hardware, software resources and research projects

### **6 Education to poor students**



To increase access to higher education for the students coming from economically weaker section of the society. promote the dignity of labour and social commitments among the students and help them to develop multidimensional personality. The financial constraints faced by the rural students particularly the girl students need to be addressed in a planned manner

### 7 Certificate courses

To provide additional professional training and added qualifications to gain an in-depth knowledge of their chosen field of interest to provide an opportunity to students to develop inter-disciplinary skills and widen their career. And it creates a bridge between different phases of academic study to showcase their creativity and innovation and make the students industry ready

### 8 Career Guidance and placement

This is another practice of our institution which undertaken to equip the students and nurture them to explore the outside world. The students are motivated to learn new skills other than academics which are essentials in the competitive world. Provide women students much needed economic power to guide students to acquire a job opportunity for their talent, knowledge, skills and aptitude to meet the manpower requirement of the industry. Cell arrange pool campus drive and informing them about job fairs.

File Description	Document
Link for 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:

The establishment of the M S Engineering College symbolizes the ascendance of plateau of achievement of academic excellence, in dissemination of quality education from Pre-University College to collegiate level by M S Educational Trust, ensconced at near Bengaluru International Airport, by Shri. Muniswamy Raju K (President) and Shri. Sudarshan Raju M (secretary). M S Engineering College is committed to usher in socio - economic transformation by providing inclusive innovative quality education of global standards to fully meet the expectations of the stake holders. To recruit and retain well qualified motivated faculty and staff and provide adequate infrastructure, equipment and machinery and strengthen the infrastructure of the institution for sustainability . To provide amenities and sports facilities in harmony with nature. Industry Institute Interaction to provide adequate exposure to the students to the world of work. Enrich library and provide latest teaching gadgets and process to promote effective teaching, learning. To provide holistic value-based education and inculcate entrepreneurial abilities so that the students are well groomed in knowledge, skills required for industries and values to have the ability to face the challenges of the corporate world and life. We believe that college life is not all about academics, games, friends, and fun. It is also about learning to interact with other people, being aware of social, environmental and gender issues,

and inequities in the society. We provide an opportunity to every student to contribute to make the society in which they live a better place and to grow as better individuals.

**Salient features of institute:**

? Institute provide inclusive technical education so that a deserving student is not denied an opportunity for technical education solely on socio economic constraints.

? Institute provide holistic education to develop skills, knowledge and values through well-structured curriculum and instructions.

? Made students readily acceptable to the corporate world and promote entrepreneurship.

? The academic Monitoring Committee headed by the Head of Departments.

? Disciplinary Committee to look into the in disciplines & Ragging.

? Power backup given on the campus.

? In line with its vision of working towards the socio-economic development of the country, the MSEC has taken utmost care to give back to the community. Several student committees are formed to carry out the duties towards society. The Two-week long intense induction program gives the freshers an insight into the institute's values and vision.

? A session on Universal Human Value (UHV) is arranged by experts. In addition to that, few faculty members have completed a short-term course in UHV, they also interact regularly with the students through open discussions on various topics. Several activities are undertaken for the first-year students to expose them to the pressing environmental issues that ail us.

? Significant career guidance programs arranged by institute to guide rural area students by arranging programs in schools nearby villages.

? Round the clock internet connectivity through dedicated 60 mbps Lease Line.

? Various Social events carried out for enrichment of students.

? Student scholarship is provided to Meritorious students.

? Mentoring scheme has developed systematic road map for improving the different aspects of personality developments, Communication Skill, Presentation Skill, Team Work, leadership qualities, resume writing, etc. and make them ready to face the challenges in industry.

? Departmental Associations are established for student development.

? The College has initiated spoken tutorial by IIT Bombay – MHRD, Government of India for implementing spoken tutorial intended to give students a stepping-stone for entering into the engineering industry.

? The college has entered into MoUs with leading industries that included INFOSYS, CISCO, BLUE PRISM which are being pursued actively.

? Internal complaint committee has been established to prevent sexual harassment.

?Institute provide students prerequisite training for building and developing competencies for the placement.

? Various personality development programs and blood donation camps are conducted by women's development committee.

? Institute has provided career development services to students with respect to higher Education opportunities for the carrier growth.

? Institute has provided user Education and Reference Services to the teachers in order to maximize the use of the resources of in the library.

? The institute has been following a reduced paper drive since the last two years. All academic communications are only done using MS Campus Automation Software. The students Progress Report also contribute to this initiative done only through web portal.

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

## 5. CONCLUSION

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### Additional Information :

#### QUALITY POLICY

- Striving for Excellence in Quality Engineering Education.
- Our commitment to comply with mandatory requirements.
- Continuous improvement of quality management system.
- Our commitment to achieve student satisfaction by assuring successful completion of the degree with skill sets to solve engineering problems.
- By providing training at all the levels with placement assistance.
- By imparting research and entrepreneurial skills to meet the rapidly changing needs.
- Use of modern technology and its up gradation.
- Participation of all the stakeholders to achieve the vision of the institution.

#### College Highlights

- MSEC is a member of Cisco Networking Academy and has **CISCO Center of Excellence Lab** in the Campus
- MSEC is an authorized **Pearson VUE Test Center**
- Ranked 65 amongst "India's Top 100 Engineering colleges " by DataQuest 2018, June 2018
- Ranked 90 amongst "Top 100 Engineering colleges in India" by Outlook 2018, June 2018
- Rated AAA amongst Top 50 Engineering Colleges 2018 by Career 360, May 2018
- Ranked 44 amongst "Top 100 Engineering colleges in India" by Higher Education Review's Survey 2017, June 2017
- Rated amongst Top 20 Best Engineering Institute in Karnataka & Top 100 Best Engineering College in India 2017 by Career Connect Magazine, April 2017
- MSEC has recognised by Infosys(Campus Connect) as Advanced Partner Institute for the year 2017
- Rated by Career Connect Magazine, April 2016, amongst 30 Best Private Engineering Colleges in Karnataka
- Recognized by Higher Education Review Magazine, March 2016, as 20 Most Promising Educational Institutions in Karnataka
- Recognized by Silicon India magazine as Silicon India Education College of the year 2015 for its contribution in "Research & Development"
- Developed and commercialized India's First VLSI Design Software AARON and Nanoelectronics Software NanoCYM
- MSEC Incubation Cell with 10 companies incubated with support from DST, Govt. of India under IEDC Scheme
- MSEC holds 30 patents and is successful in commercializing 5 of these patents to products
- MSEC has received GoK's most prestigious grant from VGST, for "CoE-Underwater Sensing" and "Centre for Innovation-Real Time Virtual Lab"
- Skill Development Cell provides 7 levels of certification while learning
- VTUs knowledge partner for VLSI and Embedded Systems Design under Mission VTU Empower 10K

### Concluding Remarks :

The institution has all statutory committees such as Governing Body, Academic Council, Boards of Studies, Finance committee and other non-statutory committees that take care of policy decisions related to academic and non-academic activities and their implementation. The institution has well defined strategic plan drafted in line with the institute vision, mission and is monitored by periodic reviews among the senior functionaries. IQAC has been contributing significantly to sustain and enhance the quality in all respects of the institution functioning. The faculty and staff are governed by the service rules of the institution in line with the regulatory bodies.

The institution practices outcome based education with well-designed industry relevant flexible curriculum with defined COs, POs and PSOs for each of the courses as per the guidelines of AICTE and industry experts. ICT tools have been used in the delivery of the courses and hands-on training has been offered in advanced courses in addition to the regular laboratory experiments. Blooms taxonomy is followed in the preparation of the lesson plan, assessment and evaluation. Attainment of COs, POs and PSOs are measured in every semester using direct and indirect assessment tools.

The faculty members are deputed to Continuing Education Programmes with support towards registration fee, Travel, stay etc. Performance Based Appraisal System is in place since 2015 to assess the performance of faculty and guide them for effective functioning and career growth.

The R&D cell continuously reviews faculty for improving quality of student projects, research publications, submission of project proposals and patent filing. The college organises innovation day on Engineers day to transform the innovative ideas of the students in the form

## 6.ANNEXURE

### 1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.1.3	<p><b>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</b></p> <ol style="list-style-type: none"> <li>1. Academic council/BoS of Affiliating university</li> <li>2. Setting of question papers for UG/PG programs</li> <li>3. Design and Development of Curriculum for Add on/ certificate/ Diploma Courses</li> <li>4. Assessment /evaluation process of the affiliating University</li> </ol> <p>Answer before DVV Verification : B. Any 3 of the above            Answer After DVV Verification: C. Any 2 of the above            Remark : DVV has select any 2 of the above as per shared documents for Sl. No. 2 &amp; 4 by HEI.</p>																				
1.2.2	<p><b>Number of Add on /Certificate programs offered during the last five years</b></p> <p>1.2.2.1. <b>How many Add on /Certificate programs are offered within the last 5 years.</b>            Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>5</td> <td>3</td> <td>2</td> <td>2</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>1</td> <td>1</td> <td>1</td> <td>1</td> </tr> </tbody> </table> <p>Remark : DVV has not considered Coursera, Google Cloude, Spoken Tutorials by IIT Bombay, NPTEL and courses conducted by external agencies such as CCNA, Internship etc.,</p>	2019-20	2018-19	2017-18	2016-17	2015-16	8	5	3	2	2	2019-20	2018-19	2017-18	2016-17	2015-16	3	1	1	1	1
2019-20	2018-19	2017-18	2016-17	2015-16																	
8	5	3	2	2																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
3	1	1	1	1																	
1.2.3	<p><b>Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years</b></p> <p>1.2.3.1. <b>Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years</b>            Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>75</td> <td>70</td> <td>66</td> <td>40</td> <td>57</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>112</td> <td>66</td> <td>66</td> <td>40</td> <td>57</td> </tr> </tbody> </table>	2019-20	2018-19	2017-18	2016-17	2015-16	75	70	66	40	57	2019-20	2018-19	2017-18	2016-17	2015-16	112	66	66	40	57
2019-20	2018-19	2017-18	2016-17	2015-16																	
75	70	66	40	57																	
2019-20	2018-19	2017-18	2016-17	2015-16																	
112	66	66	40	57																	

Remark : DVV has given the input by not considered Coursera, Google Cloude, Spoken Tutorials by IIT Bombay, NPTEL and courses conducted by external agencies such as CCNA, Internship etc.,

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
77	79	81	87	88

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
13	13	13	13	13

Remark : As per University curriculum each UG programmes as one internship and one project, and for PG programmes one project.

**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**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: D. Any 1 of the above

**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

Answer before DVV Verification : B. Feedback collected, analysed and action has been taken

Answer After DVV Verification: C. Feedback collected and analysed

Remark : DVV has select C. Feedback collected and analysed as per shared feedback report and analysis report by HEI.

**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)**

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
97	65	112	147	155

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
62	59	87	99	102

Remark : DVV has made the changes as per intake report by HEI.

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

2.3.3.1. Number of mentors

Answer before DVV Verification : 40

Answer after DVV Verification: 38

Remark : As per mentor mentee list provided by HEI reflecting no of mentors

**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)**

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
10	5	9	9	14

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
6	5	9	9	14

Remark : DVV has made the changes as per supporting Ph.D certificates shared by HEI.



2.4.3	<p><b>Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)</b></p> <p><b>2.4.3.1. Total experience of full-time teachers</b>          Answer before DVV Verification : 264          Answer after DVV Verification: 220</p> <p>Remark : DVV has made the changes as per shared experience of teachers whom still serving the institution.</p>																																								
2.6.3	<p><b>Average pass percentage of Students during last five years</b></p> <p><b>2.6.3.1. Number of final year students who passed the university examination year-wise during the last five years</b>          Answer before DVV Verification:</p> <table border="1" data-bbox="308 748 1046 882"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>145</td> <td>152</td> <td>210</td> <td>196</td> <td>206</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="308 963 1046 1097"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>139</td> <td>147</td> <td>220</td> <td>200</td> <td>192</td> </tr> </tbody> </table> <p><b>2.6.3.2. Number of final year students who appeared for the university examination year-wise during the last five years</b>          Answer before DVV Verification:</p> <table border="1" data-bbox="308 1216 1046 1350"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>150</td> <td>157</td> <td>235</td> <td>212</td> <td>224</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="308 1431 1046 1565"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>149</td> <td>163</td> <td>235</td> <td>224</td> <td>215</td> </tr> </tbody> </table> <p>Remark : DVV has made the changes as per report for result sheet by HEI.</p>	2019-20	2018-19	2017-18	2016-17	2015-16	145	152	210	196	206	2019-20	2018-19	2017-18	2016-17	2015-16	139	147	220	200	192	2019-20	2018-19	2017-18	2016-17	2015-16	150	157	235	212	224	2019-20	2018-19	2017-18	2016-17	2015-16	149	163	235	224	215
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3.1.1	<p><b>Grants received from Government and non-governmental agencies for research projects, endowments, Chairs in the institution during the last five years (INR in Lakhs)</b></p> <p><b>3.1.1.1. Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs)</b>          Answer before DVV Verification:</p> <table border="1" data-bbox="308 1919 1046 2054"> <thead> <tr> <th>2019-20</th> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>35</td> <td>1</td> <td>12</td> <td>0</td> </tr> </tbody> </table>	2019-20	2018-19	2017-18	2016-17	2015-16	1	35	1	12	0																														
2019-20	2018-19	2017-18	2016-17	2015-16																																					
1	35	1	12	0																																					

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
1.0	3.24	0	10.11	0

Remark : As per the documentary evidence submitted to DVV, letter of award for Rupees 8 Lac as claimed by HEI to be sanctioned/ awarded during 2015-16 and 2016-17 pertains to earlier period and also only provided few sanctioned/ awarded letters to DVV. Hence, the same has not been considered by DVV.

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	1	2	3	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
1	1	0	1	0

#### 3.1.3.2. Number of departments offering academic programmes

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
8	8	8	10	10

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
8	8	8	10	10

Remark : DVV has made the changes as per metric 3.1.1

### 3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

#### 3.2.2.1. Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
6	13	0	0	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	2	0	0	0

Remark : DVV has not considered workshops/seminars whom not focus on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship .

### 3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

#### 3.3.1.1. How many Ph.Ds registered per eligible teacher within last five years

Answer before DVV Verification : 12

Answer after DVV Verification: 10

#### 3.3.1.2. Number of teachers recognized as guides during the last five years

Answer before DVV Verification : 9

Answer after DVV Verification: 9

Remark : DVV has made the changes as per shared supporting Ph.D certificates by HEI.

### 3.3.2 Number of research papers per teachers in the Journals notified on UGC website during the last five years

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
7	96	65	13	19

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
4	16	18	6	8

Remark : DVV has verified the ISSN number from UGC Care list, Web Sciences and SCOPUS Website.

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

#### 3.3.3.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
85	17	135	9	33

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : As per Data template , No ISBN number found. Only Journals and conference papers has shared by HEI.

### 3.4.2 Number of awards and recognitions received for extension activities from government/ government recognised bodies during the last five years

#### 3.4.2.1. Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
0	2	0	2	1

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : DVV has not considered awards that has not for extension activities .

### 3.4.3 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)

#### 3.4.3.1. Number of extension and outreach Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	4	2	7	6

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16

3	4	2	6	0
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Remark : DVV has not considered International Yoga Day Internatioanl Womens Day Vibrant india Intiation of NSS Sports and Cultural activity for Ladies Staff Spirituality in Life

#### 3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

3.4.4.1. Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
213	575	277	835	118

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
213	575	277	635	0

Remark : DVV has not considered International Yoga Day Internatioanl Womens Day Vibrant india Intiation of NSS Sports and Cultural activity for Ladies Staff Spirituality in Life

#### 3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship per year

3.5.1.1. Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year-wise during the last five years

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	2	2	6	9

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : MoUs has not considered.

#### 3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
3	0	0	0	2

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
1	0	0	0	1

Remark : DVV has exclude MOUs for training programmes on commercial basis.

**4.1.4 Average percentage of expenditure, excluding salary for infrastructure augmentation during last five years(INR in Lakhs)**

**4.1.4.1. Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
210	255	270	185	165

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	22.43	22.07	28.98	0

Remark : Supporting fixed asset schedule is not provided for 2015-16. Input updated as per supporting fixed asset schedule provided in 4.1 for 2016-17, 2017-18, 2018-19, and 2019-20 for MS Educational Trust. Input updated in lakhs considering additions post excluding deletions

**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**

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

Answer before DVV Verification : 325

Answer after DVV Verification: 200

Remark : DVV has made the changes as per shared log books entries by HEI.

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

Answer before DVV Verification : A. 750 MBPS

Answer After DVV Verification: A. 750 MBPS

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
231	285	394	426	364

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
185	228	315	341	291

Remark : Deviation since supporting sanction letters are not provided by HEI

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

**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**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
9	8	0	2	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : Scholarship not reflected in Audited Income and Expenditure statement.

**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**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : DVV has select 3 of the above as per shared documents of Sl. No. 1, 2 &3 by HEI.

**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**

**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**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
350	225	350	300	400

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
167	170	150	135	160

Remark : DVV has not considered activities such as Guest / Expert Lectures, SWOT Analysis, Industry Relevant Placement Driven Skill Development, CISCO, Tips to Crack the Campus Placement Interview etc.,

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**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: B. 3 of the above

Remark : DVV has select 3 of the above as per shared documents for Sl. No. 1, 3 &amp; 4.

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
62	100	69	102	71

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
34	65	45	67	45

Remark : DVV has not considered offer letters without signatures, email offer letters and trainee letters.

5.2.3 **Average percentage of students qualifying in state/national/ international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/**



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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
8	3	2	1	1

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
2	1	1	1	1

**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**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
10	3	2	1	1

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
10	3	2	1	1

Remark : DVV has made the changes as per qualifying certificate by HEI. DVV has not considered one student multiple time.

**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.****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.**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
6	1	1	1	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
6	1	1	0	0

Remark : DVV has given the input as per suggested by NAAC.

**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)**

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
35	12	35	45	70

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
5	2	4	5	8

Remark : DVV has not considered technical event such as Paper Presentation, Poster Presentation, Web Search, Crack Jack, Trailer, Technical Quiz, Xebit Techo Mine NFS, Debate Competition, Counter strike etc., Also DVV has considered activities conduct on same date as one event.

**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**

**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**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
4	34	10	5	10

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : HEI has not provided any supporting documents for payment to the faculties.

**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 ).**

**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**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
5	13	14	29	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
3	6	8	12	0

Remark : DVV has not considered programs of duration of less than 5 days.

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

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
0	4	1	1	0

Answer After DVV Verification :

2019-20	2018-19	2017-18	2016-17	2015-16
0	0	0	0	0

Remark : Irrelevant document shared by HEI.

**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)**

Answer before DVV Verification : A. All of the above

Answer After DVV Verification: C. 2 of the above

Remark : DVV has select 2 of the above as per shared documents of Sl. No. 1, &amp; 4.

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

1. **Solar energy**

	<ol style="list-style-type: none"> <li>2. <b>Biogas plant</b></li> <li>3. <b>Wheeling to the Grid</b></li> <li>4. <b>Sensor-based energy conservation</b></li> <li>5. <b>Use of LED bulbs/ power efficient equipment</b></li> </ol> <p>Answer before DVV Verification : C. 2 of the above  Answer After DVV Verification: D. 1 of the above  Remark : DVV has select 1 of the above as per shared documents of Sl. No. 5.</p>
7.1.4	<p><b>Water conservation facilities available in the Institution:</b></p> <ol style="list-style-type: none"> <li>1. <b>Rain water harvesting</b></li> <li>2. <b>Borewell /Open well recharge</b></li> <li>3. <b>Construction of tanks and bunds</b></li> <li>4. <b>Waste water recycling</b></li> <li>5. <b>Maintenance of water bodies and distribution system in the campus</b></li> </ol> <p>Answer before DVV Verification : B. 3 of the above  Answer After DVV Verification: D.1 of the above</p>
7.1.5	<p><b>Green campus initiatives include:</b></p> <ol style="list-style-type: none"> <li>1. <b>Restricted entry of automobiles</b></li> <li>2. <b>Use of Bicycles/ Battery powered vehicles</b></li> <li>3. <b>Pedestrian Friendly pathways</b></li> <li>4. <b>Ban on use of Plastic</b></li> <li>5. <b>landscaping with trees and plants</b></li> </ol> <p>Answer before DVV Verification : Any 4 or All of the above  Answer After DVV Verification: B. 3 of the above</p>
7.1.10	<p><b>The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.</b></p> <ol style="list-style-type: none"> <li>1. <b>The Code of Conduct is displayed on the website</b></li> <li>2. <b>There is a committee to monitor adherence to the Code of Conduct</b></li> <li>3. <b>Institution organizes professional ethics programmes for students, teachers, administrators and other staff</b></li> <li>4. <b>Annual awareness programmes on Code of Conduct are organized</b></li> </ol> <p>Answer before DVV Verification : B. 3 of the above  Answer After DVV Verification: C. 2 of the above  Remark : As per supporting documents for Institution organizes professional ethics programmes for students, teachers, administrators and other staff and Annual awareness programmes on Code of Conduct are organized provided by HEI</p>

## 2.Extended Profile Deviations

ID	Extended Questions
1.1	<b>Number of courses offered by the Institution across all programs during the last five years</b>

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
414	427	483	461	450

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
371	414	474	451	434

2.1 **Number of students year-wise during last five years**

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
640	610	787	879	943

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
501	610	722	854	875

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
203	217	281	372	372

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
97	97	124	166	166

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
75	75	120	127	127

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
64	75	120	127	127

4.1 **Total number of classrooms and seminar halls**

Answer before DVV Verification : 72

Answer after DVV Verification : 62

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

Answer before DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
400.98	420.41	487.59	476.52	439.57

Answer After DVV Verification:

2019-20	2018-19	2017-18	2016-17	2015-16
4015	420	488	477	440