



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

MALNAD COLLEGE OF ENGINEERING

**MALNAD COLLEGE OF ENGINEERING SALAGAME ROAD HASSAN
573202**

www.mcehassan.ac.in

SSR SUBMITTED DATE: 23-03-2023

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

March 2023

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

About MCE

Malnad College of Engineering established in the year 1960, during the second 5 year plan, as a joint venture of Government of India, Government of Karnataka and the Malnad Technical Education Society, Hassan. The Malnad College of Engineering is now a reputed Engineering college in the country. The college has earned “ISTE Award” as one of the Best Engineering Colleges in the Country, in the year 2007. The Institute located in the midway, (13°N and 76.5°E, altitude 943 mtrs.) between Bengaluru (180 kms) and Mangaluru (170 kms) on NH-75. Hassan a district head quarters, having a steady temperate climate throughout the year, enjoys an annual rainfall of about 900 mm. World famous temples of Belur, Halebidu, Shravanabelagola, and The Master Control Facility for INSAT Satellites are located in Hassan District. The College is built on a 41.28 acres campus and has all the facilities expected in a modern Engineering College. The college offers 9 B.E, 5 M.Tech, M.Sc.(Engg.) by Research, and Ph.D programmes, with about 4000 students on rolls. The college is one of the few Engineering Colleges in the country recognized for conducting the Technical Education Quality Improvement Programme (TEQIP) sponsored by the World Bank. The Training and Placement centre in the college trains and assists the students in securing employment in reputed companies like Tata Consultancy, Infosys, Wipro, L&T, BEL, Fichtner, Builders’ Association of India etc., through campus recruitment programme.

Vision

Vision

To be an institute of excellence in engineering education and research, producing socially responsible professionals.

Mission

Mission

- 1. Create conducive environment for learning and research
- 2. Establish industry and academia collaborations
- 3. Ensure professional and ethical values in all institutional endeavours

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Experienced, motivated and trained faculty in the institution
2. Adequate facilities are available for all programs.
3. College has low attrition rate.
4. Excellent regional reputation due to quality education.
5. Excellent value for money.
6. Collegial environment and team work culture
7. Student centered faculty and personalized attention to students.
8. Strong alumni network placement facilities and alumni network
9. Curriculum designed to meet both local needs and international standards.
10. Readiness to accept changes by all stake holders

Institutional Weakness

1. In need of better capacity facility planning.
2. Lack of contact with best institutes.
3. Lack of diversity in both faculty and students.
4. Communication skills of graduating students.
5. Limited collaborative research, patents, and copyrights.
6. Faculty/staff with limited industrial exposure/experience.
7. Consultancy capability needs to be developed.

Institutional Opportunity

1. Networking with industries.
2. Expand and explore new research areas.
3. Ability to reach through outreach.
4. Networking with institutes of higher learning and research organizations.
5. Interdisciplinary teaching.
6. Taking relationships with alumni to new heights.

7. Emerging technologies.
8. New trends in multi-disciplinary engineering systems.
9. Avenue for sponsored research and consultancy activities.

Institutional Challenge

1. Too many engineering institutes close by.
2. Not attractive to new faculty.
3. Moderate campus placement in core area.
4. Student's accessibility to international institutes through distance education.
5. Fast pace of development in technology.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The curriculum is framed considering the twelve Program Outcomes specified by National Board of Accreditation which ensures the requirements of Outcome Based Education as well as making our students to meet global expectations and become excellent professionals. Program Educational Objectives ensues the routines of our alumni. Curriculum is frequently revised by conducting regular meetings of Board of Studies, Industrial Advisory Board and Department Academic Committee. Syllabi is upgraded taking into consideration of AICTE, academic, research and industrial experts' recommendations. Various national and international curriculums are also scanned for framing new curricula or revision of the same. Further, GATE, IETI syllabi and propositions made from alumni are also considered. The curriculum outlined warrants the stakeholders strong claim to be a successful societal member and scholar/ professional/ entrepreneur to get through with their livelihood. The academic flexibility in view of autonomy of the institute ensures in introducing advanced courses as per the trends to make the students be ready with any sort of challenges once they are into the professional field. Courses like Robotics for Engineers, Artificial Intelligence, Expert Systems, Hydrology and irrigation, Electrical Vehicle Technology, Smart Grid Technologies, Industry 4.0 and IIoT, Python Programming, MEMS, Computer Control of Manufacturing Systems, Managing innovation and so on have been introduced keeping in view of making our students be familiarized with advanced technologies.

Teaching-learning and Evaluation

All faculties are adopting outcome based education (OBE) in their teaching & assessments. The faculty and students are made aware with the OBE concepts by displaying the same in all the class and staff rooms. The Blooms level is marked for each question in both continuous internal evaluation and semester end examination papers & faculty ensures that questions are at relatively higher levels of Bloom. Each course will include few activities to be completed & these activities are designed in a way to enhance learning ability & skills of students. The quality of internal test paper & activities are testimony to measure learning levels of students. For slow learners, peer mentoring and remedial classes are being conducted. The group study is also arranged for lower semester classes and this has shown significant positive impact. The faculty mentor & course faculty take extra efforts to give maximum support to such students. For advanced learners, they are encouraged to further increase the complexity of the problem they are trying to solve. They are encouraged to carry out research orientated projects and publish technical papers in conferences & journal. Also to participate in national &

international events. Further, they are inspired to take and complete online courses offered by various organisations.

Research, Innovations and Extension

As a reputed engineering college, the college has framed and approved a robust Research Policy (uploaded in the College Website) to promote research interest and innovations in the emerging areas of science, engineering, and technology. It endeavors to create and support a research culture for enriching the professional competence of UG / PG students, research scholars and faculty which in turn leads to the realization of the Vision and Mission of the College. Students and faculties are motivated to undertake interdisciplinary research to promote experiential learning there by build using a strong academic foundation.

The quality of research work directly explains to the quality of teaching and learning in the classroom, thereby benefiting the students, the society, and the country. The research activities nourish the academic program by enriching the knowledge of faculties in their field of expertise. This in turn helps college to stand at the global level. The strength of the research initiatives is conforming to established norms and standards for safe and ethical conduct of research. Patents were filed and a few were granted in the recent years (reflected in the additional documents).

The college had received external funds through institutional development schemes to facilitate research activities through establishment of labs such as DST - Fund for Improvement of Science and Technology Infrastructure (FIST) Lab, AICTE - Idea Development, Evaluation and Application (IDEA) Lab, etc., All the above-mentioned labs not only focus on skill development but also facilitates research activities.

Infrastructure and Learning Resources

Classrooms, Drawing Halls and Seminar Halls

The institution has totally 62 classrooms with LCD projectors connected with Wi-Fi. Each classroom has spacious seating capacity based on sanctioned intake. Institution has seven Seminar halls and three Conference halls for conducting Department/ Institute level programs such as association activities and programs related to the professional bodies of the department. Institution also follows University norms with respect to laboratory curriculum viz., experiments, detail of equipment and other infrastructure requirements including department offices, exam cell, and strong room. The above provisions have been continuously inspected by Visveswaraya Technological University, Belagavi before granting affiliation. There are totally 38 laboratories in the campus. The college provides a library which occupies the prime place in the heart of the college to accommodate more than hundred students. Central Library is equipped with adequate number of titles and volumes of text and reference books and is available for students and faculty members. Each department also has its own Department Library for the benefit of students and faculty members.

Computing facilities

Each Department has well-equipped laboratories over and above the mandatory requirements AICTE. Totally 1105 computer systems are connected to internet through a leased line with dedicated high-speed internet connectivity (bandwidth) of 700 Mbps. In order to support ICT based teaching-learning process, each building including hostels has Wi-Fi facility. Adequate number of scanners and photocopy machines are available. Wi-Fi enabled library facilitates the student and staff to access E-resources and journals.

Central Library

The Central library was established in the year 1960. In 2000 when the library was shifted to its main building. It is housed in a four storeyed building located at the eastern side in the main building. The library spreads over an area of 1586 Sq.m It is well equipped with reference books, textbooks, journals, magazines and newspapers etc. All the books are bar-coded and bar-code laser scanners are used at the circulation counter for book transactions.

Student Support and Progression

The Students Council is an elected representation of the student community. The purpose of the Student Council is to serve as a legislative body, framing policies and decisions for the benefit of the student community. The Student Council shall continuously strive to identify student- related issues and help resolve them, thus building a healthy environment in the institute. The Objectives are development of skill and personality of the students' social awareness, interaction and knowledge sharing, To nurture the aptitude of the student community for holistic development. To develop student for social responsibility. The Role of Student Council has to Serve as the main forum of expression and in continuous touch with administration and act as a feedback system. The Functions of the Student Council are encouraged to take decisions through department. Views of all members of Student Council – faculty and student alike – are to be respected and equal importance is to be given to all views. The Student Council shall consider all different student activities in the department and Institute brought before it, either by one of its members, students or faculty members. Structure of the Student Council may be changed if the Dean-Students deems it necessary, upon discussion with members. However, such decisions shall need the support of the majority of the members of the Student Council present.

Meetings of the Student Council shall meet at least twice during a semester. The Convener shall call the meetings of the Student Council. The quorum for all Student Council meetings shall be 50% of its total possible strength. It is expected that all members of the Student Council be present in meetings dealing with major policy changes/constitutional amendments. The Student Council is encouraged to take decisions by consensus.

Students are also members of academic decision bodies such as board of studies, department class committee, IQAC, academic council etc., Their opinion are considered while taking some decision on academic affairs.

Governance, Leadership and Management

Malnad college of Engineering is a premier Autonomous institution in the state that follows the guidelines of the UGC. The Board of Governors (BoG) is a transparent, democratic and decentralized body having the representation of all the stake holders. The policies instituted ensures the integrity and governance of the institution. The strategic plan of the organization is developed by a bottom-up approach of the hierarchy that ensures all the stake holders of the organization are involved in its development and implementation. A systemic organisational structure that ensures decentralization of job and responsibilities have been formulated for effective functioning of institute by the establishment of various verticals like Academic council, IQAC, Board of studies, equivalence committee, Anti ragging committee and other statutory committees.

The Meeting of the BoG will be held at regular intervals to ensure that all the decisions that are taken from time to time on various events like admission, budget, infra structure, teaching learning process, placements are in line with Vision and Mission of the institute. The BoG is apprised consistently with action taken reports and minutes of the meetings.

The College maintains a decentralisation approach. All academic and non-academic decisions based on policy are delegated by the Governing Body to the institute Committee, which is led by the principal. The college committee develops standard operating procedures and delegates the execution to departments. The department HoD/Coordinators oversee the department's day-to-day operations and maintains track of the College's curricular, co-curricular and extracurricular activities. Students enjoy operational autonomy under the leadership of various committees/ clubs/ associations, and students from diverse departments are involved in the decision-making process.

The IQAC monitors the quality of all the activities conducted in the institute by conducting audits, self audits by faculty, getting feedback on faculty by students, course feedback, Mid course survey, Course end survey, Alumni feedback. It conduct awareness programs, training programs for students, faculty and staff in various areas.

Institutional Values and Best Practices

Best Practice 1 : M-Foundation Awards

Objective of the Practice: To financially support economically weaker students to complete their course without hassles

The Context: The college is admitted with many meritorious rural students. Students from this background are economically weak as their parents' income is very low. Due to these constraints, students sometimes could not able to complete or continue their studies from first to final year.

The Practice: The meritorious students with this background are identified and they are financially supported by a team of alumnus of the college under the scheme, called M-Foundation award. The facility is also extended to the wards of D group employees of our college

Evidence of Success: It is observed that the students with this kind of support successfully completed their degree and placed from our institution.

Best Practice 2: Paper Seeing Process

Objective of the Practice: To ensure transparency in the valuation of semester end / final examinations answer scripts and to avoid revaluation of scripts.

The Context : After every semester end examination, there were many students applying for revaluation of their answer scripts with the ambition to get higher marks. This trend was seen both for makeup and supplementary examinations also. It was a laborious process for examination section to complete the revaluation and reannounce the results.

The Practice : A decision is taken by the administration of our college to stop the revaluation process and to make valuation process more transparent, the paper seeing process is introduced. Under this process, all the students are allowed to see their answer scrips and permitted to write their grievances for their marks to change, based on the scheme of valuation supplied to them. The claimed scripts are again valued/corrected by the respective course faculty and it should be approved in the department academic committee. The modified marks are then submitted to examination section through the proper channel. After this process, results are

reannounced. This process is carried out without charging any fee for students.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	MALNAD COLLEGE OF ENGINEERING
Address	Malnad College of Engineering Salagame Road Hassan
City	Hassan
State	Karnataka
Pin	573202
Website	www.mcehassan.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal(in-charge)	S Pradeep	08172-245317	9740620519	08172-24568 3	office@mcehassan.ac.in
IQAC / CIQA coordinator	Shashidhara Y M	08172-8277231308	9341967755	08172-24568 3	iqac@mcehassan.ac.in

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

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	01-01-1960

Date of grant of 'Autonomy' to the College by UGC	20-12-2007			
University to which the college is affiliated				
State	University name		Document	
Karnataka	Visvesvaraya Technological University		View Document	
Details of UGC recognition				
Under Section	Date		View Document	
2f of UGC	16-08-2016		View Document	
12B of UGC	24-05-2019		View Document	
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	03-07-2022	12	
AICTE	View Document	03-07-2022	12	
AICTE	View Document	03-07-2022	12	
AICTE	View Document	03-07-2022	12	
AICTE	View Document	03-07-2022	12	

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

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Malnad College of Engineering Salagame Road Hassan	Urban	41.2	18422.35

2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Civil Engineering	48	SECOND PUC	English	120	85
UG	BE,Mechanical Engineering	48	SECOND PUC	English	180	44
UG	BE,Electrical And Electronics Engineering	48	SECOND PUC	English	120	112
UG	BE,Electronics And Communication Engineering	48	SECOND PUC	English	120	120
UG	BE,Computer Science And Engineering	48	SECOND PUC	English	180	180
UG	BE,Information Science And Engineering	48	SECOND PUC	English	120	120
UG	BE,Computer Science And Business System	48	SECOND PUC	English	30	30

UG	BE,Computer Science And Engineering In Artificial Intelligence And Machine Learning	48	SECOND PUC	English	30	30
UG	BE,Electronics And Instrumentation Engineering	48	SECOND PUC	English	60	43
PG	Mtech,Civil Engineering	24	Bachelor of Engineering	English	18	4
PG	Mtech,Mechanical Engineering	24	Bachelor of Engineering	English	18	4
PG	Mtech,Electrical And Electronics Engineering	24	Bachelor of Engineering	English	18	4
PG	Mtech,Electrical And Electronics Engineering	24	Bachelor of Engineering	English	18	0
PG	Mtech,Electronics And Communication Engineering	24	Bachelor of Engineering	English	25	4

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	15				22				18			
Recruited	14	0	0	14	18	2	0	20	13	4	0	17
Yet to Recruit	1				2				1			
Sanctioned by the Management/Society or Other Authorized Bodies	15				22				125			
Recruited	9	3	0	12	16	3	0	19	58	59	0	117
Yet to Recruit	3				3				8			

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				20
Recruited	11	7	0	18
Yet to Recruit				2
Sanctioned by the Management/Society or Other Authorized Bodies				70
Recruited	33	32	0	65
Yet to Recruit				5

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				33
Recruited	24	6	0	30
Yet to Recruit				3
Sanctioned by the Management/Society or Other Authorized Bodies				84
Recruited	70	13	0	83
Yet to Recruit				1

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	23	3	0	12	5	0	22	6	0	71
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	22	0	0	49	57	0	128
UG	0	0	0	0	0	0	0	0	0	0

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

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	0	0	0	0	0	0	0	0	1
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	4	0	0	4
UG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	6		0		6

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	367	8	0	0	375
	Female	410	0	0	0	410
	Others	0	0	0	0	0
PG	Male	8	0	0	0	8
	Female	4	0	0	0	4
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years						
Category		Year 1	Year 2	Year 3	Year 4	
SC	Male	50	25	46	40	
	Female	29	30	17	23	
	Others	0	0	0	0	
ST	Male	10	4	13	9	
	Female	7	7	5	5	
	Others	0	0	0	0	
OBC	Male	200	96	271	98	
	Female	132	64	193	68	
	Others	0	0	0	0	
General	Male	180	328	230	322	
	Female	145	227	148	230	
	Others	0	0	0	0	
Others	Male	2	27	3	3	
	Female	0	14	2	1	
	Others	0	0	0	0	
Total		755	822	928	799	

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineering	View Document
Computer Science And Business System	View Document
Computer Science And Engineering	View Document
Computer Science And Engineering In Artificial Intelligence And Machine Learning	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Electronics And Instrumentation Engineering	View Document
Information Science And Engineering	View Document
Mechanical Engineering	View Document

Institutional preparedness for NEP

<p>1. Multidisciplinary/interdisciplinary:</p>	<p>Every student must complete two open elective courses which are from other disciplines. These courses are offered in 6th and 7th semesters. And are part of the curriculum. Each branch is instructed to offer courses which are needed by other disciplines. The courses from Law, Management are also offered. The students are enjoying open elective courses. There are cases where students from non-digital stream wishing to improve their programming skills plan and take up programming courses as their open elective courses. There are few cases where few students were successful in cracking interview of IT companies because of these open elective courses. In an attempt to encourage multi-discipline projects, a committee was formed comprising of faculty from each department. The committee invited applications from students to team up from different disciplines to carry out multi-discipline projects. It was decided to consider these projects as mini and major projects in their curriculum. The received applications were discussed, and a few projects were started. Each project had guides from all departments in the team. Few projects were successful. The efforts are more focused in next years and we expect improvement in coming years. Students are also encouraged to do MOOC courses from any discipline including management, Law, environment, etc.</p>
--	---

2. Academic bank of credits (ABC):	The regulations for this is yet not announced by our university.
3. Skill development:	<p>A lot of emphasis was given on skill development in curriculum and other activities. Each discipline has introduced 2-3 skill enhancement courses in their scheme. In every course, 1-2 activities are carried out with a thrust on improving skills. In an attempt to enhance skills development marks for activities in each course was increased from 10 to 20 marks. Faculty handling courses from all branches were invited by Principal to educate them about the importance of skill and directions to bring into curriculum. Later, each faculty was asked to discuss and plan activities for their courses with a focus on bringing theoretical knowledge to application level. The principal & deans discussed with each course faculty, guided them to fine tune the planned activities. This process helped to frame good activities from each course. All faculty are now using these activities in their course to improve the learning of students. Each branch also organizes hand-on workshops for students from all semesters to improve the skills. Students undergo 1-2 internship program with a focus to improve their skills. The college has IDEA laboratory & FIST laboratory supported by AICTE. All faculty and significant number of students are trained in these laboratories. The students are using these facilities to carry out their main and major projects. Our students work as mentors to train junior students. This greatly helps them to acquire skill & leadership qualities.</p>
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	<p>The course on universal Human values & Indian knowledge system are a part of the curriculum. A faculty was identified to frame the syllabus of Universal Human values. The faculty having undergone the training given by AICTE, refereed many books to come out a good syllabus. The focus was more on making students to realise the importance of UHV and ways to imbibe. The planned session were more interactive and assessments methods were also innovative trying to understand the students and helping each to improve. A good number of faculty have undergone training conducted by AICTE and are delivering the course in the right spirit. The course well received by students. We are still working how to improve it further. It is difficult to teach UHV, rather it must be demonstrated.</p>

5. Focus on Outcome based education (OBE):	Efforts are in place to practise OBE in the right spirit. The course outcomes and mapping are revisited by several times in each department. An improvement is seen both in delivery & assessment methods of all courses. Each course faculty is now supplementing the chalk & board, ppt with other methods to improve learning of students. The use of case studies, real life examples, role play, crafted stories, demonstrations, use of properties, use of tools, etc. are being practiced. The quality of question papers is improved by asking questions at higher Blooms level. The problem based learning & project based learning are also used. New methods to assess students are used extensively. Open books are also being tried by a few faculty. Also flipped classroom. The analysis of CO attainment is carried out and it is used to improve the delivery & assessment in the coming years. Slow learners are being mentored both by faculty & peers. Efforts are in place to conduct remedial classes. Fast learners are encouraged to attend technical event, publish their work in conferences, etc. using other methods
6. Distance education/online education:	Faculty have undergone good number of MOOC courses. These course have helped them to improve their knowledge, delivery & assessment methods. The faculty are using the gained knowledge in their course delivery & assessment. Faculty are also encouraged to do MOOC on academic leadership, OBE, etc. This has helped them in administration and NBA works. MOOC are brought into our curriculum and each student must complete TWO SWAYAM courses before graduation. The list of SWAYAM courses that a student can take is announced by each department. Students are encouraged to take courses from management,foreign language domains also. The students must write proctored examination and pass, without it, degree will not be given. Hence every student has passed 2 SWAYAM courses. A few course faculty also encourages students to take MOOC as a part of their course. This has improved learning of students, also their resume & interview.

Institutional Initiatives for Electoral Literacy

--	--

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	<p>NSIT-ELCs, learning meets fun. Activities and Games are designed to stimulate and motivate students provoking them to think and ask questions. The club collaborates along with the Government, the District Collector who is also the District Election Officer (DEO) periodically participate and assign events to the club to create awareness on the importance of voting. Through ELC, Election Commission of India aims to strengthen the culture of electoral participation among young and future voters. NSIT-ELCs, members will be part of interesting and thought-provoking, mostly classroom based activities and games. There are around 25 such activities and 6 games which have been carefully designed to impart specific learning which will help them become an 'Empowered (Prospective) Voter' Every year the club conducts seminars to help students know about their rights and encourage them to exercise those rights by participating in the elections. The club also encourages students to take part in competitions conducted by SVEEP (Systematic Voters' Education and Electoral Participation Program) as this will help develop their skills and confidence. Our students and staff have participated in the competitions. Our staff coordinator Mr. Vijaykumar Tile / ME has actively involved the students in various innovative activities to encourage the students to use their voting rights and spread awareness about the importance of voting among the general public.</p>
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	<p>Every year the club conducts seminars to help students know about their rights and encourage them to exercise those rights by participating in the elections. The club also encourages students to take part in competitions conducted by SVEEP (Systematic Voters' Education and Electoral Participation Program) as this will help develop their skills and confidence. Our students and staff have participated in the competitions. Our staff coordinator Prof. Vijay Kumar Tile, Assistant Professor / Mechanical Engineering has actively involved the students in various innovative activities to encourage the students to use their voting rights and spread awareness about the importance of voting among the general public.</p>

<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>Every year students are encouraged do the mini and major projects in Electronics vote Machine(EVM), For example, In academic year 2021-22 the students did a project titled on ADVANCED VOTING SYSTEM WITH ENHANCED SECURITY in their final year. ELC is creating awareness among the public through posters and Participating competition as per the direction of District collector office.</p>
<p>5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.</p>	<p>The club collaborates along with the District Collector office who is also the District Election Officer (DEO) periodically participate and assign events to the club to create awareness on the importance of voting through various programs like rally , surveys and conducting Competitions.</p>

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2021-22	2020-21	2019-20	2018-19	2017-18
9	9	9	9	9
File Description		Document		
Institutional data in prescribed format		View Document		

1.2

Number of departments offering academic programmes

Response: 9

2 Students

2.1

Number of students year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
3665	3515	3111	2835	2591
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
861	680	607	594	573
File Description		Document		
Institutional data in prescribed format		View Document		

2.3

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
7454	3504	3044	5490	5086
File Description		Document		
Institutional data in prescribed format		View Document		

2.4

Number of revaluation applications year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
36	07	50	72	27

3 Teachers**3.1**

Number of courses in all programs year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
487	520	488	479	489
File Description		Document		
Institutional data in prescribed format		View Document		

3.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
204	184	185	172	171
File Description		Document		
Institutional data in prescribed format		View Document		

3.3

Number of sanctioned posts year-wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
213	195	191	176	173
File Description		Document		
Institutional data in prescribed format		View Document		

4 Institution**4.1****Number of eligible applications received for admissions to all the programs year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
800	875	1000	850	710
File Description		Document		
Institutional data in prescribed format		View Document		

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

2021-22	2020-21	2019-20	2018-19	2017-18
480	510	495	435	315
File Description		Document		
Institutional data in prescribed format		View Document		

4.3**Total number of classrooms and seminar halls****Response: 62****4.4****Total number of computers in the campus for academic purpose****Response: 865**

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

2021-22	2020-21	2019-20	2018-19	2017-18
1011.52	1174.26	757.87	1107.94	1485.88

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

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

Response:

Curriculum Design

Malnad College of Engineering as an autonomous institution ensures that the curriculum enables our students to meet the ever evolving global requirements as well as contribute to regional development. The curriculum is revised every year by conducting regular meetings of the Academic Council, Board of Studies and Industrial Advisory Board. The syllabi prepared by members of the Internal Board of Studies of each department are presented before the External Board of Studies. The External Board of Studies of each department consists of well- experienced academicians from premier institutes, experts from industries and distinguished alumni. This ensures that the curriculum enables the students to acquire a strong knowledge base in the field of the programme as well as be familiar with the cutting edge technology that the industry demands. The suggestions from the experts are incorporated to frame the final curriculum and will be approved in the Academic Council.

Outcome Based Education

The curriculum is designed adhering to the twelve Program Outcomes proposed by National Board of Accreditation. Program Educational Objectives, Program Outcomes, Program Specific Outcomes are defined for each program and Course Outcomes are defined for each course. At the end of the course, attainment of both Course outcome and Program Outcome are evaluated and suitable measures are taken to improve attainment.

Skill Development

In addition to the engineering courses, courses like Language Skills, Analytical Ability Development, Aptitude Reasoning Development etc are included in the curriculum by which at the end of the course, students will be groomed to be ready to face the expectations from the recruiters. While framing the syllabi utmost care is taken to ensure that after completing the programme, students will be able to compete in exams like GATE, IES etc. The curriculum warrants the student to be a successful societal member and scholar/ professional/ entrepreneur to excel in their career. To improve student's employability skills, industry-driven courses, internships and projects are included in the curriculum.

Elective System

Elective system allows students in final year and pre-final year students to opt the courses as per their choice. From the academic year 2022-23, the elective system is implemented from the first year onwards. Moreover, Open-Elective Courses were introduced to enable students pursuing a degree in one programme

to be familiar with the courses related to other programmes also which will enhance the inter-disciplinary interest of students.

Local and Regional Relevance

In addition to improving the skills of students to meet global standards, measures have been taken to ensure local and regional relevance in the curriculum. In this regard, Balake Kannada and Samskrithika Kannada courses are mandated in the curriculum. Moreover, students are encouraged to take projects that solve the societal problems in the locality. The academic flexibility in view of autonomy of the institute ensures in introducing advanced courses as per the trends to make the students be ready with any sort of challenges once they are into the professional field.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 9

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 9

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution during the last five years

Response: 36.29

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..

2021-22	2020-21	2019-20	2018-19	2017-18
237	172	168	158	158

File Description	Document
Programme / Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship(Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2 Academic Flexibility**1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.****Response:** 18.65

1.2.1.1 How many new courses are introduced within the last five years

Response: 97

1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.

Response: 520

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).

Response: 100

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

Response: 9

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

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:

Maland College of Engineering (MCE) Hassan aspires to produce socially responsible professionals by creating a conducive atmosphere for teaching-learning process ensuring professional and ethical values in all institutional endeavours. Further, MCE attempts a more comprehensive approach to integrating sustainability into engineering education through introduction of courses emphasizing on the need for frugal engineering practices. Through the completion of prescribed courses over a duration of eight semesters, MCE advocates inculcation of a professional code of ethics among all its graduates through practice. Students are encouraged to undergo internships during their final year to experience the work ethics, to get exposed to a professional set-up before graduating.

MCE has made several efforts towards developing value-based education to improve physical health, strengthening life forces, wellness of mind, individual virtues, societal virtues, morals, human values and harmony among the engineering students. Beyond the syllabus, MCE organized programmes to inculcate human values in students and staff which includes periodic Blood Donation Camp, arrangement of social and cultural activities in the college and adopted village by NSS unit and under Ummnath Bharath Abhiyan scheme.

Professional Ethics: A mandatory course on "Constitution of India and Professional Ethics" is included in the curriculum to study ethical practices in engineering. Professional Ethics infuses ethics in the workplace that has given new importance to human relations and values. Further, the inner ability of students is strengthened through soft skills training. Placement Cell of the institute organized placement activities including training, development of students, aptitude tests on a regular basis as per the current industry

requirements.

Gender: Although no courses are introduced to directly impart gender equality, MCE practices gender equality in all its administrative and academic-related activities. Minor / Major projects, course activities, lab groups, and club activities are performed by groups of like-minded students irrespective of gender. The Women Empowerment Cell established in the college helps female faculty and students to discover their potential in all aspects, providing an affable working/studying environment for them by addressing any grievances. Club activities and responsibilities are equally shared among boys and girls.

Human values: A course on Universal Human Values (UHV) is introduced in the AY 2021-22 for 2021-22 admitted batch of engineering students in their II Year of B.E. Programme. AICTE – certified faculty members are identified to teach the UHV courses as per the eligibility criteria set by AICTE.

Environment and sustainability: Any engineering / technological development usually affects water and air quality because of complex interaction of physico-chemical & biological processes which spreads the harmful compounds and/or substances in air and water. A course on “Water & Air Quality Modeling ” introduced during the AY 2021-22 provides an introduction to the basics of mathematical modelling of environmental systems and their applications in simulating the pollutant fate and transport problems. This course is crucial for any integrated assessment and management strategy like an Environmental Impact Assessment and promoting Environmental Sustainability. Further, a multidisciplinary course on “Hazardous Waste Management” introduced as an open elective course.

File Description	Document
Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 193

1.3.2.1 How many new value-added courses are added within the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
119	59	9	4	2

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 24.14

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

2021-22	2020-21	2019-20	2018-19	2017-18
1810	1056	833	326	77

File Description	Document
List of students enrolled	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 51.54

1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 1889

File Description	Document
List of programs and number of students undertaking field projects / internships / student projects (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

Response: A. All 4 of the above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document
Link for Additional Information	View Document

1.4.2 The feedback system of the Institution comprises of the following :

Response: A. Feedback collected, analysed and action taken and report made available on website

File Description	Document
Any additional information	View Document
URL for stakeholder feedback report	View Document
Link for Additional Information	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 88.95

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

2021-22	2020-21	2019-20	2018-19	2017-18
755	822	929	799	629

2.1.1.2 Number of sanctioned seats year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
960	1020	990	870	630

File Description

Document

Institutional data in prescribed format (Data Template)

[View Document](#)

Any additional information

[View Document](#)

Link for 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: 90.25

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

2021-22	2020-21	2019-20	2018-19	2017-18
379	437	482	402	305

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for 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:

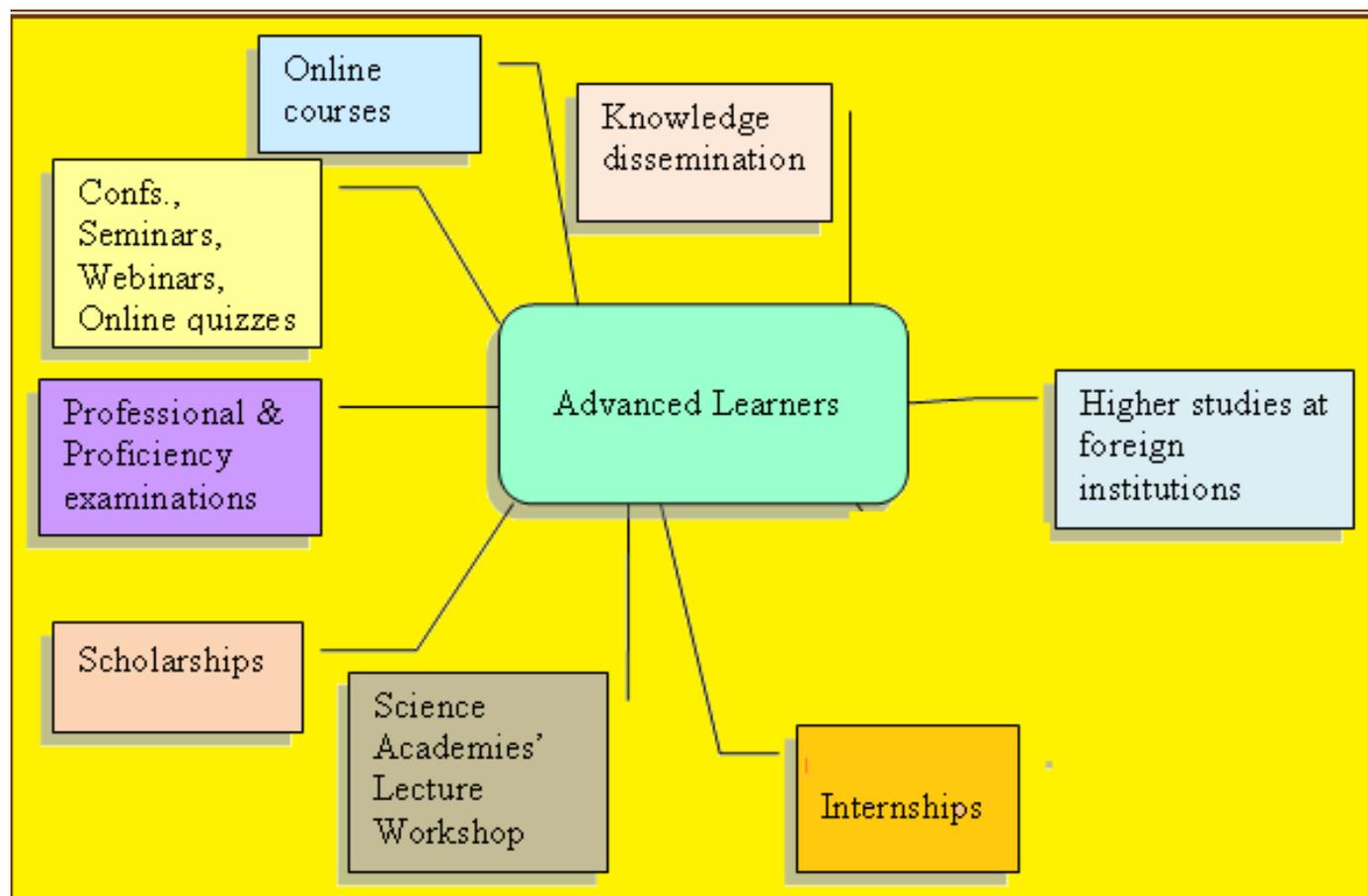
LEARNING LEVEL ASSESSMENT:

The college provides an induction program of 3 weeks for first-year students to know about the college environment, facilities, academic and administrative regulations and procedures. At every academic year, an orientation program is conducted to refresh their knowledge of previous courses and match the current course prerequisites. The students of various academic profiles like vocational, state board, CBSE, ICSE, various streams of study, join the institution who get oriented towards the engineering curriculum.

The institution periodically assesses the student performance through Continuous Internal Examination (CIE), additional tests, assignments, quizzes, end-semester examination and constant mentoring of students by the faculty mentors. Based on this, the advanced learners and the slow learners are identified.

PROGRAMS FOR ADVANCED LEARNERS

Students are allowed to take up industrial internship in their final semester. The students are encouraged to take up SWAYAM -NPTEL courses. The credits earned in these courses are transferred to the final grade statement. The technically strong students are trained and motivated to participate in various technical competitions and publish papers in conferences. The advanced students are motivated to bring innovative projects and research work for their end semester. The advanced level learners are awarded with Mr. Shreedhar memorial awards as proficiency winners as per their skills and knowledge. Fast learners are motivated to attend various co-curricular and extracurricular activities in Inter and Intra College competitions.



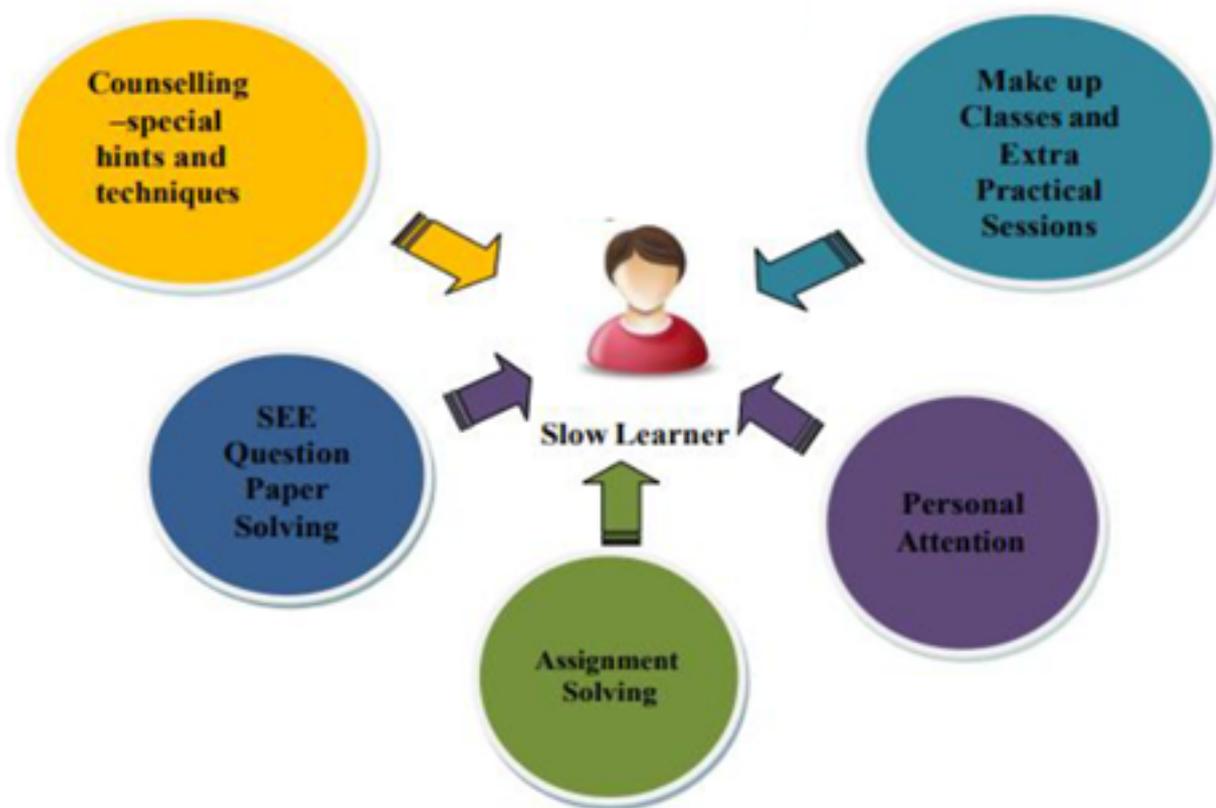
Guidelines to identify gradual learner's

The Counsellors regularly conduct meetings regarding progress of their mentees and are responsible to identify learners who scored less than 60% marks in their internal evaluation. Under the direction of HOD, the learner's Counsellors evaluate the progress card of those students who have score below 60% marks in three or more subject and below 75% attendance are considered as **academically gradual learner's** and same is also intimated to their parents.

Action plan to support gradual learner's

1. Identify learner's scoring less than 60% of marks in Internal Assessment
2. Faculty Advisor follows their progress regularly advising them about attending classes, making up classes missed and getting additional help.
3. Intimating parents to counsel their wards.
4. Conduction of remedial classes for Diploma students with less basics of mathematics
5. Conduction of remedial classes for learner's who fail in semester exams.
6. Although remedial classes are planned for gradual learner's, the bright learners also utilized the opportunity. therefore, attempt is made not to segregate and demotivate the gradual learner's
7. Conduction of extra classes to those who failed in previous semester subjects

8. Giving them opportunity for slow paced self-learning through sharing of lecture notes online.



File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response: 18:1

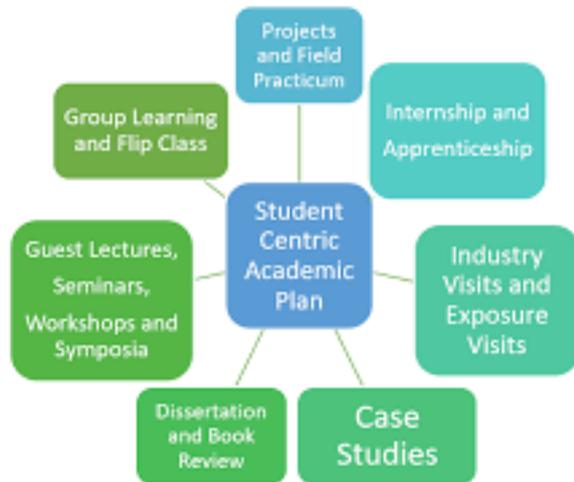
File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

Through the development of independent and autonomous learning, student-centric teaching-learning focuses on shifting the responsibility for instruction from the instructor to the students.



Experimentation Learning

Using experiential learning projects as a pedagogical method to create value in engineering education, it is a combination of projects, classroom activities, and real-world experiences to create an exciting and engaging engineering course for students.

- To assist students in developing their concepts into a functional prototype, project work, mini-projects, laboratory exercises, and conferences are held.
- All students are provided with workshops and seminars pertaining to their courses.
- To help them transition from academic to real-world industrial requirements, fast track students are permitted to participate in internship programmes.
- The purpose of the internship is to increase the students' practical experience.

Participative Learning

Students are encouraged to join organizations like the IEI. They take part in a variety of technical events such as conferences, workshops, and seminars.

- Events held by intra- and inter-college organisations encourage students to take part in co-curricular and extracurricular activities. The students are strongly encouraged to participate in Seminars/workshops, Value added courses, Innovative projects and competitions and Industrial training/internship.
- Design/development of solutions: Students attempt to develop solutions for complex engineering problems and design system components/processes that meet the specified needs of real-time cases through group analysis, brainstorming etc.
- Mind Maps for creativity: Teachers create a central node on a Mind Map and provide students the freedom to expand and develop novel ideas. Flipped Classes, blended learning and model making methods are introduced for selected topics to enhance participative learning.
- Students are encouraged and presently made mandatory to take (Massive Open Online Courses) MOOCs offered by premier institutions of the country. They include online lectures, demonstrations and interaction through skype sessions.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning process.

Response:

The faculty members in the institution are using Information and Communication Technology (ICT) tools very effectively to enhance the teaching-learning process among the students by creating interest in live concepts.

Infrastructure

- Faculty members produce the curriculum plan and specify the delivery technique as part of the teaching-learning process before starting each semester. Theory courses are taught using PowerPoint Slides, while simulations and practical models are given utilizing Videos and ICT tools for a more visual effect on students' understanding.

- Well-equipped smart classrooms and smart board facilities help the faculty and students present PPTs and Videos effectively.

- Laboratories, classrooms, Seminar halls, Conference Rooms, Auditoriums, and Hostels are enabled with a Wi-Fi internet facility with a bandwidth of 500Mbps, which provides space for students to learn from e-resources update their skills.

- Computer system laboratories with microphones, headsets and webcams help the faculty members to handle online classes and record quality audio and video to update as an e-learning resource in YouTube channels and E-learning centre of college servers.

E-resources

- Advanced Digital Library with personal computers and Online Public Access Catalogue system makes easy access for students and faculty members.
- The e-resources are used like DELNET, INFLIBNET, NLIST, NDLI, Shodh Sindhu, Shodh Ganga, etc.
- The institute has purchased e-journals, and students can access those resources in the digital library and get enough inputs for their project works.

Interaction platforms

- Study materials, assignments, activities, and assessments are conducted through classrooms, Google forms, Kahoot (online quiz, polls, and surveys). Online classes are conducted via Microsoft Teams, which helped the multimodal teaching and learning process, including videos, audios, ppts, website reference, and real-time analysis.
- Online lectures are now delivered using digital platforms. Students are given links for them. They can use file transfers, chat, and raise their hands to post questions.
- Virtual labs are online simulation-based labs for various courses of Computer Science and Engineering under the initiative of the Ministry of Education. That is used remotely by the students and helps the faculty to check individual practical performance among multiple students.
- Faculty members grade all activities using various ways, like a basic scale or rubric-based evaluation system with optional comments to ensure an efficient learning experience.



File Description	Document
Any additional information	View Document
Link for Additional Information	View Document
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	View Document

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

Response: 18:1

2.3.3.1 Number of mentors ?????????????? ???????

Response: 202

File Description	Document
Upload year wise, number of students enrolled and full time teachers on roll	View Document
Circulars pertaining to assigning mentors to mentees	View Document
Any additional information	View Document
Link for additional information	View Document

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

Response:

ACADEMIC CALENDAR

An Academic Calendar is prepared every semester prior to the commencement of classes by a committee comprising of the Principal, Dean Academics and the Dean Exams and circulated to all the departments. The academic calendar is prepared considering the regulations of the corresponding program regarding the number of working days, the number of assessments to be conducted for both theory and laboratory courses. The calendar specifies the commencement date for each programme. The calendar specifies the periods for the three Continuous Internal Evaluation Tests, the last working day and commencement of Semester End Exams(SEE) both practical and theory examinations. The reopening date for the next semester is also mentioned.

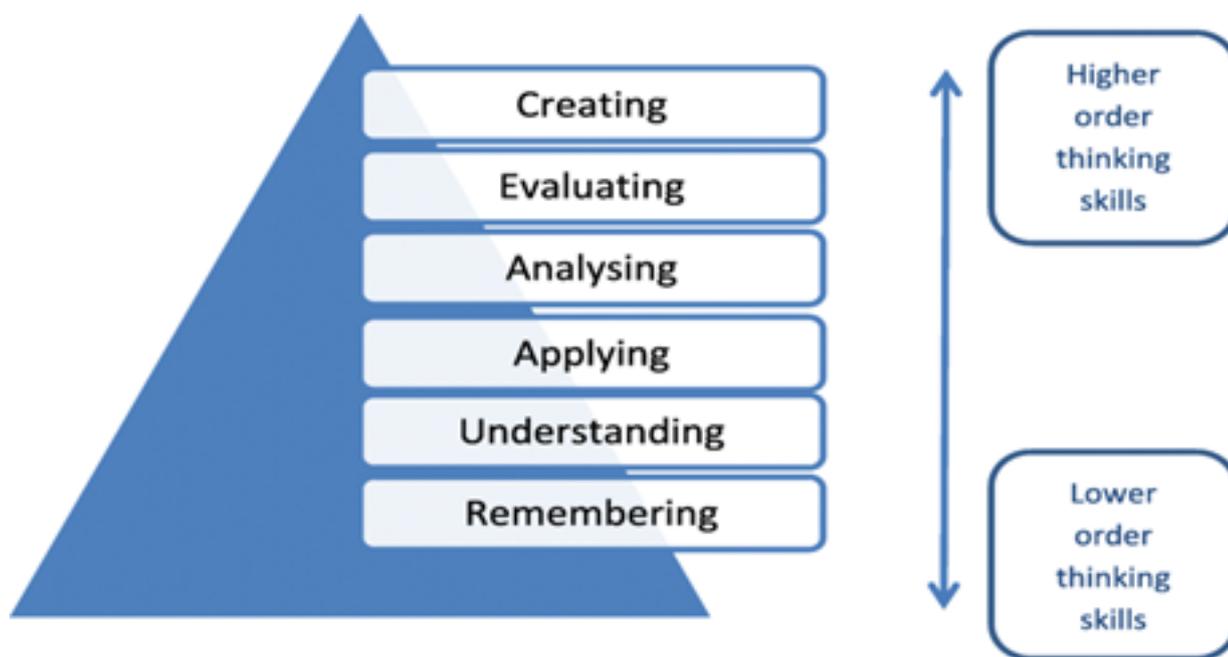
TEACHING PLAN

The teaching plans are prepared by the individual faculty before the starting of the classes. It is ensured in the plan that the complete syllabus of a course is covered in that semester. The faculty has to enter the lesson plan in the CONTINEO software and percentage coverage of syllabus during every academic year.

EVALUATION PATTERN

The internal test will be conducted for 50 marks with three Continuous Internal Evaluations(CIE)and after the paper evaluation, the answer scripts will be shared to the students to get their signature. The components of the internal marks will be shared with the students and finally the marks will be entered into the Contineo software portal sent to the Controller of Examination through HOD and the same will be shared to the parents as report card

The Semester End Exam(SEE) will be conducted for 100 marks and reduced to 50marks Question bank will be shared to the students to get familiarize on the question paper/Evaluation pattern. After the paper evaluation, the answer scripts will be shared to the students.



File Description	Document
Upload Academic Calendar and Teaching plans for five years	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.4 Teacher Profile and Quality

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

Response: 96.71

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document
Link for Additional Information	View Document

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: 33.57

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

2021-22	2020-21	2019-20	2018-19	2017-18
73	68	67	53	48

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

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: 12.84

2.4.3.1 Total experience of full-time teachers

Response: 2620

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5 Evaluation Process and Reforms

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

Response: 8.78

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

2021-22	2020-21	2019-20	2018-19	2017-18
9.6	6	17	4.8	6.5

File Description	Document
Institutional data in prescribed format (Data Template)	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0.83

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
36	7	50	72	27

File Description	Document
Number of complaints and total number of students appeared year wise	View Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Response:

In view of the outcome based education system (OBE) adopted by the institute, increasing the efficiency and effectiveness of the existing system is very important. The role of assessment in higher education institution plays a key role in the effective functioning of the system. The program specific outcomes (PSOs) and Course outcomes (COs)/program outcomes (POs) are marked in the question papers of the continuous internal examination (CIE) and external evaluation i.e Semester End Examination (SEE). The students are tested for different Blooms level in each question in the examination. As an autonomous institution we are having our own syllabus (as per guidelines of AICTE), assessment methods and issue of transcripts for qualifying students at the end of course. In order to ensure the strong and effective evaluation system, the examination process is completely digitized with a software CONTINEO. IT integration done, starting with the student registration process, marking of attendance, entry of CIE assessment, entry of SEE assessment marks and also declaration of results with SGPA and CGPA.

The OBE assessments are integrated with the softwares and are available. once the assessments are completed with the results announced in every semester. The question paper of internal assessment will be subjected to quality assessment by the experts from different institutions and the short comings suggested by the experts will be informed to concerned faculty and will be given one opportunity to improve the quality of paper setting. Through this feedback the examination system is getting improved in each semester. For having a better transparency in the evaluation system, the students will be provided with a unique paper seeing facility after the announcement of results. A notification will be made for paper seeing after the result announcement. The students can give their grievances in a separate form about the assessment short comings and this will be addressed by the faculty once again. Even after paper seeing, if the student feels that his grievance has not been met by the system, then he can apply for challenge revaluation. The examinations in every semester will be conducted as per the calendar of events in both CIE and SEE and will be for one hour and three hour respectively. The notification of the examination will be announced one week prior to the scheduled date. The results of regular and supplementary semester will be usually announced within ten days of the last course exam conducted. The examination system has a malpractice committee (MPC) for examining the malpractice made by students. The students of such nature will be issued a notice to attend the MPC meeting on a prescribed date. Even for faculty, the errors in evaluation of answer scripts made will be viewed seriously and memo will be issued and if found guilty, suitable action will be initiated.



File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

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:

Program Educational Objectives (PEOs)

Program educational objectives are broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

Program Outcomes (POs)

Program outcomes describe what students are expected to know and would be able to do by the time of graduation. These relate to the skills, knowledge, and behaviours that students acquire as they progress

through the program.

Program Specific Outcomes (PSOs)

Program Specific Outcomes are statements that describe what the graduates of a specific engineering program should be able to do.

The POs and PSOs are published and disseminated

The Program Outcomes are published and disseminated as follows

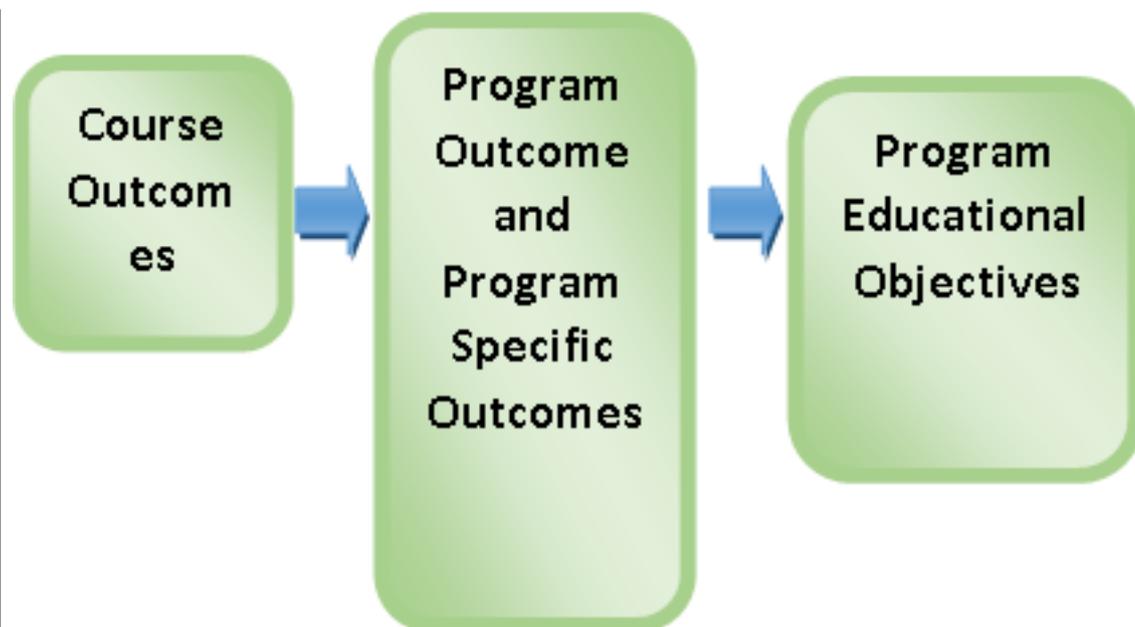
How Published	Where Published	How Disseminated
<ul style="list-style-type: none"> Incorporating in syllabus book, course files. 	<ul style="list-style-type: none"> Syllabus books Course files Laboratories in the department 	<ul style="list-style-type: none"> Discussed during Orientation Day Distributed along with Syllabus books, course files Address by faculty advisors
<ul style="list-style-type: none"> Flex 	<ul style="list-style-type: none"> Class rooms/ Laboratories Office of the department 	<ul style="list-style-type: none"> Self-reading by students, parents and alumni
<ul style="list-style-type: none"> Digital Media 	<ul style="list-style-type: none"> Institute Website www.mcehassan.ac.in 	<ul style="list-style-type: none"> Available for Self-reading in public domain

Course Outcomes (COs)

Statements indicating what a student can do after the successful completion of a course. Every Course leads to some Course Outcomes. The CO statements are defined by considering the course content covered in each module of a course. For every course there may be 4 or 5 COs. The keywords used to define COs are based on Bloom's Taxonomy.

All the courses together must cover all the POs (and PSOs). For a course we map the COs to POs and PSOs through the CO-PO PSO matrix as shown below. The various correlation levels are:

- "1" –Slight (Low) Correlation
- "2" –Moderate (Medium) Correlation
- "3" –Substantial (High) Correlation
- "-" -- Indicates there is no correlation.



File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Any additional information	View Document
Link for Additional Information	View Document

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

Response:

OBE Calculations

Attainment formula

Attainment is reported only for intersection of CO-PO/PSO which has been mapped with 1/2/3

Definition of attainment computation items

Threshold:

Is set for a course, applies to all CO's of a course and is the minimum % age of marks that need to be obtained by a student to be considered for computation of attainment

Target:

Is set in % age of students that will score above the threshold and Is set for each CO in a course

CO attainment calculation

- 1.Number of students having marks equal to or more than threshold level in the respective CO is counted.
- 2.The number of students attempted the question mapping to the CO has also been counted.
- 3.%CO attained for each CO = (1) / (2) *100
- 4.Similarly, CO attainment is calculated for SEE.
- 5.Final CO attainment is the average CO attainment obtained in CIE and SEE.

Target is set for each CO individually, only CO attainment \geq target value is said to be attained.

PO attainment calculation

PO attainment is calculated using the following formula.

$$PO = (\sum (\text{weight} * \text{CO attainment}) / 3) / \text{Number of COs}$$

CO1	CO2	CO3	CO4	CO5			
86.54	86.53	52.81	78.55	84.03	CO ATTAINMENT OF CIE		
95.38	70.60	47.50	54.32	51.54	CO ATTAINMENT OF SEE		
90.96	78.56	50.16	66.44	67.78	% CO ATTAINMENT		
		PO1	PO2	PO3	PO4	PO5	PO6
CO1	90.96	3					
CO2	78.56	3					
CO3	50.16	3	2	2			
CO4	66.44	3					
CO5	67.78	3	2				
PO ATTAINMENT		70.78	39.31	33.44	-	-	-

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.3 Pass Percentage of students(Data for the latest completed academic year)

Response: 95.93

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 826

2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution.

Response: 861

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document
Any additional information	View Document
Link for additional information	View Document
Link for the annual report	View Document

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

File Description	Document
Upload database of all currently enrolled students	View Document
Upload any additional information	View Document
Link for any additional information	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

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

Response:

As a reputed engineering college, the college has framed and approved a robust Research Policy (uploaded in the College Website) to promote research interest and innovations in the emerging areas of science, engineering, and technology. It endeavors to create and support a research culture for enriching the professional competence of UG / PG students, research scholars, and faculty which in turn leads to the realization of the Vision and Mission of the College. Students and faculties are motivated to undertake interdisciplinary research to promote experiential learning there by build using a strong academic foundation.

The quality of research work directly explains to the quality of teaching and learning in the classroom, thereby benefiting the students, the society, and the country. The research activities nourish the academic program by enriching the knowledge of faculties in their field of expertise. This in turn helps college to stand at the global level. The strength of the research initiatives is conforming to established norms and standards for safe and ethical conduct of research. Patents were filed and a few were granted in the recent years (reflected in the additional documents).

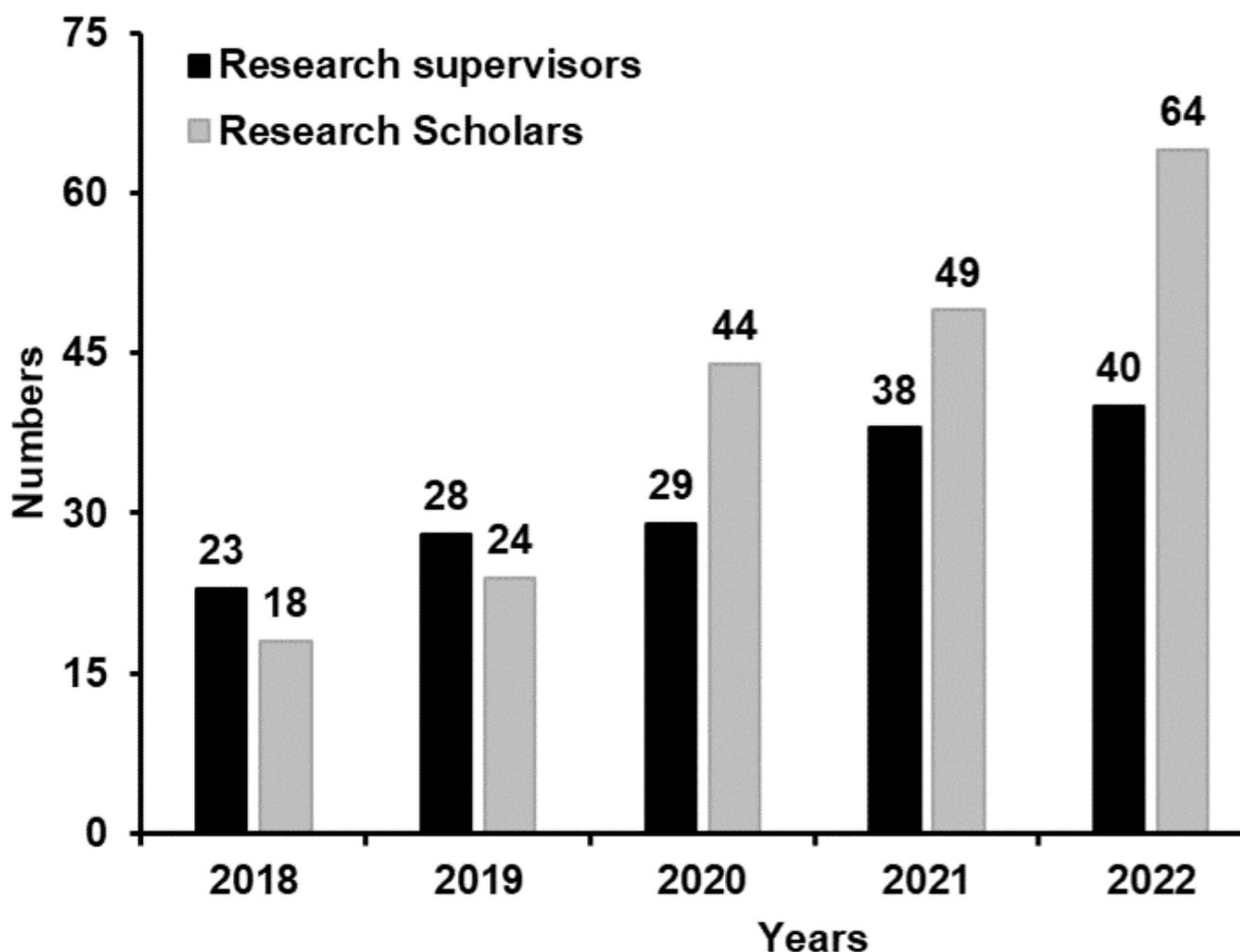
The college had received external funds through institutional development schemes to facilitate research activities through establishment of labs such as DST - Fund for Improvement of S&T Infrastructure (FIST) Lab, AICTE - Idea Development, Evaluation & Application (IDEA) Lab, etc., All the above-mentioned labs not only focus on skill development but also facilitates research activities.

Sponsored Research and Consultancy (SRC) Cell: SRC Cell in the college keeps a constant check on the call for the project proposals and encourages faculty members to submit proposals for government funding agencies. Research proposals shall pass through multi-tier review, where the proposal is reviewed by the Cell. The proposal is then vetted by the SRC Cell before submission to the funding agency.

Library: The college maintains highly stacked library for research reference. The Central Library keeps increasing the book stacks. The Central Library has access to subscribed e-resources like e-books, e-ShodhSindhu, Shodhganga, NPTEL, National Digital Library and e-books.

Web-based research: The college has conducted various webinars, workshops and FDPs to promote research in the area of research methodology, patent, improving research visibility, etc.

Research Centre: Eleven departments in the college were recognized as research centre to offer Ph.D. / M.Sc. (Engg.) by Research programs by Visvesvaraya Technological University, Belagavi. The college has witnessed a significant increase in research supervisors during the period between 2017 and 2022 as reflected in the graphical representation of counts below. The details of research guides and research areas are made available in the college website which aids prospective research scholars to choose their interest areas and research guides.



File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 1.72

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
6.6971597159	0	1.9	0	0

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 1.86

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
5	9	1	2	0

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	View Document
Any additional information	View Document

3.2 Resource Mobilization for Research

3.2.1 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: 227.81

3.2.1.1 Total Grants from Government and non-governmental agencies for research projects ,

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

2021-22	2020-21	2019-20	2018-19	2017-18
53.4	0.05	55.10	89.03	30.23

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by government and non-government	View Document
Any additional information	View Document

3.2.2 Percentage of teachers having research projects during the last five years**Response:** 4.04**3.2.2.1 Number of teachers having research projects during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
15	1	7	11	3

File Description	Document
Names of teachers having research projects	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.3 Percentage of teachers recognised as research guides**Response:** 19.61**3.2.3.1 Number of teachers recognized as research guides**

Response: 40

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	View Document
Any additional information	View Document
Link for additional information	View Document

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 42.22

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

2021-22	2020-21	2019-20	2018-19	2017-18
6	1	2	8	2

3.2.4.2 Number of departments offering academic programmes

2021-22	2020-21	2019-20	2018-19	2017-18
9	9	9	9	9

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	View Document
Any additional information	View Document
Paste link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

ME-RIISE Innovation and Incubation Centre

The Malnad Enclave for Research, Innovation, Incubation, Start-Ups, and Entrepreneurship got off on the right foot by giving young people the tools they needed to come up with new ideas and giving them constant support. ME-RIISE has a goal of turning out graduates with great skills in the areas of product/service innovation and technological development. It has put on many events that students have benefited from and helped them grow in all ways. It aims to improve the minds of young people who are passionate about something and to inspire them to start a successful journey right after they graduate.



Recognized Research Centers

Research is active at the college. Dean (Research) and Professor of Electronics & Instrumentation Engg. G. Shivakumar heads it. Visvesvaraya Technological University (VTU), Belagavi, has designated nine engineering departments as research centres: civil engineering, mechanical engineering, electrical & electronics engineering, electronics & communication engineering, automobile engineering, industrial & production engineering, computer science & engineering, electronics & instrumentation engineering, and information science & engineering. The VTU recognises Mathematics and Physics department as research centres. The College has set up a good environment for research by providing labs, paying for students to

go to conferences, seminars, and conclaves, and giving rewards for publishing good research papers, among other things. Faculty and students at the college regularly share their research at well-known conferences and in well-known journals with a good impact factor.



Club Activities

It is highly encouraged that MCE students host and attend events like the Project Expo, Symposium, and Hackathon. Project Expo is a showcase for the students' creative project models. Prizes are awarded to the victors of various activities at symposia, including paper presentations, trivia contests, and technical-oriented challenges. The Eco, Leo, Literary, Rotract, DevOps, Spicmacacy and Science Association clubs of MCE is functioning effectively in the campus.

Eco	Leo	Literary	Science Association	Devop	Rotract
•To create an environmentally friendly society which can actively get involved in environmental education.	•ECO Club is the youth wing of Lions Club International in MCE, Hassan, conducting annual literary and cultural fests along with philanthropic activities	•To foster the talents and assorted interests of blooming engineers with creative skills and a penchant for literature.	•To cater genuine interest in science and to enlighten students about the scientific facts by providing a practical dimension	•The Malnad Technical Club was founded on 09-09-2009 to cope up with the rapid growth of technology.	•Rotaract Club is a voluntary wing of Rotary Club, Hassan. The motto of the club is to serve the society in various ways for their well being.
File Description			Document		
Upload any additional information			View Document		
Paste link for additional information		View Document			

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Response: 50

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
5	7	6	16	16

File Description	Document
Report of the event	View Document
List of workshops/seminars during last 5 years	View Document
Any additional information	View Document

3.4 Research Publications and Awards

3.4.1 The Institution ensures implementation of its stated Code of Ethics for research through the

following: 1. Inclusion of research ethics in the research methodology course work 2. Presence of Ethics committee 3. Plagiarism check through software 4. Research Advisory Committee

Response: A. All of the above

File Description	Document
Any additional information	View Document
Link for additional information	View Document

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

Response: 1.73

3.4.2.1 How many Ph.Ds are registered within last 5 years

Response: 69

3.4.2.2 Number of teachers recognized as guides during the last five years

Response: 40

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
URL to the research page on HEI web site	View Document

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

Response: 2.25

3.4.3.1 Number of research papers in the Journals notified on UGC website during the last five years

2021-22	2020-21	2019-20	2018-19	2017-18
66	132	70	61	83

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document
Any additional information	View Document

3.4.4 Number of books and chapters in edited volumes / books published per teacher during the last five years**Response:** 0.4**3.4.4.1 Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year-wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
7	22	9	15	20

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.5 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed**Response:**

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

3.4.6 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution**Response:**

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

3.5 Consultancy**3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in**

Lakhs).

Response: 47.01

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

2021-22	2020-21	2019-20	2018-19	2017-18
11.17	7.88	14.49	2.28	11.19

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy and corporate training	View Document
Any additional information	View Document

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Response: 8.43

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

2021-22	2020-21	2019-20	2018-19	2017-18
8.4282	0	0	0	0

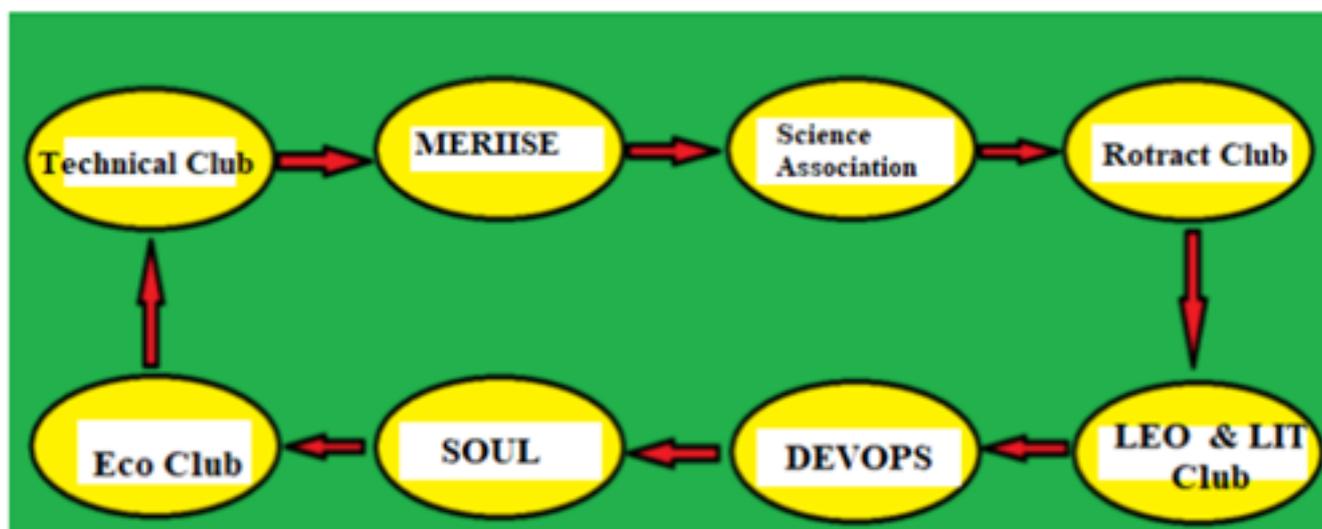
File Description	Document
List of training programmes, teachers and staff trained for undertaking consultancy	View Document
List of facilities and staff available for undertaking consultancy	View Document
Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community, -sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

Malnad college of Engineering gives lot of importance to holistic development and societal needs by motivating students and conducting many activities focusing on social issues during last five years. There are clubs for every type of college student, from academic purists to social butterflies and from artists to athletes. They are fantastic for making friends, networking for a future career, finding opportunities to serve the community, and expanding your worldview by meeting fellow students from every social, economic, racial, and spiritual background under the sun. And, they look great on a resume because they show potential employers that you took full advantage of your college experience. Along with this extension programs like NCC, NSS, Blood Donation camps have also been part of one's campus life.



Some of the clubs in our college and their contributions are as follows:

1. Technical Club: Enigma- Unleash the mystery of technology: The State level Technical Fest of the

college. Mainly auditorium is fully utilized for the Robo events. Saviskaar - A talent hunt shows exclusively for freshers. Mainly we were concerned with paper events. As such, Civil, Mechanical seminar halls were used for the events like quiz, virtual gaming etc.

2. MERIISE : IDEATION, ENTERORPHOSIS, MERIISE fest PRAGYATHA, Riiseathon. - Hack-o-soft events are conducted -Students presented their ideas on various topics like smart communications, Agri-tech, water management, urban traffic, smart cars/ vehicles, robotics, waste management, education, surveillance/security, start-up ideas and industry challenge. Workshop on Arduino Programming, PCB DESIGNING workshop has been was conducted. Unnath Bharath Abhiyan is one of the most successful and effective programs rolled out by government of India for development of rural India. Under this program institute are encouraged to adopt villages from the neighborhood and projects for overall development of villages.

3.Science association and: Two major event Scientia and smart in Scientia are conducted under science association .

4. IUCEE-EWB Students Participated in IASF-2020 and recived certification for winning/participating and introduction to sustainability course has also been offered.

5. Rotaract club: Conducts sparshaartha, as a part of Reflections and blood donation camp/Visit to Blind school. SPARSHAARTHA- The event is for visually challenged students of Blind school, Hassan. TUSSLE, a mock placement event.

6. LEO Club(LEO)-Leadership, Experience, Opportunity and Service by uniting friendship, fellowship, and mutual understanding through conducting events like JAMBOREE, KATALYST, PAPER DRIVE and ORPHANAGE VISIT.

7. LIT Club (The Literary Club): The Literary Club organize the annual fest of our college MALNAD consisting of 30+ odd events. It is categorized based on literary, art, sports and cultural competitions into 4 divisions as, BALWAAN, BUDDHIMAAN, KALAKRITH,DARPAN. And NOESIS to bring out the talents of the students and to foster it.

8. DEVOPS: Amphitheatre (2022-2023)-Cultural events were organized from DevOps club on 21 oct 2022. Events like Dance, mad-ads were performed. HACK.MCE 2.0(2021-2022) has been done.

9.SOUL: Soul is a voluntary student organization which was formed by a group of students on 9th February 2014 with the tagline: "Educating minds, Empowering lives". Also, some activities will be done for the kids like science experiments, drawing, crafts which are useful for their education. The volunteers teach kids from classes 1 to 10. FOOD DRIVE, DEEPAVALI CELEBRATIONS and visit to Balamandir, INDEPENDENCE DAY are conducted. Kids of Balamandir perform various cultural activities to entertain guests.

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

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years**Response: 7****3.6.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.**

2021-22	2020-21	2019-20	2018-19	2017-18
2	0	1	4	0

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	View Document
Any additional information	View Document

3.6.3 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**Response: 157****3.6.3.1 Number of extension and outreach programs conducted by the institution through NSS/NCC, Government and Government recognised bodies during the last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
41	36	17	26	37

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	View Document
Any additional information	View Document

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during

the last five years

Response: 45.46

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
2714	774	492	1488	1630

File Description	Document
Reports of the event	View Document
Average percentage of students participating in extension activities with Govt or NGO etc	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Response: 125.4

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

2021-22	2020-21	2019-20	2018-19	2017-18
627	0	0	0	0

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document
Any additional information	View Document

3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 31**3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years**

2021-22	2020-21	2019-20	2018-19	2017-18
10	9	3	6	3

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	View Document
Any additional information	View Document

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:

Classrooms, Drawing Halls and Seminar Halls

The institution has totally 62 classrooms with LCD projectors connected with Wi-Fi. Each classroom has spacious seating capacity based on sanctioned intake. Institution has seven Seminar halls and three Conference halls for conducting Department/ Institute level programs such as association activities and programs related to the professional bodies of the department.

Institution also follows University norms with respect to laboratory curriculum viz., experiments, detail of equipment and other infrastructure requirements including department offices, exam cell, and strong room. The above provisions have been continuously inspected by Visveswaraya University, Belgaum before granting affiliation. There are totally 38 laboratories in the campus. The college provides a library which occupies the prime place in the heart of the college to accommodate more than hundred students. Central Library is equipped with adequate number of titles and volumes of text and reference books and is available for students and faculty members. Each department also has its own Department Library for the benefit of students and faculty members.

Computing facilities

Each Department has well-equipped laboratories over and above the mandatory requirements AICTE. Totally 1105 computer systems are connected to internet through a leased line with dedicated high-speed internet connectivity (bandwidth) of 750 Mbps. In order to support ICT based teaching-learning process, each building including hostels has Wi-Fi facility. Adequate number of scanners and photocopy machines are available. Wi-Fi enabled library facilitates the student and staff to access E-resources and journals.

Central Library

The Central library was established in the year 1960. In 2000 when the library was shifted to its main building. It is housed in a four storeyed building located at the eastern side in the main building. The library spreads over an area of 1586Sq.m It is well equipped with reference books, textbooks, journals, magazines and newspapers etc. All the books are bar-coded and bar-code laser scanners are used at the circulation counter for book transactions.

CCTV surveillance system with 15 cameras is functioning in the library.

All Books are classified according to D.D.C Scheme. Seating capacity of the library is 300. It Provides Online Public Access Catalogue (OPAC) service to its users in addition to the other The library aims to stock all the books and periodicals that the students and staff members are expected to read and enrich their knowledge.

Digital Library

It has 14 terminals with head phones and mikes are available in the Digital Library section with Internet access facility to facilitate access to the, NPTEL, e-books and IEEE, ASME, ASCE, Elsevier Science direct, Springer Nature, Taylor and Francis, Emerald, Proquest, Emerald case studies, Turnitin originality online checkonline resources. It is a main source of knowledge, which is an integral and important part of our institute for higher learning.



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

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

Response:

Cultural Activities

In the college of Technical education we can get many opportunities to explore the latest technologies and experience it. AICTE IDEA Lab, TEQIP Labs, department labs and research centers, we have in the campus are the best place to witness the latest technologies and apply the theoretical knowledge we learn. There are many boot camps and workshops conducted for the development and enhancement of our technical knowledge. We also have events like HACK MCE, SCIENCIA, ENIGMA_ and many more. Which is just purely oriented in technical aspects. There are many boot camps and workshops conducted for the development and enhancement of our technical knowledge. We also have events like HACK MCE, SCIENCIA, ENIGMA_ and many more. Which is just purely oriented in technical aspects. We have many groups and events to acquire the qualities of leadership, friendship, fellowship. These are the groups of people who make you more confident and develop your personality in all areas. They are the people who pull in everything to conduct fests and events by giving a platform not only to present our talent but by giving us the opportunity to experience how it feels to celebrate togetherness and success of each other.

There are Fest like PRAGYATHA which is souly oriented on encouraging entrepreneurs and events that focuses on incubating innovation and leadership qualities for budding entrepreneurs. They also help in incubation and funding transforming from job seekers to generators. There are many activities we do in small groups like helping government schools, kids by giving value education tech education, motivating government school students in career building and help them in betterment of their life..

Yoga and Meditation Hall

Our Indians roots have got spread so much that, our culture has established all over the world.

The Institution celebrates International Yoga Day which helps to enhance awareness among students in order to connect oneself and balance oneself.

SPORTS AND GAMES FACILITIES

The Department of Physical Education facilitates the students with required sports items for their practice and motivates them to participate in both the indoor and outdoor games and sports in the National level and in Zone Level. Matches, Games and Sports are given adequate weightage. The sports activities are encouraged by providing all the necessary facilities. The students are given enough practice to participate in Inter-University, Intra-University and other tournaments. The college teams have won many Prizes, Medals, Shields and Cups in the Intercollege level.

Indoor Facilities

The Department of Physical Education facilitates the following Games as indoor games for the benefit of students such as Table tennis, Chess and Indoor shuttle badminton. College has a good collection of sports materials for effective utilization by students during holidays too.

Gym

Gym is another central facility which is functioning in the college premise. The college gym is fully equipped with essential fitness equipment's.

File Description	Document
Upload any additional information	View Document
Geotagged pictures	View Document
Paste link for additional information	View Document

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: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 62

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Paste link for additional information	View Document

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

Response: 60.27

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

2021-22	2020-21	2019-20	2018-19	2017-18
701.93	865.79	279.99	553.11	1060.47

File Description	Document
Upload Details of Expenditure , excluding salary during the last five years	View Document
Upload audited utilization statements	View Document
Upload any additional information	View Document
Link for any additional information	View Document

4.2 Library as a Learning Resource

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

Response:

The Central library was established in the year 1960 and in 2000 the library was shifted to the main building. It is housed in a two storeyed building located at the North west corner of the campus. The library spreads over an area of 1586 Sq.m. The Library of our college stands as an epitome of intellectual elegance and source of technical education, in particular to Engineering and Technology. The Library is well equipped with unique features and world - class infrastructure to support and encourage scholarly communication and professional development. With the state-of-the-art technology, the users can access the print, digital and visual resources online throughout the campus. The central library is fully computerized, well equipped with modern facilities, resources in the form of books, printed and electronic journals, CD-ROMs, on-line databases, etc. Open Access System is being followed to access the books and journals.

Name of the ILMS Software : **easylib**

Nature of Automation : **Full**

Version : **6.4a (Cloud)**

Year of Automation : **2013**

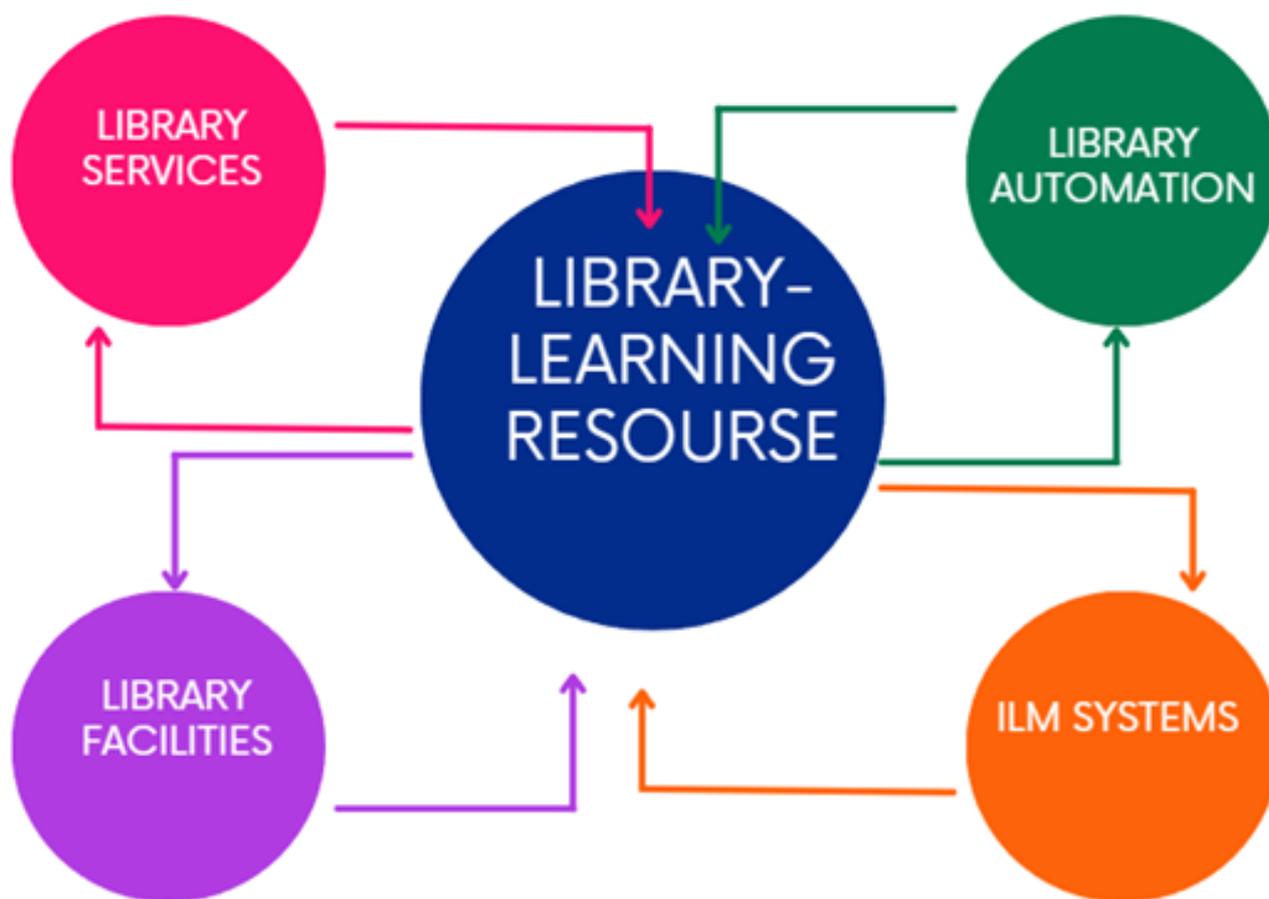
FEATURES OF SOFTWARE:

1. **Acquisition**
2. **Catalogue and Accessioning**
3. **Circulation**
4. **Communication module**

5. **Digital Library**
6. **Display Boards**
7. **In Out Management**
8. **Members**
9. **OPAC**
10. **OPAC Setup**
11. **Periodicals**
12. **Registration Module**
13. **Reports**
14. **Security Modules**
15. **Setup**

LIBRARY SERVICES AND FACILITIES

1. **Fully Computerized bar-code circulation services (Issue, Return & Renewal of books)**
2. **Online Public Access Catalogue (OPAC) for searching of books which can be accessed anywhere with the necessary credentials by students and staff.**
3. **On-site use of textbooks, Reference books/Online Journals inside the library**
4. **Reference services (Encyclopedia, Dictionary, Handbooks, Previous year question papers)**
5. **Reprography (Xerox)**
6. **CD & DVD Access**
7. **Open Access System**
8. **SC / ST Book bank**
9. **Merit Incentive Book Bank**
10. **CCTV Servellance system with 15 camaras**
11. **High speed internet in the Digital library section to access. NPTEL, E –books & IEEE, ASME ASCE, Elsevier Sciencedirect ,Springer Nature, Taylor & Francis, Emeraldinsight, ProQuest, Emerald Case-Studies, Mint Books, Mapmy Access Online resources**
12. **Display Rack for Indicating New arrivals**
13. **Wi-Fi Internet.**



File Description	Document
Upload any additional information	View Document
Paste Link for additional information	View Document

4.2.2 Institution has access to the following: 1. e-journals 2. e-ShodhSindhu 3. Shodhganga Membership 4. e-books 5. Databases 6. Remote access to e-resources

Response: A. Any 4 or more of the above

File Description	Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Details of subscriptions like e-journals, e-books , e-ShodhSindhu, Shodhganga Membership etc	View Document

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:** 29.28**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)**

2021-22	2020-21	2019-20	2018-19	2017-18
34.34	31.40	27.77	28.00	24.91

File Description	Document
Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the latest completed academic year**Response:** 14.45**4.2.4.1 Number of teachers and students using library per day over last one year**

Response: 559

File Description	Document
Details of library usage by teachers and students	View Document
Any additional information	View Document

4.3 IT Infrastructure**4.3.1 Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities****Response:****Wi-Fi and IT facilities**

Each department in our campus is connected through a star network via OFC. Each department in our campus has a LAN connected through Extreme 1G supported switches, each and every system at the

department level is connected to internet. College campus contains 50 Wireless Access points to provide campus wide wireless internet facility, which supports 3000 concurrent users. Each wireless user is provided access through MAC based authentication. For content filtering we have Dell Sonic firewall NSA 5600. VOIP facility is also available for internal communication among faculties.

All these facilities are administered under a centralized network control center. We have BSNL as ISP and has a network bandwidth of 750Mbps with redundant OFC facility from ISP. College has domain id **mcehassan.ac.in** registered under ERNET India, each and every staff is provided domain specific email id through G-suite. We have Microsoft Teams license which supports 5000 users.

IT Management

- To maintain, secure and ensure legal and appropriate use of IT infrastructure on the campus.
- To establish the responsibilities of all IT users for protecting integrity and confidentiality of the managed and controlled information assets.
- To monitor infrastructural assets like computers, servers, laptops, LCDs, and projectors and information assets like data, network devices and documents.
- MCE has a dedicated Leave Management Application for maintaining Leave Database of MCE staff hosted on AWS Cloud.

No. of Systems and their Configuration

Institution has a total of 1105 computers with the following configuration: i3 / i5 Processor, 4GB / 8GB RAM, 500 GB / 1 TB HardDisk, 500GB SSD, 3.41 GHz Processor clock speed and above CPU Speed, Dell R430 servers for high performance computing.

Internet Connection

Internet connection is distributed across the college through wired and Wi-Fi networks. The campus is enabled with 24x7 Wi-Fi, 750 Mbps bandwidth connectivity. Upgraded network infrastructure from 155 Mbps to 750 Mbps. 50 Wi-Fi access points have been installed in the campus to improve the Internet access; MAC based authentication is provided for secured access. The coverage of Wi-Fi is extended to all areas including classrooms, library, conference halls, cafeteria and hostels. The college internet system has been functioning with 750 Mbps (1:1) leased line connectivity provided by BSNL.

Networking Peripherals

MCE uses fibre optical networking cable with a speed of 100 / 1000 MBPS media converters and layer 2 switches like CISCO SG 500 / 350 / 300, Extreme summit x460 G2, Ruckus 1CX7150.

LCD Projectors

Upgrading of IT infrastructure is seen in teaching learning process as institute have LCD projector In all classrooms and has smart boards facilities. Laboratories are equipped with LCD projectors and screens for the implementation of smart and innovative learning methodologies.

IT Usage Policy

* Every user on the premises has a responsibility to promptly report the theft, loss or unauthorized disclosure of institution's proprietary information.

* Authorized individuals may monitor systems and network traffic at any time.

* Lower end configurations and obsolete systems are periodically replaced with high configuration systems.

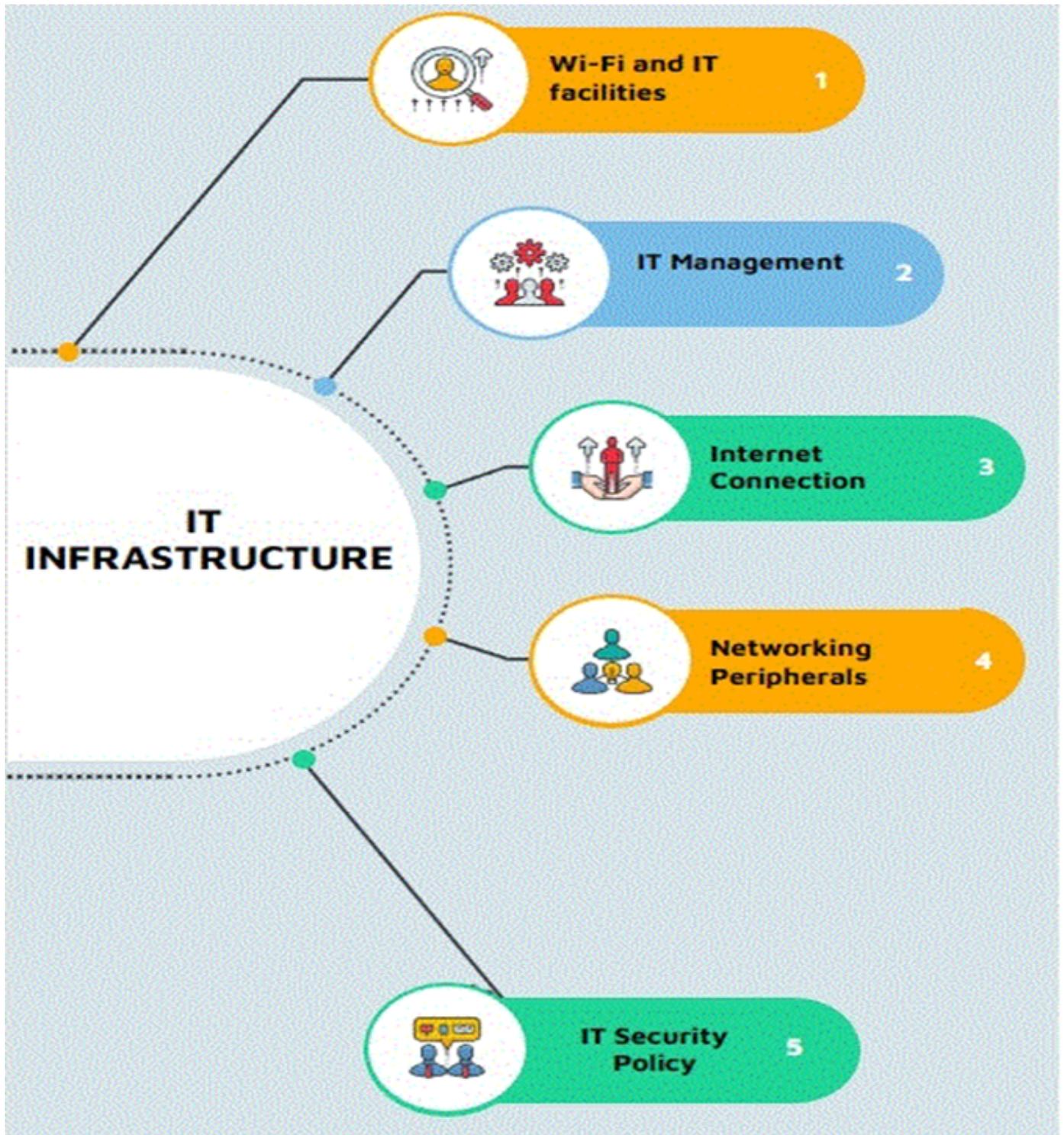
IT Security Policy

*Anti-malware software K7 is used, Dell sonic wall NSA5600 Firewalls are used to protect IT infrastructure.

*Effective security is a team effort involving the participation and support of every IT user.

Firewall/Security

Dell Sonic wall NSA5600 is a licenced one and it will provide high level security by filtering malicious traffic with content filtering.



File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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

Response: 4:1

File Description	Document
Upload any additional information	View Document
Student - computer ratio	View Document

4.3.3 Bandwidth of internet connection in the Institution.

Response: 750 MBPS

File Description	Document
Upload any additional information	View Document
Details of available bandwidth of internet connection in the Institution	View Document

4.3.4 Institution has the following Facilities for e-content development

1. Media centre
2. Audio visual centre
3. Lecture Capturing System(LCS)
4. Mixing equipments and softwares for editing

Response: A. All of the above

File Description	Document
Upload Additional information	View Document
Institutional data in prescribed format	View Document
Link for Additional information	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 20.17

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

2021-22	2020-21	2019-20	2018-19	2017-18
211.71	192.88	229.86	193.89	232.57

File Description	Document
Upload any additional information	View Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts	View Document

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:

Class Room Maintenance (Indoor)

- The cleaning of **classroom, seminar hall, laboratory and other facilities** are done by **in-house staff** of the institute and all of these supervised by **Supervisor, Garden Committee** under the instruction of Principal and HOD's.
- Each department has dedicated pre allotted staff to mopping, sweeping and cleaning.
- The classrooms are well-furnished, and the desks and benches are well organised.
- The Green board is cleaned after each session by the faculty concerned, and it is cleaned with water in the evening by an attender every day.
- Every Day the classrooms are cleaned in the Morning session.
- Students are instructed to dispose the waste in the trash can.
- For electrical faults in fan, tube lights, the student representative will notify the Class advisor. The class advisor will notify the section concerned (Work Section/Electrical Maintenance Section) via. Head of the Department.
- The projector in the classrooms is ensured to be turned off when the students leave the classroom.
- Every day, the lights and fans in the classroom are turned off by the student themselves when they leave the classroom.

Laboratory Maintenance Procedure

- Under the supervision of the HOD, the technician in charge does regular maintenance work as per the maintenance schedule, which is then reordered in the maintenance register.
- The peripherals of the system are maintained and serviced in accordance with the contained method.
- Stock register is kept separately for consumables and non-consumables. Consumable register is known by the Department abbreviated name followed by the type of register (Consumable/ non consumable), then by the count in the department.
- Non-consumables are serviced every year by the Lab Technician. If the technician is unable to repair the defect, the supplier/manufacturer will be notified of the nature of the problem and asked to attend the service. In response, the supplier/manufacturer may visit the campus and service the same, for which a service charge will be charged.
- At the end of the semester, the maintenance work is cross-checked by the faculty in-charge and the

HOD.

Library Facilities

- Each book is assigned an accession number, which is kept in the Book Stock Register.
- Staff and students visit the library to use the books; the visitor's information is kept on file in the E Gate register on a daily basis.
- A book transactions register is kept in the library for the issue and return of books.
- A gate entry register is kept for the Digital Library.
- Periodicals and non-book items are kept up to date every year.
- Every day, a daily newspaper is kept in the library.
- Once a year, the newspapers are disposed of based on the date of purchase.
- A fire extinguisher is kept in the library in case of a fire.
- A Feedback from staff and students are received periodically in order to improve the library.
- Old books, journals, and periodicals are bound to avoid damage.
- Physical stock verification is performed in the library once a year.
- Every day and evening, the library's book shelves are reorganised.
- Every morning, all section furniture is cleaned.
- Every day, the working conditions of all computer systems and printers are examined.

File Description	Document
Upload any additional information	View Document
Paste link for additional information	View Document

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: 54.7

5.1.1.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2021-22	2020-21	2019-20	2018-19	2017-18
1718	1991	1818	1619	1411

File Description	Document
upload self attested letter with the list of students sanctioned scholarships	View Document
Upload any additional information	View Document
Institutional data in prescribed format	View Document
Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years	View Document

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

Response: 23.02

5.1.2.1 Number of students benefited by scholarships and free ships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years (other than students receiving scholarships under the government schemes for reserved categories)

2021-22	2020-21	2019-20	2018-19	2017-18
1151	1087	817	514	217

File Description	Document
Upload any additional information	View Document
Number of students benefited by scholarships and freships besides government schemes in last 5 years	View Document
Institutional data in prescribed format	View Document

5.1.3 Following Capacity development and skills enhancement activities are organised for improving students capability 1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology

Response: A. All of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations as offered by the Institution during the last five years.

Response: 48.18

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

2021-22	2020-21	2019-20	2018-19	2017-18
1296	858	2370	1502	1346

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases 1. Implementation of guidelines of statutory/regulatory bodies

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

Response: A. All of the above

File Description	Document
Upload any additional information	View Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document

5.2 Student Progression

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

Response: 17.98

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

2021-22	2020-21	2019-20	2018-19	2017-18
258	115	83	82	89

File Description	Document
Upload any additional information	View Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch).

Response: 1.16

5.2.2.1 Number of outgoing student progressing to higher education.

Response: 10

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

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: 100

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	4	5	3	2

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	4	5	3	2

File Description	Document
Upload supporting data for student/alumni	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

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: 37

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

2021-22	2020-21	2019-20	2018-19	2017-18
13	0	08	10	06

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at inter-university / state / national / international level during the last five years	View Document
e-copies of award letters and certificates	View Document
Any additional information	View Document

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

Response:

The Students Council is an elected representation of the student community. The purpose of the Student Council is to serve as a legislative body, framing policies and decisions for the benefit of the student community. The Student Council shall continuously strive to identify student-related issues and help resolve them, thus building a healthy environment in the institute. The Objectives are development of skill and personality of the students' social awareness, interaction and knowledge sharing, To nurture the aptitude of the student community for holistic development. To develop student for social responsibility. The Role of Student Council has to Serve as the main forum of expression and in continuous touch with administration and act as a feedback system. The Functions of the Student Council are encouraged to take decisions through department. Views of all members of Student Council – faculty and student alike – are to be respected and equal importance is to be given to all views.

a) The Student Council shall consider all different student activities in the department and Institute brought before it, either by one of its members, students or faculty members.

b) Structure of the Student Council may be changed if the Dean-Students deems it necessary, upon discussion with members. However, such decisions shall need the support of the majority of the members of the Student Council present.

Meetings of the Student Council shall meet at least twice during a semester. The Convener shall call the meetings of the Student Council. The quorum for all Student Council meetings shall be 50% of its total

possible strength. It is expected that all members of the Student Council be present in meetings dealing with major policy changes /constitutional amendments. The Student Council is encouraged to take decisions by consensus.

File Description	Document
Upload any additional information	View Document
Paste link for Additional Information	View Document

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 22

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

2021-22	2020-21	2019-20	2018-19	2017-18
31	0	15	38	26

File Description	Document
Upload any additional information	View Document
Report of the event	View Document
Number of sports and cultural events / competitions organised per year	View Document

5.4 Alumni Engagement

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

Response:

The Malnad College of Engineering Alumni Association(MAA), Hassan was registered with a Reg. No. 338/2009-10, under Karnataka Society Registration Act 1960 on 30.01.2010. It has a good linkage between institute and alumni and have (UK), Chennai, Dubai and USA apart from parent chapter in Hassan. The Association has 10000 plus members. Alumni chapters at Bengaluru, Mangaluru, London MAA aspires to connect alumni with the institution, build synergistic plans to help the institution realize its vision, and enable the institute to add value to all of its stakeholders. The alumni association aids in the development of a network of alumni as well as keeps in touch with the business world. Every year, the Alumni

Association, with the help of Management, will conduct an Alumni Meet named "Nenapina Doni", where alumni from all branches will be welcomed to express their thoughts and suggestions on the scope of their course, as well as to raise knowledge of the professional world. This allows alumni to reconnect with one another and share their prior experiences and memories.

Alumni contributions to the development of the institution:

Enriching the Curriculum: Alumni serve on several committees, such as the Department Advisory Board, Make in MCE (MIM) and ME-RIISE all of which contribute to improving the curricula and syllabi of the various programs.

Technical Sessions: The alumni association assists in the organization of interactive sessions to educate current students about the employability and educational opportunities available abroad. Alumni serve as resource people for a variety of events such as seminars, guest lectures, workshops, and technical event judges.

Industry Relations: Alumni who are entrepreneurs arrange industrial visits for students and provide advice on how to start a new venture to turn them into job providers through ME-RIISE. The Alumni Association extends its support for student internships. **Placements Support:** Many alumni hold prominent positions in well-known industries. The within opportunities available their organization are shared with with the assistance students, and many qualified students have been recruited of alumni.

Financial Contribution: Alumni have started a project to constructed multipurpose alumni tower, which includes an open air thean '. an auditorium wit11 cutting edge technology and facilities. As a first part, open theatre h 1s h"cn ompleted and further work is in progress. Alumni contribution towards the Alumni Association is approximately Rs. 26,03,848/-.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

5.4.2 Alumni financial contribution during the last five years (in INR).

Response: A. ? 15 Lakhs

File Description	Document
Any additional information	View Document
Link for additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Response:

Nature of Governance: Malnad college of engineering is a premier autonomous institution in the state that follows the guidelines of the UGC. The Board of Governors(BOG) is a transparent, democratic and decentralized having the representation of all the stake holders. The policies instituted ensures the integrity and governance of the institution. The strategic plan of the organization is developed by a bottom-up approach of the hierarchy that ensures all the stake holders of the organization are involved in its development and implementation. A systemic organisational structure that ensures decentralization of job and responsibilities have been formulated for effective functioning of institute by the establishment of various verticals like Academic council, IQAC, Board of studies, equivalence committee, Anti ragging committee and other statutory committees. The Meeting of the GC will be held at regular intervals to ensure that all the decisions that are taken from time to time on various events like admission, budget, infra structure, teaching learning process, placements are in line with Vision and Mission of the institute. The BOG is apprised consistently with action taken reports and minutes of the meetings. Perspective Plans: Internal quality Assurance Cell (IQAC): The IQAC monitors the quality of all the activities conducted in the institute by conducting audits, self audits by faculty, getting feedback on faculty by students, course feedback, Mid course survey, Course end survey, Alumni feedback. It conduct awareness programs, training programs for students, faculty and staff in various areas that include:

1. Enhancing engagement with society, industry, alumni.
2. Distinct learning environment for students.
3. Development of a cleaner and greener campus by initiating various waste management system.

Finance: The amount received from various grants, other sources like alumni contribution, admission, funds from government will be transferred to the principals account. the financial requirement such as department budget, infrastructure development for the year will be received from various verticals. The same will be forwarded to the management for approval. Leadership Principal being the head of the institution monitors the mechanism regarding administration and academic processes. Deans carryout various responsibilities related to Admission, Academics, Examination, Student relationships and Research. There are coordinators for various Clubs, NSS, student associations of various departments. The coordinators carry the responsibilities of planning various activities and their smooth conduction of the activities. The leadership is the collaboration of Faculty, Department heads, IQAC, Board of studies for decision making and improving the efficiency of the institution. Responsibilities Following are the responsibilities of deans: Dean Planning and development: Developing strategic plan of the institute and its implementation. Dean Academics : Preparing the Academic Calendar, looking after student registration, approval of syllabus of various Courses. Dean examinations: Preparing the calendar for internal and external exams, Conduction of examination, conduction of Valuation and announcement of results Dean Students: All student related activity Dean Research: All research related activity The Head of the Departments assign workloads to faculty members with the agreement of the Head of the Institution in

accordance with their domain competence. The programme Board of studies is chaired by the concerned Head of the Department. Being an autonomous institution, the changes in curriculum and syllabi are approved by the department board of studies, and the overall improvements and changes in the examination pattern and system are approved by the academic council.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

Response:

Decentralization of Administration of Malnad College of Engineering believes that the Growth and development of the institution involves good governance. This initiative's goals are decentralization of governance and task delegation to senior officials and department heads. This goal promotes accessibility and a participatory management style. As part of the governance, the management transferred power (administrative and academic) to the Principal and academic heads. Decentralization also provides decision-making authority and financial resources. Decentralization has thus influenced engineering education planning, policy making, and management. Participative management the Governing Council (GC) is in charge of improving an institution's performance. The GC chairman and members actively contribute to the institute's growth. All institutional decisions and policies are made in the institution's best interest, after consulting with relevant stakeholders. The GC's top-down strategy not only motivated stakeholders but also helped the institute grow. Faculty members are informed via meetings and circulars. Academic success requires clear roles, responsibilities, and authority for all responsible persons. The college organisation chart depicts the general structure, authority, and levels of various administrators. Institutional practices Decentralization and participatory management are the key to the organization's collective leadership and democratic values. This practice is reflected in the extensive delegation of power to department heads. The Department Head guides and supervises the department's teaching-learning plans with the help of senior faculty. Activities such as departmental symposiums, value added courses and industrial visits are planned by the department head. Regarding implementation, the department takes creative and innovative steps to improve teaching and learning process. The HoD coordinates student and faculty research activities in the department. Department heads plan, organize, and publish the departmental magazine and newsletters with their colleagues. The department organizes parent- teacher meetings to inform parents/guardians of academic progress. Faculty members have goals, and involving them in decision-making helps achieve the institution's vision and mission. Academic and cultural activities are framed by faculty members under the direction of the department head. The university has many committees to implement new academic and administrative policies. The academic calendar includes re-opening dates for each semester, working days or holidays, Continuous Assessment Test, etc., Each departmental faculty member is encouraged to contact the principal or department head with any creative or innovative ideas then and there.

File Description	Document
Any additional information	View Document
Link for additional information	View Document
Link for strategic plan and deployment documents on the website	View Document

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

Institutional Strategic Development Plan - 2023-2028 Malnad College of Engineering has felt the need of a strategic development of a plan for the institution. The mandate was given to the Dean planning and development to develop strategic plan for a period of five years from 2023-2028. An Institutional strategic development plan team (ISDP) deliberated and arrived at policies keeping the Institution's vision in mind. The ISDP team involved all the deans, heads of the departments, and all faculty members, technical staff and the students in preparing the strategic plan. The implementation of the policies would be the responsibility of the head of the Institution. The responsibilities of evaluation, monitoring, reviewing and analyzing the deviation during the course periodically made to remain with the Internal Quality Assurance Cell – IQAC along with Dean Planning and Development. This comprehensive plan will be a guiding plan for the years 2023-2028. MCE Strategic Plan 2023 -2028 identifies the following targets: The vision articulated for the Institution in 2007 was to become and be perceived as the leading college in engineering education in the country and one of the premier colleges of engineering in the world producing skilled, creative to be socially responsible professionals. This continues to be the vision and long-term goal. The college will achieve national and international recognition of this envisioned future through the following targets: Perception: The Institution will attain a reputation for excellence in engineering education and research, producing socially responsible professionals. We will be an internationally reputed institution for best practices in research, education and outreach. We will be a world-class educational institution, giving solutions to the problems related to technical, social, economical through research and educational contributions on a global scale contributing directly to MAKE IN INDIA initiative by the batch of 1990 alumni to address global challenges.

Staff / Faculty and students: The incentives, rewards, and appreciations in terms of monetary and professorships will attract a diverse set of faculty and retain the best faculty. The Institutional scholarships, stipends, Incentives, research culture and entrepreneurial culture will attract the best and brightest students. Research: We will be an institute of excellence in identifying and solving problems to improve human and environmental conditions on global footprints, funding through industry, research organizations, and universities. We will be the world's knowledge centre through inventions, and discoveries resulting in scholarly publications for information exchange, patents, and startups in revenue generation to be a self-sustaining Institute and at the same time the faculty/staff and students will be rewarded for their contribution in research. Education/ Students/Alumni/: The students will be globally competitive, industry ready and have entrepreneurial abilities. We will be recognized internationally for quality diversity and for best attitude of students. We will be recognized for innovative distance education programs. The institution will provide relevant education in respect of the culture of the land to think and feel "the world is one

family”. Our alumni initiative MAKE IN MCE will be a model for all educational institutes and our alumni will be world leaders in leading world’s best institutions, industries, and society. Malnad college of Engineering will be more focused on starting new academic programs focused on interdisciplinary and system orientation, and industrially relevant.

File Description	Document
Any additional information	View Document
Link for additional information	View Document
Link for Strategic Plan and deployment documents on the website	View Document

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

Response:

The information in this HR policy is important to all the Employees of Malnad College of Engineering (MCE) and they should strictly adhere and follow the HR policy. This HR policy is to be referred whenever a clarification on college policies / benefits is required based on the instructions from various statutory bodies and state government the policies, practices and benefits described in the HR policy may change from time to time. On such occasions, the college reserves the right to amend, modify, rescind, delete, supplement or add to the provisions of this HR policy at its own discretion. However, no amendment or modification of this HR policy shall be effective unless made in writing, and signed by the chairman of the governing body, the Malnad Technical Education Society (MTES) ®. The college will attempt to provide the employees with notification of any other changes as they occur.

File Description	Document
Any additional information	View Document
Link for additional information	View Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

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

Response: A. All of the above

File Description	Document
Screen shots of user interfaces	View Document
Institutional data in prescribed format	View Document
ERP (Enterprise Resource Planning) Document	View Document
Any additional information	View Document
Link for additional information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

Response:

The college takes excellent care of its personnel. Several welfare initiatives have been implemented for both teaching and non-teaching Staff of the college. To increase the morale of the staff and motivating them for efficient working the college promotes beneficial welfare programmes for both teaching and non-teaching staff. The college values its personnel's contributions to the institution's overall development and progress. Additionally, it encourages employees to take advantage of welfare benefits with simplicity. The institute provides a variety of welfare benefits to its employees, including promotion and increments based on self-assessment. Financial Assistance for technical Publications Academic excellence awards in the form of cash and certificates of recognition, incentives for the publication of papers/research articles, Incentive programme to encourage individuals to engage in research activities or initiatives, support for faculty members conducting/organizing guest lectures, and assistance for faculty members conducting / organizing conferences / seminars / workshops / FDPs. Health Insurance All employees are protected by medical insurance for accidental and health issues. Employee Provident Fund (EPF) Additionally, the institution offers its employees the option of contributing to an Employee Provident Fund (EPF). Emergency care and Ambulance service The College provides a full-time dispensary and emergency care. An ambulance service is available in case of an emergency. General Facilities The institution has sports, gym, and yoga facilities; A Fee concession is given to faculty wards enrolled in MCE-affiliated institutes. Leave Benefits The college offers a variety of leave benefits to all employees, including casual leave, special Casual leaves, OOD, committed leave, earned leave and maternity leave. These benefits are available to both teaching and non-teaching staff as per state government norms.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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: 30.06

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

2021-22	2020-21	2019-20	2018-19	2017-18
16	52	97	59	47

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

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

Response: 5.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
1	2	4	16	3

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

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: 41.37

6.3.4.1 Total number of teachers attending professional development Programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes year wise during last five years

2021-22	2020-21	2019-20	2018-19	2017-18
62	89	86	75	65

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers)	View Document
IQAC report summary	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Link for additional information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Finance Committee: The institution has internal and external auditing systems in place that are completely fool proof. The finance committee takes great care in its careful verification of income and spending information. The final audit of the Institution is done by the outside experts.

Budget Proposal and utilization. The procedure for effective and efficient financial resource monitoring is described as follows: The Head of the Institution submits to the Management a budget proposal that incorporates the recommendations of all department heads within the institution. Salary, power, internet charges, maintenance costs, stationery, and other consumable charges are all included in the Institution budget, also include non-recurring expenses like lab equipment purchases, furnishings, and other development costs. Further the expenses, such as research and development are included in the institution budget. The accounts department keeps track of expenditures in accordance with the budget established by management. Internal Auditing Procedures On a regular basis, the internal audits of all the vouchers is conducted to ensure that they are accurate. Bills and vouchers are double-checked to confirm that the expenses listed under each heading are correct. If a flaw or deviation is detected, it is promptly brought to the attention of the college's Principal. A legal audit is usually performed at the end of the financial year.

The management team examines the audit report. The Accounts department audits and approves the disbursement statements before they are submitted to the principal. The stores department acquires laboratory equipment, teaching aids, furniture, and other facilities and the accounts department provides payments to service providers for maintenance and repairs, in addition to collecting tuition fees, paying salaries, processing tax payments, and disbursing loans. The quality and timeliness of the institution's financial records are extremely important to it. The college oversees ensuring that audits run smoothly. No faults or complaints have been detected since the institution has implemented and is an effective system of internal controls such as obtaining quotations, comparison and preparing purchase orders. Approvals are obtained at each stage of the execution process, and the items and services are thoroughly inspected after delivery.

External auditing Procedures : The college's financial accounts are audited by an experienced auditor at the end of financial year. Following the audit, the auditor verifies that all transactions are lawfully authorized, and the final report is given to management for review. Any discrepancy detected during the auditing process would be investigated right away, and the supporting documents would be examined within the timeframes set. All these strategies, in addition to exhibiting financial transparency, show a commitment to financial discipline at all levels of management to prevent the misuse of funds or other assets of the institution. The audited statement is signed by the authorized management personnel as well as the auditor.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

Response: 26.93

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

2021-22	2020-21	2019-20	2018-19	2017-18
00	1.93	25	00	00

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Annual statements of accounts	View Document
Link for additional information	View Document

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

Response:

The institute mobilizes the funds in many ways to establish various facilities in the college. The management funds for most of the infrastructure development of the college such as building for classrooms, labs, computing facilities and academic facilities. The college had TEQIP funding for various academic and research activities. Laboratories across all the branches are uplifted to state of art technology. Faculty members are apply for various Government and Nongovernment funding agencies for research and development and modernisation of laboratories. Good number of funding is being obtained and utilized for the research and academic activities.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

Response:

IQAC has started in the year 2017. Principal of the institution being the Chairperson of the cell. The cell took many initiatives under the areas of curriculum development, Teaching learning, assessment methods, Research and development, infrastructure development, student support and so on. · The cell is involved in curriculum design, considering academic flexibility of the institute, introducing advanced courses according to the trends. This made the students be ready with any sort of challenges once they are into the professional field. · IQAC has developed many programmes for faculty and students for the up gradation of knowledge. Many workshops, faculty development programs, seminars, etc., are organised by various departments. National/International conferences are also conducted based on the recent trends. · IQAC has proposed many augmentation of facilities, particularly for the laboratories of various departments based on state of the art technology. · IQAC of the institute persistently striving from framing strategies to bring about an effective, cohesive and mutually beneficial networking between various bodies to improve the teachinglearning process through increased use of ICT, expanding the scope of the library, skill development courses, arranging for industrial visit/training of students, assisting in placements and training, career consultations (higher studies, developing communication and interpersonal skills of students for interviews). · IQAC encouraged various committees/cells of the institute like NSS, student clubs, alumni association etc., to organize awareness camps, extension and service oriented activities. · The cell maintained institutional database, also analyses feedback from various offline and online sources. ·

IQAC periodically conducted academic and administrative audits and follow up procedures. · IQAC prepared and submitted Annual Quality Assurance Reports since 2017 to 2022 · IQAC has made data collection, compilation and submission of self study report to NAAC and accreditation bodies. The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms Following IQAC activities have contributed significantly for quality assurance in the institute.

Arrangement of internal and external academic audits to understand the quality of various process and improve the same. · Arrangement for feedback responses from students, parents and other stakeholders on quality related processes. · Organization of workshops, seminars on quality related themes and promotion of quality in Engineering education. · Documentation of the various activities of the College, leading to quality improvement. Acting as a nodal agency of the HEI for coordinating quality-related activities, including adoption and dissemination of good practices. · Development and maintenance of Institutional database through management information system for the purpose of maintaining / enhancing the institutional quality. · Development of Quality Culture. Preparation of the Annual Quality Assurance Report of the based on the quality parameters / assessment criteria developed by the relevant quality assurance body like NAAC, in the prescribed format.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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

An internal and external academic audit is carried out every year after completing both odd and even semester. Faculty members are supplied with self-academic audit formats and inform to submit the same after the completion of academic year. The report includes evaluation type, COs of the course, CO and PO mapping, CIE and SEE question paper quality through bloom's taxonomy, innovation in teaching methods, results correlation between CIE and SEE, adoption of suggestion by the BOS. The IQAC forms a committee with senior members or professors of the institution. The committee evaluates the academic performance of the each faculty and the same is submitted to the IQAC for further action. IQAC is sending CIE question papers to external evaluator for checking the quality of the question, in terms of framing of questions at the different bloom's level, coverage of CEOs, and overall quality of the question paper. The reports from the external auditors are scrutinized and action taken report is generated from the administration and it is maintained in the IQAC.

File Description	Document
Any additional information	View Document
Link for additional information	View Document

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)**

Response: All of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document
Paste web link of Annual reports of Institution	View Document
Link for additional information	View Document

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:

MCE college constitutes a women empowerment cell and anti-ragging committee to create awareness among the students to assert their rights and to educate them about women empowerment. We conduct orientation programs for the newly admitted students for various courses and gender sensitization was one of the agendas to be included in the program to educate the students on these issues when they enter the campus to pursue their degrees in different streams. The student council of the college has branch and class representatives, one boy and one girl from each branch. The governing committee includes male and female staff as members. Every year International Women's Day was celebrated in a grand manner to motivate the girl students and the women faculty members. Every year, "Best outgoing student of the year" is awarded to one boy and one girl on graduation day. Separate slots were provided for girl students to use the facilities like Gym, indoor games and swimming pool.

File Description	Document
Annual gender sensitization action plan	View Document
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	View Document

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

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

Response: A. 4 or All of the above

File Description	Document
Geotagged Photographs	View Document
Any other relevant information	View Document

7.1.3 Describe the facilities in the Institution for the management of the following types of

degradable and non-degradable waste (within 500 words)

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

Response:

Waste Management Steps

- The institution has taken up several initiatives to sustain an eco-friendly campus towards the waste management of solid waste and liquid waste.
- The gardens inside the campus are maintained by a dedicated group of sweepers and maintenance staff.
- The institution implements effective waste management through waste segregation and recycling of the waste.
- To reduce the waste at institute, students and staff are educated on proper waste management.
- Practices through Seminars and various programmes.

Solid Waste Management

- The waste generated within the campus is collected and segregated through dustbins kept at various sources and transported to disposal site.
- Wastes like papers, tin, glass, metals and plastic are given for recycling to external agencies.
- The biodegradable and food waste that is generated from the hostel is mostly segregated and feeded to cows.
- To make plastic free zone campus, frequent awareness programmes are conducted for students.

Liquid Waste Management

- Liquid wastes from various points of origination like washrooms, canteen, and laboratories are collected through proper canals, and are disposed to sewage treatment plant without stagnation.
- The treated waste water is used for watering the garden using sprinklers. RO waste water is used for cleaning vessels in the canteen.

E-waste Management

- The institution has taken up number of E-waste Management methods with the objective of creating a healthy atmosphere in the campus.
- E-wastes such as electronic components/unused computers/UPS/batteries/printers,etc., are collected and handed over to external agencies to recycle the materials.
- The awareness programs are organized in the institution with a view to impart the E- waste management techniques.

Waste Recycling System

- The fundamental principle of the institution in waste recycling system is the implementation of the 3R's-Reduce, Reuse, and Recycle.

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

7.1.4 Water conservation facilities available in the Institution:

- Rain water harvesting
- Borewell /Open well recharge
- Construction of tanks and bunds
- Waste water recycling
- Maintenance of water bodies and distribution system in the campus

Response: A. Any 4 or all of the above

File Description	Document
Geotagged photographs / videos of the facilities	View Document
Any other relevant information	View Document
Link for any additional information	View Document

7.1.5 Green campus initiatives include:

- Restricted entry of automobiles
- Use of Bicycles/ Battery powered vehicles
- Pedestrian Friendly pathways
- Ban on use of Plastic
- landscaping with trees and plants

Response: A. Any 4 or All of the above

File Description	Document
Various policy documents / decisions circulated for implementation	View Document
Geotagged photos / videos of the facilities	View Document
Any other relevant documents	View Document

7.1.6 Quality audits on environment and energy are 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: A. Any 4 or all of the above

File Description	Document
Reports on environment and energy audits submitted by the auditing agency	View Document
Certification by the auditing agency	View Document
Certificates of the awards received	View Document
Any other relevant information	View Document

7.1.7 The Institution has disabled-friendly, barrier free environment

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

Response: A. Any 4 or all of the above

File Description	Document
Policy documents and information brochures on the support to be provided	View Document
Geotagged photographs / videos of the facilities	View Document
Details of the Software procured for providing the assistance	View Document
Any other relevant information	View Document

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

Response:

Malnad College of engineering conducts many club activities which motivates students in many ways other than the academic part.

Many clubs were formed which attracts students to attend the creative activities The following are the Clubs which encourages students to showcase their talents.

1) Leo club 2) Science club 3) Rotary club 4) Literature club 5) DevOps club

Cultural events were organized from DevOps club on 21 Oct 2022. Events like Dance, mad-ads were performed. MALNAD is a marvellous spectacle filled with numerous cultural, literary, art and athletic battles. Thousands of audience stood witness to this phenomenal fest which spanned over a period of 2-3 days. The 30 well organized events made sure to drag every student 's attention and urged them to race against time to prove their mettle. It was made sure that the participants would be forced to use each and every tactic in their arsenal in order to gain the pride of winning the ultimate

reward ' 'SARVOTTAM'

HACK.MCE 2.0(2021-2022):

A techno gaming fest was conducted by DevOps team on 18 and 19 June. Gameathon was conducted under the roof of HACK.MCE one week prior to the main event at canteen. The main events were on 18th and 19th of June which was organized at auditorium.

Technical Activities indulged in the academic year 2021-22:

1. Saviskaar - A talent hunt show exclusively for fresher. Mainly we were concerned with paper events. As such, Civil, Mechanical seminar halls were used for the events like quiz, virtual gaming etc.

2. Enigma- Unleash the mystery of technology: The State level Technical fest of the college. The event comprises students from different parts of the state, and the properties and resources of the college are

utilized to the maximum extent. Mainly Auditorium is fully utilized for Roboevents. A national level Hackathon based on the theme 'lifestyle' a 24hrs coding competition. Many participated from different districts. It included 2 events where the mobile application built from scratch by DevOps club was used. The entire campus map was incorporated into a game named thief city. Inspired by the Swachh Bharath Abhiyan, we conduct Spot Fix every year. Spot Fix is the cleanliness drive in which we choose a spot in and around Hassan city, immaculate and take responsibility of maintaining it in a best way possible. The main purpose of this event is to create awareness among the common people about the cities of Public Hygiene. Eternity is one among the prestigious events organized in our college. It provides a platform to the students to showcase their talents and unique ideas. It also triggers an eco-concern among the technical students that develops an understanding that the nature is the ultimate technology. These various types of activities help the students to showcase their talents.

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

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

Response:

India has always placed a high value on ethics and values, and the Constitution of India reflects this. It is the guiding principle for all Indian citizens to become responsible and ethical individuals. Educational institutions play a crucial role in inculcating values for responsible citizenship, and there are several activities that these institutions undertake to achieve this goal.

Value Based Education: Our institution offer value-based education to students. This kind of education aims to impart an ethical and moral foundation to students that will help them become responsible citizens. The educational institutions teach moral values and ethics through various means such as Role of Engineers in society, General knowledge and English learning programmes, Creativity, smart thinking smart work program, Values in life and Social Skill Development.

Community Services: community service is an essential part of the curriculum. It provides students with an opportunity to learn about the importance of being responsible and ethical citizens by helping the community. Our Institution encourage students to participate in various community service activities such as blood donation camps, tree plantations, orphanage and old age home visits.

Civic Education: Civic education is another critical activity that our institution undertake. It aims to teach students about their rights and responsibilities as Indian citizens. Civic education covers topics such as the Voter id linking, crime prevention day, crime prevention month program, Programme on scheme and benefits in rural development, Road Safety and Legal Awareness, citizenship, and voting rights. It also teaches students about the importance of civic participation and the role of citizens in building a strong

nation.

Leadership Training: Our institution also offer leadership training to students. It helps in developing responsible leaders who can work towards the betterment of society. These training programs help students develop skills such as decision-making, problem-solving, communication, and teamwork.

Cultural Activities: Cultural activities play an important role in inculcating values for being responsible citizens. Our institution celebrate various cultural events and festivals such as Independence Day, Republic Day, teachers day, Dr. B. R. Ambedkar Jayanthi and Gandhi Jayanti. These events provide an opportunity for students to learn about India's history, culture, and values.

Environmental activities: Environmental education is another critical activity carried out. It aims to teach students about the importance of preserving the environment and natural resources. Our institute takes initiatives to promote environmental sustainability by implementing eco-friendly practices and conducting awareness campaigns such as Bharath Swachata Pakwad, Reduction in energy consumption, Green and clean campus, Unnat Bharat Abhiyan, Shramadana and plantation programme, International day of forest, Plantation programme, Plastic free society, Kalyani cleaning programme, Save nature and Save Future program on world environment day, One student and one tree campaign.

File Description	Document
• Details of activities that inculcate values; necessary to render students in to responsible citizens	View Document
Any other relevant information	View Document

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

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

Response: A. All of the above

File Description	Document
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	View Document
Code of ethics policy document	View Document
Any other relevant information	View Document

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

Malnad college of Engineering celebrates national and international commemorative days , events and festivals in order to promote integrity harmony and to have effective socialization relationship among students and staff of the college. The college has organized the following programs in connection with national and international commemorative days, events and festivals. The significance of celebration of these festivals makes the students and staff learn about the country's rich heritage and history. The following days are celebrated in the college with the true spirit.

Gandhi Jayanti - Gandhi Jayanti is celebrated on October 2nd every year to commemorate the birthday of Mahatma Gandhi, the father of the nation. Gandhi was born on October 2, 1869, in Porbandar, a coastal town in present-day Gujarat, India. The aim of celebrating Gandhi Jayanti in college is to inspire students to imbibe the values that Gandhi stood for and to encourage them to make positive contributions to society.

Republic Day Republic Day is celebrated on January 26th every year to commemorate the day when the Indian Constitution came into effect in 1950, making India a republic. Our college celebrates the day with various activities and events like Flag hoisting ceremony, Cultural programs, Patriotic speeches etc. The aim of celebrating Republic Day in college is to promote patriotism, celebrate the rich cultural heritage of India, and to inspire students to become responsible citizens who contribute positively to society.

Independence Day Independence day is celebrated on August 15th every year to commemorate India's independence from British colonial rule in 1947. Celebrating this day in a college setting can be a great way to inspire students to value their freedom and understand the sacrifices made by those who fought for India's independence. The aim of celebrating Independence Day in college is to promote patriotism, celebrate the rich cultural heritage of India, and to inspire students to become responsible citizens who contribute positively to society.

Dr. Ambedkar Jayanti– Dr. B.R Ambedkar Jayanti is celebrated every year on April 14 to commemorate the memory of B.R. Ambedkar. Dr. Ambedkar is a well known social reformer and also a politician. This day is also referred to as “ Equity Day”, Celebrating international days in college is an excellent way to promote awareness and appreciation for important issues affecting our world. It can also create a sense of community and bring students and faculty together to work towards a common goal. In India, celebrating these international days can also help promote national values and create a sense of social responsibility among the youth.

File Description	Document
Geotagged photographs of some of the events	View Document
Any other relevant information	View Document
Annual report of the celebrations and commemorative events for the last five years	View Document

7.2 Best Practices

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

Response:

1. **Paper Seeing Process**
2. **Objectives of the Practice**

To ensure transparency in the valuation of semester end/final examinations answer scripts and to avoid revaluation of scripts.

1. To Context

The examination process is one of the key areas for any educational institution or university. It is a crucial evaluation process to grade students. In the case of theory exams, there is a traditional way of evaluating answer sheets. It is being followed by many universities and education institutes.

The Honorable Supreme Court of India in its landmark judgement has allowed for the full disclosure of exam answer copies to the applicant. Evaluated answer sheet now falls under the definition of “information” under the powerful Right to Information (RTI) Act. This judgement is a welcome step for the lakhs of students who receive wrong results due to negligence of examining bodies or their members. All the exams conducted by government bodies, including all those by individual state and central governments are covered by this law.

This Act can be extremely beneficial to the student community by allowing such transparency. A student in any university or school can demand inspection of his answer script and take its certified copies. There are many decisions and discussions on obtaining evaluated answer copies under RTI

There are no one set of rules or standards that apply in examination evaluation by Universities or Education Boards. There is no countrywide accepted norms or any legal rights for the students over fraudulent practices or biased marking. This has created nightmares for millions of bright students and destroyed the future or promising students across India. Maintaining and Giving Answer Copies may be extra workload for the educational institution, but it is not a reasonable excuse to deny this information under RTI. Evaluated answer copies have to be open to the public to ensure transparency in our education system. Any student who got unexpected low marks or failed even after answering questions properly, is a grieved citizen. This student can demand to inspect his results so that the evaluators cannot use unjustified means to act against any student.

After every semester end examination, there were many students applying for revaluation of their answer scripts with the ambition to get higher marks. This trend was seen both for makeup and supplementary examinations also. It was a laborious process for examination section to complete the revaluation and re announce the results.

1. The Practice

Physical handling of the answer sheet has many logistical and administrative activities. The following are some of the key stakeholders of the answer sheet evaluation and result processing. Allowing students to view their answer scripts prior to results announcement is the goal of this practice. They can include the question number in the complaints area if they identify any errors in the assessment or the totaling of the marks. Students can also confirm that the grades awarded follow the evaluation criteria. Students will receive extra marks if their complaint is valid. This kind of practice is more beneficial, increases pupils' consciousness, and demonstrates the fairness of the evaluation process.

A decision is taken by the administration of our college to stop the revaluation process and to make valuation process more transparent, the paper seeing process is introduced. Under this process, all the students are allowed to see their answer scripts and permitted to write their grievances for their marks to change, based on the scheme of valuation supplied to them. The claimed scripts are again valued/corrected by the respective course faculty and it should be approved in the department academic committee. The modified marks are then submitted to examination section through the proper channel. After this process, results are re-announced. This process is carried out without charging any fee for students.

Paper seeing facility is provided, before the announcement of the results of SEE or Make-up examinations. A student could apply for viewing of his/her answer script after the declaration of the result. An application form for the same with detail of subjects whose answer scripts are to be viewed is duly filled by the candidate and submitted to the office of COE with the fees duly paid. The student on the announced date and time of the paper viewing would be accompanied by the faculty mentor/parent to view the script. The answer script along with the scheme and solution would be shown to the student with the marks evaluated. The student needs to write his/her comments in a register provided after paper viewing.

Evidence of Success

It is observed that after introduction of this process, students are happy and have confidence in valuation process. Also, the number of grievances by the students have come down drastically. Copy of document with table attached.

Problems Encountered and Resources Required

Since examination section has large number of answer scripts, they need to be dispersed to the respective departments for paper seeing. Searching the papers is tedious task since scripts are coded booklets.

Title of the Best Practice

M-Foundation Award

Objectives of the Practice: To financially support economically weaker students to complete their course without hassles.

3. The Context:

The college is admitted with many meritorious rural students. Students from this background are economically weak as their parents' income is very low. Due to these constraints, students sometimes could not be able to complete or continue their studies from first to final year. As per the assurance made by the M-foundation members, Rs 50000.00 /- is earmarked for this purpose. The children of class IV employees studying in PUC / degree post-graduation with merit or eligible for the scholarship. Applications are to be invited from parents of this children with proof of having paid the fees and copy of

marks card of qualifying exam. Depending upon the number of applications received, the amount shall be distributed. The committee shall decide the numbers and amount based on the application received.

For the best outgoing student award of the year the following conditioned are follows

- Only UG students are eligible
- The given applicant is permitted to be considered for award, even if He / She has completed the course in the immediate make -up exam, with X or I grade in the respective SEE. (Minimum percentage of marks: SSLC – 60%, PUC-60%, BE-60% in all semesters)

4. The Practice:

The M Foundation (a registered charitable trust) has been set with intention of providing scholarships to such students, who have been able to obtain a merit-based seat but due the economic condition of their guardians, find it difficult to pay such fees as required by the Government/College authorities.

MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding, to be signed between the College authorities and the M Foundation lists the broad terms and conditions under which the scholarship will be awarded.

The MCE undertakes the following responsibilities.

At the beginning of each academic year, a committee constituted by the Principal of Malnad College of Engineering (MCE) will call for applications for this scholarship. The application will be addressed to the committee constituted as above on a plain sheet of paper along with the authenticated proof of marks and economic conditions and prepares a short list of 3 boys and 3 girls. Such a shortlist will be forwarded by the Principal of MCE to the M Foundation office at Bangalore Detailed conditions to be satisfied by a student beneficiary shall be listed separately and forwarded to the foundation within one month of signing this MOU.

The meritorious students with this background are identified and they are financially supported by a team of alumnus of the college under the scheme, called M-Foundation award. The facility is also extended to the wards of D group employees of our college.

For the best outgoing student award of the year the following conditioned are follows

- Only UG students are eligible
- The given applicant is permitted to be considered for award, even if He / She has completed the course in the immediate make -up exam, with X or I grade in the respective SEE. (Minimum percentage of marks: SSLC – 60%, PUC-60%, BE-60% in all semesters)

M- foundation scholarship for wards of class -IV employee's children.

The following conditions are to be fulfilled for claiming the scholarship

- The ward of class IV employee, identified by the college based on seniority and income to be

preferred for scholarship.

- Some if the wards are doing PUC/BA/BSc/BCom/Bed/BCA/MA/MSc/MCA etc. and they need some funding for their study.
- Application from deserving employees will be taken and on merit and other eligibility criteria the names will be shortlisted and will be recommended to M- foundation for final approval.
- The fee payable towards the study will vary from college to college and from course to course. It may be less than Rs.5000/- in some cases and more than Rs.10000/ for others.
- Restricting the total budget to Rs 50,000.00/-, as assured by M-foundation, the committee shall take a decision for distribution among applicants. If the total amount awarded comes to less than Rs.50000/- the balance can be carried for the next academic year.

File Description	Document
Best practices in the Institutional web site	View Document
Any other relevant information	View Document

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:

Malnad College of Engineering has the vision set as “to be an Institute of Excellence in Engineering education and research, producing socially responsible professionals”. In order to advance scholarly activity in Malnad College of Engineering, ME-RIISE (Malnad Enclave for Research, Innovation, Incubation, Start-ups, and Entrepreneurship) was founded with the intention of engaging in collaborative research, training students in research tools, disseminating research, or engaging in creative projects.

ME-RIISE often promotes multidisciplinary study and encompasses activities that go beyond the scope of one subject. The establishment of a Centre with the express purpose of obtaining funding for research projects is possible. The center can be used by researchers, faculties to apply for grants and get funds for R&D. Several events like FDP, Webinars and training programs were held in the center prevalently for the benefit of the faculty and students.

A GLIMPSE OF KEY COLLABORATIONS AND ACTIVITIES CONDUCTED BY ME-RIISE ARE

MHRD Institution Innovation Council

Ministry of Education (MoE), Govt. of India has established ‘MoE’s Innovation Cell (MIC)’ to systematically foster the culture of innovation amongst all Higher Education Institutions (HEIs). In collaboration with ME-RIISE, Institution Innovation Cell has been established in the college with the vision of fostering innovation and support students to enrich their spirit of entrepreneurship.

Collaboration with ICT Academy

ME-RIISE has association with ICT Academy which has led to the establishment of Centre of Excellence powered by Autodesk and Fusion 360. Workshops conducted: Fusion 360, Revit Architecture and Salesforce Developer 402 Awards:

- State Cloud Championship Award and best under institution for extensive participation in Cloud literacy month 2018.
- Coordinator of ME-RIISE was awarded with best cloud champion award under coordinator category in cloud literacy month 2018.
- ICT Academy Partner's In Growth Awarded for outstanding partnership and active participation in initiatives of ICT Academy

Unnat Bharat Abhiyan

ME-RIISE, has also found a cause in bringing transformational change in rural development under Unnat Bharath Abhiyan. Five villages around Hassan have been adopted and activities are being conducted to move towards holistic development of the villages.

New Age Innovation Network (NAIN)

ME-RIISE is associated with New Age Innovation Network and is working towards bringing up incubation centers that will encourage students, researchers, scholars, and alumni to share their ideas, nurture, and bring out technical solutions to problems that are local-centric.

The main objective of the NAIN Scheme is to encourage students, research scholars, and alumni to share their ideas to solve the chosen problems which are local-centric and to validate, refine, and nurture the ideas. Incubation Center shall provide an eco-system to convert the ideas in proof of concept and upgrade them to a level of commercial value. After successful incubation, encourage and lead the teams towards setting up a business enterprise

MoU with Atal Incubation Centre

ME-RIISE has a MoU with Atal Incubation Centre, Jyothi Institute of Technology, Bangalore. This association has provided a platform for collaborative research between two different institutes and various other activities.

Innovation & Centralized Research Laboratory

Innovation lab of ME-RIISE fosters innovative activities and supports students to enrich their spirit of entrepreneurship. The innovation lab comprises IoT facilities for developing innovative projects and high-performance computing facilities for carrying out research.

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

5. CONCLUSION

Additional Information :

The Malnad Enclave for Research, Innovation, Incubation, Start-Ups and Entrepreneurship began its right course of action by empowering young minds to generate innovative ideas and empowered them with constant support, through its immense amount of efforts. It has been a golden gateway for the students of MCE to pursue their dream of becoming a self-reliant entrepreneur ever since.

ME-RIISE possesses a vision to engender graduates with their magnificent skills in the arena of innovation and technological development of products / services. It has successfully completed a multitude of events with umpteen numbers of students getting benefitted through each and every one of them for their all-round development.

Concluding Remarks :

Malnad College of Engineering (MCE) as an autonomous institution, ensures the curriculum enables our students to meet the ever evolving global requirements as well as contribute to regional development. The college has highly qualified and dedicated faculty to train the student community to the expectations of industry. Faculty members are involved in research activities in full swing with good number of publications and more patents. MCE has good infrastructure facilities for both teaching and research. Students of MCE are trained in academics, co-curriculum and extension activities. Students are also involved as members of academic and administrative bodies. In toto, Malnad College of Engineering working towards its vision, "To be an institute of excellence in engineering education and research, producing socially responsible professionals".