

# FOR 1<sup>st</sup> CYCLE OF ACCREDITATION

# S D M COLLEGE OF ENGINEERING AND TECHNOLOGY

S D M COLLEGE OF ENGINEERING AND TECHNOLOGY KALGHATAGI ROAD
DHARWAD
580002
www.sdmcet.ac.in

#### Submitted To

# NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

(Draft)

#### 1. EXECUTIVE SUMMARY

#### 1.1 INTRODUCTION

Shri Dharmasthala Manjunatheshwara College of Engineering and Technology is a reputed institute run by Shri. Dharmasthala Manjunatheshwara Educational [SDME] Society, Ujire® under the able leadership of DR. D. VEERENDRA HEGGADE.

Shri Dharmasthala Manjunatheshwara College of Engineering and Technology offers B.E. / B.Tech, M.B.A, M.Tech courses. It was established in 1979 in the city of Karnataka to provide education and skills through a curriculum focused on Chemical Engineering, Electronics & Communication Engineering, Electrical Engineering, Computer Science Engineering, Information Technology, Mechanical Engineering, Civil Engineering, Artificial Intelligence & Machine Learning. Through well-designed full-time graduate course, the institute aims to equip students with skills to excel in a variety of specializations in the fields of Engineering, Business & Management Studies. The Institute offers 8 UG and 7 PG Degree courses. It has a faculty who have expertise and experience in their respective fields. Along with a strong focus on research and development, the dissemination of teaching and training allows students to remain ahead of competition through latest insights on the industry.

#### Vision

To develop competent professionals with human values.

#### Mission

- To have contextually relevant Curricula.
- To promote effective Teaching Learning Practices supported by Modern Educational Tools and Techniques.
- To enhance Research Culture.
- To involve the Industrial Expertise for connecting Classroom contents to real-life situations.
- To inculcate Ethics and soft-skills leading to overall personality development.

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

#### **Institutional Strength**

- 1. An institution with fruitful existence of 40-plus years.
- 2. Campus sprawling across 68 acres of land.
- 3. Supportive management committed staff and motivated students led by Revered President.
- 4. All UG programs except 1 are accredited by the National Board of Accreditation (NBA).

- 5. Implementation of Outcome Based Educational (OBE) process.
- 6. Autonomy to design robust curriculum in line with industry requirements.
- 7. Focus on excellence in Education, Research, and Promotion of Innovation & Entrepreneurship
- 8. Optimum usage of ICT in the teaching learning process
- 9. Highly qualified and skillful employees
- 10. All the Engineering and Management departments are having recognized research centers by Visvesvaraya Technological University (VTU), Belagavi.
- 11. Received a considerable amount of funded projects from various National and Regional funding agencies.
- 12. Excellent Industry-Institution Interaction and trainings for placement have resulted in good placement opportunities for eligible students.
- 13. In-house startup cell to foster entrepreneurship quality among the students with minimum seed funding facility.
- 14. Adequate and well-maintained infrastructure for Curricular, Co-curricular and Extra-curricular activities.
- 15. Well-established Library with adequate books and Journals conforming to AICTE/UGC requirements. Digital Library with a subscription to E-Journals.
- 16. The residential facility which has separate Girls & Boys Hostels for approximately 1450 students with an In-house hygienic Mess on the campus.
- 17. Garnering strong support from widely scattered happy alumni across the globe for academic, placements and research through active alumni association
- 18. Preaching and practicing the values to inculcate ethics in students and employees in line with Dharamshala Culture.

#### **Institutional Weakness**

- 1. Scope to improve the quality research
- 2. Motivating meritorious students to opt for higher studies/research
- 3. Need to create more demand for M.Tech programs.
- 4. Scope to establishing more 'Centres of Excellence

- 5. Rank listing by various agencies.
- 6. Peer and public perception.

#### **Institutional Opportunity**

- 1. To tap widely available avenues of research funding (STEM)
- 2. Consider the National Education Policy (NEP-2020) recommendations progressively.
- 3. Starting new Programs in emerging areas.
- 4. Having MoUs with institutions of National importance like (IITs, IISc, IIITs, NITs) and foreign universities of repute for research and development.
- 5. Enhancing employability
- 6. To get better ranking by various ranking agencies.
- 7. Acquire accreditation from National and International bodies.

#### **Institutional Challenge**

- 1. Reduced research funding and consideration of private institutions by Public and Private Agencies.
- 2. Attracting quality inputs being in peer competition.
- 3. Alternate service providers, i.e., online universities and community colleges
- 4. Transparency in ranking procedures.
- 5. Rapid changes in technological upgradation

#### 1.3 CRITERIA WISE SUMMARY

#### **Curricular Aspects**

The criterion 1 provides the details of curricular aspects along with the various processes and practices and deliverables both in tangible and intangible form. It includes the key indicators to represent the set quality standards. An insight about design of contextual curricula along with regular and periodic revision of syllabic contents to meet the immediate requirements of the employers from different sectors is presented. Further, it

reveals micro level details such as introduction of courses in emerging areas, courses to enhance employability, courses for skill development etc. The details of Outcome Based Education (OBE) are furnished by the way of an option extended to the students to choose the courses

as well as the number of credits i.e. Choice Based Credit System (CBCS). The need and role of integrating courses from Humanities, Social sciences, Professional ethics, Universal Human Values, law of the land etc., is highlighted along with how it is the reflected in the scheme. In spite of a systematic process being in place for design and development of curricula, there exists a curriculum gap due to fast and frequent changes in the technologies, expectations and practices. Hence, the requirement of value added courses along with the course titles and statistics is provided that enhances the ability of the employment of the students, thus making them for industry ready. These courses help developing well rounded

personalities with the requisite skills. This criterion also includes details of the gross enrollment of the students, the effectiveness of teaching learning process, the success rate of the students passing out etc. The details about the exposure to the external world through carrying out projects, undergoing internship, carrying out field work and also making them familiar with industrial environment is furnished. The logical end for any process is the system evaluation through feedback and feedback is taken from various stakeholders which are significant inputs for preparing an action plan and execution to become more effective in future. The feedback collected in structured way is analyzed that help to locate the scope for improvement and also make adequate preparation to initiate actions.

#### **Teaching-learning and Evaluation**

The criterion 2 furnishes the details about the teaching learning process and evaluation procedures. It gives an insight of enrollment percentage and percentage of students admitted to the programs under various categories. The students admitted to our college forms a heterogeneous group with varied learning ability and from different backgrounds. The details of assessment of learning levels along with an attention paid to academically challenged students are provided. The existing staff student ratio is cited for training the students. The college practices Outcome Based Education (OBE) which is accomplished by student centric teaching methods such as innovative teaching techniques, experiential,

participatory, activity based methods. The details regarding modern teaching aids along with ICT are mentioned. Mentoring of the students help boosting the morale of the students and keep them in the main stream. The college prepares the academic calendar as per the guidelines of the VTU which includes all components related to academics and implemented meticulously. The qualification details of the teaching faculty that ascertain the expertise is provided along with distinction in terms of degree secured. The details of retention of the faculty as a quality indicator of knowledge transfer are furnished. The examination events calendar is provided to the students in the beginning of the semester to enable them to plan accordingly about their academic and examination activities. There is a wing in the Governance structure to address the grievances of the students in respect of the examination issues is functional in the college. The details of IT integration found in place to complete the time bound examination activities in the college. The students are aware of PEOs, POs and COs of their program and courses respectively which help making them not only competent engineers but also responsible citizens. A tool in ERP is used in order to calculate the attainment of COs and POs. The performance of the students is calculated and students' satisfaction survey is carried out for providing better facilities to create conducive learning environment.

#### Research, Innovations and Extension

The institution envisages the promotion of quality research by creating strong and vibrant

research ecosystem with an emphasis on innovation and technology development. The integration of research, innovation, and technology development is the basic building block of Atma-Nirbhar Bharat (Self-reliant India). It is essential to create a conducive environment for increased research productivity, to encourage collaborative research cutting across different streams. In line with the Country's mission, the institution caters to the needs of research by supporting the development of laboratories, funding equipment's specifically required for research and provide financial support for the product development. The Institution promotes interdisciplinary/multidisciplinary and translational research culture. The Institution has incubation centre which houses 6 startups and one centre of excellence in Robotics and Sensorics. The Institution deputes the faculty members to pursue full time PhD from premier institutions by sanctioning study leave and paying regular salary. The Institution provides financial support (registration fees & travel allowance) to attend National/ International Conferences, symposiums, and consortiums. The Institution helps the students/faculty members to file the patent and lends financial support to get it published or

granted. Separate budget is earmarked for research and innovation. The institution has well defined research policy which includes components such as seed money scheme/seed grant, research incentives for journals publications, attending conferences, incentives for research projects, organising conferences / seminars / symposiums /consortiums and partially supports the professional memberships. All the departments of the Institution are recognised as research centres by Visvesvaraya Technological University, Belagavi, Karnataka where more than 100 students have registered for doctoral degree. Institute is actively involved in interdisciplinary and multidisciplinary in collaboration with University of Agricultural Sciences, Dharwad and SDM University, Dharwad.

#### **Infrastructure and Learning Resources**

SDM College of Engineering and Technology has adequate infrastructure and physical facilities for academic and cocurricular activities. For the academic activities' classrooms, laboratories, computing equipment and machineries etc. The Institution has adequate facilities for cultural activities, sports (indoor, outdoor) games, gymnasium, yoga center etc.

We have classrooms, out of which number of class rooms are equipped with ICT facilities.

All our classrooms are well ventilated and natural air circulation. Our team of housekeeping staff are maintaining the classrooms to have good ambiance and cleanness.

Our laboratories and well equipped with latest computers, machineries, and equipment. We

spend almost 75 lakhs on computers and software and approximately 40 lakhs of worth machineries and equipment. SDMCET management is committed to provide state of the art

machineries and equipment in our laboratories. We have students: computer ratio as SDMCET has a unique library with square meters of space. titles and volumes.

Every year we spend Rs 4,00,000 for purchasing the books ,2,50,000 for journals. The entire

activities are managed by a library management software "Easylib" We have seminar halls of different capacities such as 50 participants, 100 participants, 150 participants, 250 participants, 600 participants 800 participants auditorium. These are being used for both curricular and cocurricular activities.

SDMCET has good sporting facilities for both indoor and outdoor games. Outdoor Sports

facilities like cricket, football, volleyball ,athletics ,archery are being conducted in our ground of acres. SDMCET in association with alumni's have created a indoor sports complex of 4.00 crores with floor area of sq meters .It caters facilities for 4 badminton courts, 4 table tennis tables, chess, carrom like indoor activities.

#### **Student Support and Progression**

This section of the SSR describes student academic and personal development facilities. The college is glad to provide the necessary facilities for students in this area. Examples:

- Students are eligible for government, non-governmental, private trust, and other scholarships. The college also provides scholarships and free ships. This guarantees that no admitted student will struggle financially.
- The college's strong Alumni Association helps with facility enhancement, placements, financial aid to eligible students, and mentorship initiatives. The 10,000- member Alumni Association meets every two years. The organization has chapters across India, the UAE, and the US. Alumni partially funded a guest house/auditorium used for large conferences, seminars, and other events, as well as a vast indoor sports complex that can accommodate badminton, volleyball, basketball, table tennis, gymnastics,
- Students are encouraged to use the college's outstanding indoor sports complex and outdoor sports facilities, including Dharwad's largest sports ground, for cricket, athletics, and other sports. The college has the most "University Blues" and ranks second among technical colleges in the state in sports.
- The college promotes external internships and provides periodic interpersonal skills training. Students receive advanced technology training. For the past five years, the college has had strong placements and rising average placement packages.
- The college also has facilities for encouraging startups and budding entrepreuners in collaboration with Govt. of karnataka ITBT department till 2020 and independently afterwards. A total of 42 projects have been granted funding of Rs.45.6 lakhs.
- Training for Competitive and admission exams for higher education in India and abroad are also promoted. These facilities serve many pupils. Our students learn technical skills, interpersonal skills, teamwork skills, and leadership attributes that will help them in their jobs.

#### Governance, Leadership and Management

and more.

Shri Dharmasthala Manjunatheshwara College of Engineering and Technology is a time tested institution having clearly stated its mission statements serving as its driving force in achieving the stated vision. The institute is a self funded by prestigious SDME Society, Ujire, Headed by Padmavibhushan Dr. D. Veerendra Heggade, who is a sitting Member of Parliament (RS) and Dharmadhikaari, Shri Kshetra Dharmasthala.

The Institute practices an open, transparent, and democratic method of governance with all parties involved at all levels. The Institute envisions a strategic plan every five years after discussions with stakeholders. The Institute primarily focuses on quality teaching-learning and research. The Institute encourages staff members to participate in academics, trainings, orientations, workshops, and faculty development programmes to upgrade and update themselves. There are many extension activities are conducted regularly like NSS, women empowerment cell, village adoption to sensitize the students about the need for community service. The Institute extensively makes use of technology in its teaching, learning and evaluation practices and administrative system. ICT- enabled class rooms are provided for effective teaching-learning. The Institute strives hard to keep our staff and students happy and healthy in the campus therefore various welfare measures are taken care. Every year, the staff will be appraised by their immediate superiors such as section heads and head of the departments. The Institute regularly conducts the internal and external financial audits through the designated auditors earmarked by the management. The Internal Audit Committee gives a detailed report including observations, if any, to the management. The management seeks replies for observations made in the report. The major financial resource for the institution is obtained through student fees. The major part of

Page 7/98 24-03-2023 08:33:02

expenditure is spent on salaries, maintenance and day-to-day expenses. In case of any additional requirement, management provides the support. The Institute has a well organized IQAC which plays instrumental role in taking developmental decisions pertaining to academic development and accreditation. The IQAC sets a schedule of the meetings of NBA, PBSA, and Internal and External academic audits at the beginning of the semester with different departments to assess their progress on monthly basis.

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

SDM CET was started by strong vision and objective laid down by the visionary founder, Dr. D Verendra Heggadeji, the president of SDME Society, Ujire, Karnataka. His contribution to the society especially in the field of rural development is immense. The vision of out institute is to build competent professionals with human values. The entire campus is environment friendly. All the faculty members and students cooperate very much in maintaining that. The following are our strategies in claiming the institutional values and best practices:

- Demonstrating values and ethics to the soceity
- Transparent, participative gender equity initiatives
- Availability of Code of Conduct and, Values and Ethics Committee
- Green Campus with Barrier free environment and user-friendly systems
- Installation of Solar Power Plants
- Establishment of waste water management and rain water harvesting
- Ban on one-time use plastics
- Equal Opportunities for all categories of students
- Celebration of nationally important days for imbibing values among students and faculty members

### 2. PROFILE

### 2.1 BASIC INFORMATION

Name and Address of the College		
Name	S D M COLLEGE OF ENGINEERING AND TECHNOLOGY	
Address	S D M College of Engineering and Technology Kalghatagi Road Dharwad	
City	Dharwad	
State	Karnataka	
Pin	580002	
Website	www.sdmcet.ac.in	

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	K Gopinath	0836-2447465	9538677470	0836-246463 8	principal@sdmcet. ac.in
IQAC / CIQA coordinator	U P Kulkarni	0836-2328350	9448915301	0836-246463 8	upkulkarni@yahoo .com

Status of the Institution		
Institution Status	Private and Self Financing	

Type of Institution		
By Gender	Co-education	
By Shift	Regular	

Recognized Minority institution	
If it is a recognized minroity institution	No

<b>Establishment Details</b>	
Date of Establishment, Prior to the Grant of	21-11-1979

Page 9/98 24-03-2023 08:33:02

'Autonomy'	
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			
<b>Under Section</b>	Date	View Document	
2f of UGC	01-01-2016	<u>View Document</u>	
12B of UGC	01-01-2016	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/App roval details Inst itution/Departme nt programme	Day,Month and year(dd-mm- yyyy)	Validity in months	Remarks
AICTE	View Document	03-07-2022	12	Approved by AICTE

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	National Institutional Ranking Framework
Date of recognition	15-07-2022

Location and Area of Campus				
<b>Campus Type</b>	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	S D M College of Engineering and Technology Kalghatagi Road Dharwad	Urban	40.225	60966.6

### 2.2 ACADEMIC INFORMATION

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Pr ogramme/C ourse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BE,Chemical Engineering	48	PUC or Equivalent	English	30	26
UG	BE,Civil Engineering	48	PUC or Equivalent	English	90	65
UG	BE,Compute r Science And Engineering	48	PUC or Equivalent	English	120	120
UG	BE,Electrical And Electronics Engineering	48	PUC or Equivalent	English	60	60
UG	BE,Electroni cs And Com munication Engineering	48	PUC or Equivalent	English	120	120
UG	BE,Informati on Science And Engineering	48	PUC or Equivalent	English	60	60
UG	BE,Mechani cal Engineering	48	PUC or Equivalent	English	120	61
UG	BE,Artificial Intelligence And	48	PUC or Equivalent	English	60	60

	Machine Learning					
PG	Mtech,Civil Engineering	24	BE or BTech inrelevant discipline	English	18	15
PG	Mtech,Comp uter Science And Engineering	24	BE or BTech inrelevant discipline	English	18	3
PG	Mtech,Electr ical And Electronics Engineering	24	BE or BTech inrelevant discipline	English	18	1
PG	Mtech,Electr onics And C ommunicatio n Engineering	24	BE or BTech inrelevant discipline	English	18	7
PG	Mtech,Infor mation Science And Engineering	24	BE or BTech inrelevant discipline	English	18	0
PG	Mtech,Mech anical Engineering	24	BE or BTech inrelevant discipline	English	18	1
PG	MBA,Manag ement And Business Ad ministration	24	BE or BTech inrelevant discipline	English	60	60
Doctoral (Ph.D)	PhD or DPhi 1,Chemical Engineering	36	ME or MTech inrelevant discipline	English	1	1
Doctoral (Ph.D)	PhD or DPhil,Civil Engineering	36	ME or MTech inrelevant discipline	English	7	7
Doctoral (Ph.D)	PhD or DPhi 1,Computer Science And Engineering	36	ME or MTech inrelevant discipline	English	16	16

Doctoral (Ph.D)	PhD or DPhi l,Electrical And Electronics Engineering	36	ME or MTech inrelevant discipline	English	3	3
Doctoral (Ph.D)	PhD or DPhi 1,Electronics And Commu nication Engineering	36	ME or MTech inrelevant discipline	English	6	6
Doctoral (Ph.D)	PhD or DPhi 1,Information Science And Engineering	36	ME or MTech inrelevant discipline	English	6	6
Doctoral (Ph.D)	PhD or DPhi 1,Mechanical Engineering	36	ME or MTech inrelevant discipline	English	10	10
Doctoral (Ph.D)	PhD or DPhi 1,Manageme nt And Business Ad ministration	36	ME or MTech inrelevant discipline	English	2	2
Doctoral (Ph.D)	PhD or DPhil,Physic s	36	ME or MTech inrelevant discipline	English	1	1
Doctoral (Ph.D)	PhD or DPhi 1,Chemistry	36	ME or MTech inrelevant discipline	English	2	2
Doctoral (Ph.D)	PhD or DPhi 1,Mathematic s	36	ME or MTech inrelevant discipline	English	2	2

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				0				0				0
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit				0				0				0
Sanctioned by the Management/Soci ety or Other Authorized Bodies				21				13				114
Recruited	18	3	0	21	10	3	0	13	78	36	0	114
Yet to Recruit				0			<u> </u>	0		'		0

	Non-Teaching Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				203				
Recruited	175	28	0	203				
Yet to Recruit				0				

	Technical Staff							
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				44				
Recruited	42	2	0	44				
Yet to Recruit				0				

### Qualification Details of the Teaching Staff

	Permanent Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	16	3	0	7	2	0	29	9	0	66
M.Phil.	0	0	0	0	0	0	0	1	0	1
PG	2	0	0	3	1	0	49	26	0	81
UG	0	0	0	0	0	0	0	0	0	0

	Temporary Teachers									
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor				
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	3	0	0	3
M.Phil.	0	0	0	0	0	0	0	1	0	1
PG	0	0	0	0	0	0	3	2	0	5
UG	0	0	0	0	0	0	0	0	0	0

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

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty	Male	Female	Others	Total	
engaged with the college?	2	0	0	2	

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	354	11	0	0	365
	Female	239	3	0	0	242
	Others	0	0	0	0	0
PG	Male	31	1	0	0	32
	Female	28	0	0	0	28
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Others	0	0	0	0	0

#### Provide the Following Details of Students admitted to the College During the last four Academic Years Category Year 1 Year 2 Year 3 Year 4 SCMale Female Others STMale Female Others OBC Male Female Others General Male Female Others Others Male Female Others Total

### 2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Artificial Intelligence And Machine Learning	<u>View Document</u>
Chemical Engineering	<u>View Document</u>
Chemistry	<u>View Document</u>
Civil Engineering	<u>View Document</u>
Computer Science And Engineering	<u>View Document</u>
Electrical And Electronics Engineering	<u>View Document</u>
Electronics And Communication Engineering	<u>View Document</u>
Information Science And Engineering	<u>View Document</u>
Management And Business Administration	<u>View Document</u>
Mathematics	<u>View Document</u>
Mechanical Engineering	<u>View Document</u>
Physics	<u>View Document</u>

### Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	SDMCET is autonomous institute affiliated to Visvesvaraya Technological University (VTU). We have already introduced multidisciplinary openelective system and students are offered Interdisciplinary subjects with three to four credits. Students are encouraged to participate in certification courses, workshops, technical talks etc. which are multidisciplinary in nature. In order to incorporate social engineering graduate attributes, we have taken initiation to introduce Universal Human Value (UHV) and Scientific foundations of health subject to students as per AICTE model curriculum. Further few of the faculties have successfully completed the UHV workshop as per the AICTE, to teach UHV. Institute is planning for organizing FDPs/SDPs to train the faculties and students on NEP.
2. Academic bank of credits (ABC):	Institution maintains students' data about their credits and other general information through ERP system. This institution is autonomous affiliated to Visveshwaraya Technological University, Belagavi, Karnataka state. The university collects all academic and general information about every student and

	maintains the data in their database.
3. Skill development:	Institution firmly believes in comprehensive holistic growth of students by nurturing them through training for technical skills, life skills, Human values, societal concern and Environmental awareness. The institute takes care of training under Center for Industry Institute Interaction in conducting technical, soft-skill training through its knowledge partners. Institute aims to bring the hidden qualities and talents of the students through multiple clubs like Samanvaya Club, Robotics & Aero modelling clubs, Literary Clubs, QWERTY.I/O, Antaranga, pratibimba, Astitva, Diversity, Toastmasters Club, which ensure to impart life skills, society and environmental concern etc. The institution has MoUs/Academic collaborations with reputed organizations and Industries Eleation, Pune, German Treffpunkt, Deshpande Foundation, Sand Box Startups, Hubli, TATA ELXSI, ICT Academy, Advanced Electronic Systems Bangalore, NICHROME industries to enhance skill-sets.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	The institution has introduced courses on Human Values, Soft Skills, Kannada, Entrepreneurship, Constitution of India etc to integrate indian knowledge system in terms of personal values, family values, interpersonal skills, social values, national values, language, culture etc.
5. Focus on Outcome based education (OBE):	Outcome Based Education (OBE) is an educational philosophy that drives the experiential learning components specified in NEP-2020 by ensuring the competence and performance required for a role to be played by the students in the Industry i.e. industry readiness. IQAC unit of this Institution has established the simple and effective procedures of defining Course Outcome(COs), mapping of COs to program outcomes (POs) and attainment of outcomes.
6. Distance education/online education:	SDMCET being an autonomous institute affiliated to Visveshwaraya Technological University, Belagavi is not eligible to offer distance education and online education. However SDMCET encourages students and faculty members to register for online courses offered by NPTEL, INFOSYS Springboard and SWAYAM platforms. The students who undergo such courses are given dew credits in-terms of course

teachers assessment marks.

### **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
14	14	14	14	14

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 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
2927	2923	2773	2917	2968

File Description	Do	Document		
Institutional data in prescribed forma	t <u>Vie</u>	ew 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
820	771	788	791	818

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
2927	2623	2766	2921	2975

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
636	288	383	1134	1435

### 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	
555	567	546	537	554	

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 3.2

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

2021-22	2020-21	2019-20	2018-19	2017-18
162	169	169	171	174

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
163	163	163	163	163

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 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
206	191	192	241	241

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
272	291	317	250	259

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

#### 4.3

Total number of classrooms and seminar halls

Response: 52

4.4

Total number of computers in the campus for academic purpose

Response: 687

Page 24/98 24-03-2023 08:33:02

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
140.64	76.25	144.90	112.95	134.33

### 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:**

The curricula are developed in line with the vision of the institution that is to develop competent professionals with human values. While developing the curricula, reference is made to the body of the knowledge specified by both the legal and professional organisations at National and global levels. The curriculum is defined to achieve the program educational objectives such as employment, professional growth, life-long learning, sense of serving the society by practicing the values. The courses incorporated in the curricula will cover the specified Program Outcomes (PO) for an engineering graduate. The contents of the courses are discussed in length in BOS which consists of members representing industry, meritorious alumnus, academic experts nominated by the University and Chairman Academic Council and finalised keeping the contextual relevance. The course contents are also making reference to the modified Bloom's taxonomy with the set of defined Course Outcomes (COs). There is a process in place to design the curricula. The departments will take the inputs from various stakeholders such as industry, alumni, peer Institutions, academic experts, management representatives, parents, students etc. Further, taking the reference of model curricula by AICTE and VTU, the Department Undergraduate Committee (DUGC) will discuss over a few sittings and propose the designed curricula to the Board of Studies (BOS). The BOS further discuss and deliberate on the proposal recommended by the DUGC and with suitable changes, it will recommend to Academic Council (AC) for final approval. The academic Council will consider the recommendations of BOS for discussion and will approve the curricula. However, in the case of any changes or modifications, the same is referred to BOS to review the recommendations and direct BOS to resubmit. The AC approved curricula now will be implemented by the college by pooling the proper resources in accordance with the mission statements of the Institution. The resources provided include pedagogy to promote effective teaching-learning practices using modern tools and techniques, interleaving research in teaching, industrial connect to classrooms for the students to know and understand real life situations and impart ethics and soft skills leading to well-rounded personality development. The curricula are revised completely once in 4 years. Also, every year it is reviewed and changes in the course contents to the extent of 10% is permitted. The departments will submit budget requirement for upgrading the infrastructure and equipments whenever the curricula is revised. Thus, the institution is committed to have curricula relevant to local, national and global development needs and curricula implementation is accomplished by providing the necessary resources.

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: 14

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

Response: 14

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
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: 8.7

# 1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development yearwise during the last five years..

2021-22	2020-21	2019-20	2018-19	2017-18
55	72	30	45	39

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

#### 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:** 9.44

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

Response: 239

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

Response: 2532

File DescriptionDocumentMinutes of relevant Academic Council/BOS<br/>meetingsView DocumentInstitutional data in prescribed formatView DocumentAny additional informationView DocumentLink for Additional InformationView 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: 14

File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document
Any 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:** 

Education is basically to bring about the behavioral change. The change in behavior can happen when the knowledge is gained with positive attitude. The knowledge is obtained by cognitive learning and behavioral change will happen by affective learning. There are many resources and means for cognitive learning and the institution will provide these resources. The major portion of the curriculum focuses on cognitive learning. In principle, the affective learning should happen inherently, but it is becoming inhibited. In line with the vision statement of the college that is "To develop competent professionals with human values", the college considered the significance of cognitive and affective learning. The college is committed to develop competency through cognitive means and human values through affective domain learning. In our college, considerable importance is given to affective learning. The contents pertaining to affective learning are brought in to the curricula, so that each student will learn and practice the values in their professional and personal life. Of late, importance of affective learning is elaborated by AICTE, VTU and many professional organizations and suggested to include in the curriculum as mandatory learning courses with credits or audit. It is also the duty of our college to produce responsible citizens apart from competent Technocrats. To meet this requirement, a course on "The Constitution of India and Professional Ethics" is included in the curricula.

Professional ethics encompasses practicing the values, code of professional practice, adherence to standards etc. Courses on Human values are taught to inculcate good manners, socially acceptable acts, respect for individuals and society.

An exposure to these courses enables students to make decisions on the basis of sound moral principles and culture of our nation. This will also build proud feeling about the Heritage, culture and values of our nation. The college understands that the engineers have an obligation to the society and need to create awareness in the society about environmental concern. To address the need of environmental related issues, the possible engineering sustainable solutions, a course on society, environment and Engineering is included in the curricula. The young minds are made to be responsible to pass on clean and non-degraded environment to the generations to follow. The college provides equal opportunity for women to participate in all activities. Many lady faculty members are in key positions in Academic and administrative Governance. There is an anti-sexual harassment cell functional in the college to address the registered grievances in addition to the online AICTE grievance cell.

Students are also involved in the community related activists to earn AICTE activity points. In our college, we have co-education.

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	

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

Response: 163

#### 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
18	22	22	53	48

File Description	Document
List of value added courses (Data Template)	View Document
Brochure or any other document relating to value added courses	View Document

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

**Response:** 102.33

# 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
1958	2266	2134	4791	3740

File Description	Document	
List of students enrolled	<u>View Document</u>	

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

Response: 100

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

Response: 2927

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

#### 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
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	
URL for stakeholder feedback report	<u>View Document</u>	

### **Criterion 2 - Teaching-learning and Evaluation**

#### 2.1 Student Enrollment and Profile

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

Response: 91.7

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

2021-22	2020-21	2019-20	2018-19	2017-18
2927	2923	2773	2917	2968

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

2021-22	2020-21	2019-20	2018-19	2017-18
3041	3107	3171	3247	3266

File Description	Document
Institutional data in prescribed format (Data Template)	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: 38.56

# 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
92	97	70	118	146

File Description	Document
Institutional data in prescribed format	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:**

The students entering into education are from different backgrounds such as rural, urban, category, economy level, medium of instructions, etc., and above all of varied learning abilities. The students in 10+2 level are normally exposed to extensive and definite contents study. When they enter into professional education, there is a paradigm in scope and nature of study. The students need to be facilitated to adjust to the changed academic ambience.

The Institution has an implicit mechanism to assess the learning levels of the students. In our college, the students are admitted under three categories viz CET, COMEDK and Management quota with varied learning levels. Since, first year study being common to all branches of engineering, class divisions are formed drawing students from all three categories. This will drive out from their mind regarding the category under which they have been admitted. This will ensure the equality and thus, the class division is a heterogeneous group with varied learnability.

The faculty members plan and deliver the contents catering to the needs of the heterogeneous group through innovative teaching techniques. The course instructors after engaging 10-12 classes will gauge the grasping levels of the students based on the interaction in the class. In addition, the slow learners and advanced learners are identified after Internal Assessment test-1 looking to their performance in the test. The students who score less than certain preset marks as decided by the faculty and who remain absent for IA test are treated as slow learners. The list of such slow learners will not be publically notified to avoid embarrassment to the students. However, such academically challenged students are communicated individually by the faculty members.

This observation, helps the faculties to modify teaching method, tools and focus. The faculty members plan and engage extra/special classes for slow (academically challenged) learners in identified courses, typically problem-oriented and/or conceptual/fundamental courses. The Institute makes a provision for slots in the time table for extra/special classes for slow learners if the number is more. On the other hand, the faculty members will give lead lectures/doubt-clearing sessions, if the number is small at mutual convenient time.

The faculty members encourage the advanced learners by giving them assignments and evaluated under Course Teachers' Assessment (CTA). The assignments are different for students of different learnability. The assignments include quiz, paper writing, paper presentation, poster presentation, seminar, do-it-yourself projects, realization of simple concepts, participation in curricular activities at out stations, involving in peer teaching and learning, conducting mock tests, exposure to foreign languages, attending domain-specific training conducted by CIII, suggesting engineering solutions for community problems in the vicinity to fetch AICTE activity points etc.

Further, the advanced learners are guided to opt multidisciplinary and interdisciplinary electives offered by the other departments. The students are also encouraged to register for Honours degree wherein they will earn 18 credits by taking online courses suggested by the respective Board of Studies.

Thus, the slow and advanced learners are assessed and facilitated to explore their academic ability

Page 33/98 24-03-2023 08:33:02

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

Response: 18:1

#### 2.3 Teaching-Learning Process

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

#### Response:

Teaching-Learning is the prime and focused activity of an affiliated/autonomous academic institute that produces and provides Application Engineers to the National Technical man power pool. These Engineering Graduates are expected to interpret and implement the technologies for the comfort of the society.

At present, the Teaching-Learning Process (TLP) is driven by the technologies to train the students to acquire knowledge for enhancement of their intellectual base. In earlier days, the knowledge was available with only a few resources and hence, the role of teacher was to impart knowledge to the students through class room delivery making the process more teacher-centric. Now, with the changing times teacher-centric method alone cannot explore potential of the students to increase their learning horizons. The technologies are available for teaching that leads to student-centric teaching/learning methods. This will instil more confidence in the students and also make them to achieve the Program Outcomes (POs) such as design ability, thinking ability, practical validation, working in team, leadership qualities, concern towards societal problems, lifelong learning etc.

In our Institute, the contents are included in the curricula such that the students participate in the learning process. In few identified courses, topics for self-study, contents to study beyond the syllabus, open-ended problems, open-ended experiments, are included besides project courses introduced from 4th to 8th semester. In addition, the internship, seminar, training on aptitude and soft skills are also provided in which students participate to learn more on their own. The students are also educated about the Program Outcomes (POs) and Course Outcomes (COs).

The faculty members organize the contents properly by preparing meticulous lesson plans with an emphasis on scope for participatory learning. The faculty members use learner-centric methods such as activity; project based learning wherein the students learn the concepts, problem-solving methods, practical realization of concepts by carrying out activities, projects, etc. The students are encouraged to deliver seminars in the class on the contents related to the course(s) followed by interaction and discussion in the class. This will give the students an experience of professional practice through learning.

The students are encouraged in the laboratories to learn, create, design, innovate, develop work setup/experiment as solutions for open-ended problems. The faculty members act as facilitators for courses such as laboratory, project, internship, seminar etc., and leading to participatory learning. In addition, the faculty members involve in creating learning materials, designing assignments and also develop in-house teaching models to augment student-centric learning.

Further, students are encouraged to attend lectures delivered by industry experts, alumni, academicians that instil the zeal of lifelong learning in the students. Thus, the Institute aims at enhancing the learning by

practicing learner-centric approach, experiential learning, participatory learning by incorporating the essence in the curricula and teaching methodologies, teaching tools besides providing the necessary infrastructure.

File Description	Document
Any additional information	View Document

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

#### **Response:**

The Institute is aware of the redefined role of teachers in the present education system. Apart from imparting knowledge, they need to act as facilitators, guides and help directing the students to fetch the right information from various resources. The learning is made more effective by promoting the use of ICT while delivering the contents in the class rooms. Now the curricula involve integrated courses in which theory followed by validation is done. At present, the execution of course structure is possible by the teachers with integration of ICT enabled tools, involving online resources for effective teaching and learning processes. The college uses ICT enabled tools in addition to the traditional classroom teaching. The general ICT tools used by the faculty members based on the nature of the course include desktops and laptops, projectors, printers, document cameras, pen drives, iPads, scanners, microphones, interactive whiteboards (smart boards), DVDs, CDs, cassettes, Wi-Fi connectivity as well as mobile, powered by wireless networks. The Institute will focus on e-learning that provides inclusion, higher order thinking skills, enhanced learning, develop ICT literacy and compatibility, motivated learning, collaborative learning, improved engagement and knowledge retention.

The knowledge resource center (Library) of the college provides resources such as digital library for accessing e-books, e-journals, cassettes, CDs and institutional repository containing projects reports, thesis reports and question papers for references. The use of ICT enabled tools and e-resources are cost-effective and cover the environmental concerns such as paperless governance, ease of student management etc. The NEP-2020 recommendations included blended mode of teaching to support distance learning also. The college uses Learning Management System (LMS) that includes platforms such as Google meet, Webex, Microsoft Teams, Zoom, etc., to engage online classes. The world witnessed the need of online teaching during COVID-19 period. The college conducted online teaching during COVID period. The proctored online examination was conducted by integrating two online platforms viz Google meet and exam.net during COVID -19 period.

Many faculty members provide learning materials in the form of notes, prerecorded lectures by creating Google classroom and blogs. Also the learning material is made available in the college website for students' reference. The college also uses ICT for administration and ERP for library usage analysis and examination purpose.

Thus, the ICT enabled tools are used to enhance the effectiveness of teaching and learning process.

File Description	Document
Any additional information	<u>View Document</u>

# 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: 162

File Description	Document
Circulars pertaining to assigning mentors to mentees	<u>View Document</u>

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

#### **Response:**

Each academic year is divided mainly into two semesters. A semester that begins in August is called odd semester and the semester that begins in January as even semester. These odd and even semesters are called main / regular semesters. There is a supplementary semester for those students who have not completed courses successfully in the main / regular semesters.

The entire B.E. program (UG) in each branch is for eight semesters with each semester having a total duration of 19 weeks that includes course registration, continuous and semester end assessments. The entire M.Tech (PG) in each specialisation is for four semesters, with a time duration same as UG. Further, for MBA program, there are six semesters with a similar time duration. A vacation of two weeks after every odd semester and 12 weeks after every even semester will be provided or based on the prevailing situation. A Supplementary Semester is conducted during the vacation between the end of even and start of odd semester to facilitate those students who have not completed courses successfully in the main / regular semesters. It is of 8 weeks duration including course registration, continuous (sessional) and semester end (terminal) assessments. Courses offered in the Supplementary Semester will be treated as equivalent to a regular semester (odd/even) for all teaching-learning and assessment purposes. Supplementary Semester will be at an accelerated pace and will be at double the rate of normal semester such that a course of 4 hours per week will have 8 hours per week.

An academic calendar depicts the activities and duration for a full year is divided into semesters (main/regular and supplementary) with the calendar duration and academic activities being prepared in advance. The academic calendar includes around 20 to 22 activities in respect of each academic session as fixed by the college from time to time. The academic calendar is prepared by Dean (Academic Program), in discussion with HODs, approved by AC and will be announced to all the concerned at least two weeks prior to the commencement of the semester. The academic calendar is prepared ensuring that the total number of working days for academic work is ? 180 days / year and complying the other guidelines as per the affiliating University.

The Academic Calendar is strictly followed and activities such as co-curricular and extra-curricular will not overlap or interfere with the curricular activities mentioned in the academic calendar. However, slots provision for such activities will be considered while framing the academic calendar.

Under unforeseen circumstances when teaching days are declared as holidays or teaching-learning activities not being held for whatsoever reasons, makeup classes for the days lost shall be conducted on Saturdays/Sundays and other days with an announcement in advance to the students. However, the classes will not be conducted on general holidays declared by the Government / University. It is mandatory / binding for all the employees and students of SDMCET to austerely follow the academic calendar for accomplishment of the academic activities.

File Description	Document
Upload Academic Calendar and Teaching plans for five years	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:** 103.68

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years(Data Template)	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: 36.2

### 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
68	69	62	57	49

File Description	Document
Institutional data in prescribed format (Data Template)	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:** 12.62

### 2.4.3.1 Total experience of full-time teachers

Response: 2044

File Description	Document
Institutional data in prescribed format	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: 6.8

### 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
4	7	8	8	7

File Description	Document
Institutional data in prescribed format (Data Template)	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: 22.16

#### 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
838	1240	292	183	537

### 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:**

The examination procedures and processes have been framed keeping in mind the objectives of examination like testing for the achievement, prediction, creativity, ranking etc. The students are tested for the knowledge acquired, competency and skill sets through examination. The college follows absolute grading system. The nature of the examination depends upon the type of the course(s).

There are two components to examine the students viz Continuous Internal Evaluation (CIE) and Semester End Examination (SEE) with equal weightage for both the components. The CIE is devised to ensure that the students are studious and show positive progress in learning. Further, the CIE is having two components viz Internal Assessment Tests (IA Test) and Course Teachers' Assessment (CTA) with weightage of 80% and 20% respectively. The first component consists of IA Test 1, IA test 2 and IA Test 3 of which IA Test 1 and IA Test 2 are compulsory and IA Test 3 is an improvement test. The duration of IA test is one hour. The two higher scores of 3 tests are considered for finalization. Another component i.e. CTA is evaluated for 20% of the marks. The component of CTA include quiz, assignments, projects, seminar, paper presentation, poster presentation, participation in curricular technical activities, successful online course completion etc. The CIE will be finalized considering the performance in the IA tests and The students have to score minimum 40% marks to become eligible to write Semester End Examination, otherwise they have to repeat the course through re-registration whenever offered next. The Semester End Examination is conducted at the end of the semester for 100 marks and scaled down to 50 marks. However, for courses with two credits, examination is conducted for 2 hours for 50 marks. All the courses (with credits) like theory, Laboratories, project, internship courses are evaluated in terms of CIE and SEE. Non-credit and mandatory learning courses are evaluated only through CIE. The IA test time table is prepared centrally and conducted involving all the departments. The question paper template for IA test and SEE is supplied to the departments to maintain uniformity by the Controller of Examination office. Since the continuous and final evaluation being one of the features of academic autonomy, it is necessary to use Information Technology (IT) for smooth conduct of examination and related activities. The college has Enterprise Resource Planning (ERP) software called Adstock with 40 various modules. The examination module of the Adstock is used for implementing the procedures and processes of examination. The examination block preparation with seating arrangement is done by using an exclusive Excel template. The scheme of study will be entered into the software. The faculty members enter the IA marks of all IA tests, CTA scores and attendance in the Adstock. Further, few faculty members use Google classroom to conduct quiz and MCQ tests. The question paper pattern declaration along with course outcomes is also done using the software and attainment of Course Outcomes and Program Outcomes will be calculated by the software. The ERP provides final CIE score of students. There is also report generation option for cross verification. The ERP also generates barcodes for the answer scripts of Semester End Examination. The valuers enter the marks in the Adstock directly and will take printout of the marks cards to be submitted to COE office. The ERP will give the results of the students directly. The grade cards are printed using Adsock besides transcripts. The software provides the list of students for vertical progression to take admission to the next academic year. The students' credentials are verified through an online portal interface with our college website when sought by the external agencies. Also the students are issued with duplicate copies of academic records and certificates on request in online and offline mode. The college practices the transparency in examination system by showing the valued answer scripts (only theory courses) to the students as per the schedule declared by COE office, before announcement of the results. This will considerably reduce the applications for revaluation. More than that,

the students will come to know the requisite answers to score good marks in future examinations by interacting with the faculty and referring to the scheme provided.

The IT integration to implemented examination procedures helps the college to complete the time-bound activities and ensure adherence to the academic calendar. These reforms in the examination procedures will augment related academic activities like admission, training programs, flexibility to the students to plan their activities during vacation for internship, travel and any academic related activities. As a quality measure, the audit of the examination centre is carried out every year involving an external expert from a reputed Institute.

File Description	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:**

The outcome based education defines a set of tangible outcomes for the students to demonstrate at the end of the program. The program outcomes are explained through Program Articulation Matrix (PAM) which depicts the proportional weightage for various graduate attributes. The Program Outcomes (POs) are defined by mapping to learning levels as per Bloom's Taxonomy. There are 12 Program Outcomes in general for all UG programs and 3 for PG programs. However, based on the program, in the case of additional attributes, the Program Specific Outcomes(PSOs) are also defined. These program specific outcomes will equip the students with specific attributes over and above the program outcomes. Down the line, the courses are selected as per the articulation Matrix with corresponding weightage. The category/nature of courses are selected with the different learning levels such as knowledge, comprehension, application, analysis, synthesis and evaluation. The courses are classified in three categories viz fundamental/basic, problem oriented/analysis and application oriented. The program consists of courses exposing the students to L3, L4 and L5 (learning levels). Depending on the level of learning, the course outcomes are defined for all courses including humanities and mandatory learning courses. The course details in the syllabus starts with Course Learning Objectives (CLOs) which will be the reference for the teachers to reach the students. The course outcomes are the deliverables by the students after learning the courses. The Course Outcomes (COs) are measured by direct and indirect (rubrics) methods. The course outcomes serve as inputs for the faculty to prepare action plan and apply midcourse corrections. Thus, the possibility of midcourse correction will make the outcome based education as a closed-loop system which is not found in traditional education. The course outcomes are clearly defined and printed in the syllabus book using appropriate action verbs to accomplish the level of learning such as recite, define, comprehend, use, analyse, solve, design, evaluate, etc. The action verbs used in defining the course outcomes indicate the type and learning level of the course. The program outcomes are communicated to the students through display boards in the departments, College website, and syllabus book. In the first hour of lecture, the faculty members educate the students about the objectives, scope of the course and expected course outcomes at the end of the course. The college follows defining the course outcomes

topic/unit wise contents of the syllabus integrating the learning levels. At the end, the attainment of course outcomes are calculated by the faculty members and based on the course outcomes of all the courses, the departments calculate, the attainment of program outcomes. The benchmark for POs and COs attainment will be decided by the DUGC and DPGC keeping in mind the positive progression and quality of education. A software tool available in ERP (Adstcok) is used calculate the CO-PO attainment.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document

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

### **Response:**

Outcome Based Education (**OBE**), being the core aspects of **industry readiness** and one of the foundation philosophy of **NEP-2022** in terms of **experiential learning**, SDM College of Engineering and Technology has started integrating OBE philosophy in its curriculum **since 2010** and **incrementally** making progress as a major drive of autonomy granted by **UGC** and affiliating **university**. OBE philosophy is witnessed in curriculum structure, pedagogy, assessment tool and assignments based on course teacher's assessment(**CTA**).

The **major steps** followed in OBE implementation are as below:

- 1. **Writing** Course Outcomes(**CO**s), Program Outcomes (**POs**)/Program Specific Outcomes(**PSO**s): This is done based on blooms taxonomy and IEEE/ACM body of knowledge (BoK).
- 2. **Mapping** Course Outcomes with Program Outcomes(POs): Mapping is done at level-3 (Substantial), at Level-2 (Moderate) and at Level-1 (introductory) based on industry readiness supported by various assessment tools.
- 3. **Measurement** of Attainment of Outcomes: This is the cumulative assessment involving all assessment tools based on marks scored by students against the total marks allotted for a particular COs. Percentage of such students in a class represents the attainment of a particular CO. Based on mapping of COs with POs indicated in the syllabus, attainment of POs is calculated using weighted average. This attainment is verified against the target set at three different levels i.e. at level 3, 2 and 1. These targets are expressed as percentage of students reaching the set percentage of marks.
- 4. Writing **action plan** and correcting/revising learning procedures for students: These actions are based on corrections to pedagogy, curriculum intervention and various other Teaching Learning Process(TLP) related aspects.

File Description	Document
Any additional information	View Document

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

**Response:** 97.18

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

Response: 690

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

Response: 710

File Description	Document
Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template)	View Document

### 2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process		
Response:		
File Description	Document	

File Description	Document
Upload database of all currently enrolled students	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:**

The institution envisages the promotion of quality research by creating strong and vibrant research ecosystem with an emphasis on innovation and technology development. The institution caters to the needs of research by supporting the development of laboratories, funding equipment's specifically required for research and provide financial support for the product development. The Institution promotes interdisciplinary/multidisciplinary and translational research culture. The Institution has incubation centre which houses 6 startups and two centres of excellence in Robotics & Sensorics and IoT. All the departments of the Institution are recognised as research centres by Visvesvaraya Technological University, Belagavi, Karnataka where more than 100 students have registered for doctoral degree.

The Institution deputes the faculty members to pursue full time PhD from premier institutions by sanctioning study leave and paying regular salary. The Institution provides financial support (registration fees & travel allowance) to attend National/International Conferences, symposiums, and consortiums. The Institution helps the students/faculty members to file the patent and lends financial support to get it published or granted. Separate budget is earmarked for research and innovation. The institution has well defined research policy which includes components such as seed money scheme/seed grant, research incentives for journals publications, attending conferences, incentives for research projects, organising conferences / seminars / symposiums /consortiums and partially supports the professional memberships.

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	
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: 0.2

### 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
1.0	0	0	0	0

File Description	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:** 1.07

### 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
2	2	2	2	1

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers	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:** 321.08

### 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
59.76	45.88	115.44	60	40

File Description	Document
List of project and grant details	<u>View Document</u>
e-copies of the grant award letters for research projects sponsored by government and non- government	View Document

### 3.2.2 Percentage of teachers having research projects during the last five years

Response: 2.96

### 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
7	3	10	2	3

File Description	Document
Link for additional information	View Document

### 3.2.3 Percentage of teachers recognised as research guides

Response: 31.48

#### 3.2.3.1 Number of teachers recognized as research guides

Response: 51

File Description	Document
Upload copies of the letter of the university recognizing faculty as research guides	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: 37.5

### 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
3	2	5	2	3

### 3.2.4.2 Number of departments offering academic programes

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

File Description	Document
Supporting document from Funding Agency	View Document
List of research projects and funding details	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:**

Creation of pre-incubation and incubation facilities for nurturing innovations and startups is being practiced in the institution and the effort is to link innovation to enterprise to success. The institution has facilities for supporting pre-incubation such as Institute Innovation Cell (IIC) as per the guidelines by "MHRDs Innovation Cell". The institution has created an eco-system for innovations by creating a space for incubation which houses *6 startups* and one centre of excellence in Robotics and Sensorics. Regular workshops and short-term training programs are organised/conducted for the students and the faculty members of the Institution in order to upgrade their knowledge and skill sets. The institution is recognised to conduct Surya Mitra programs on solar photovoltaic system installation and this program is supported by National Institute of Solar Energy (NISE), New Delhi. Total 13 batches of students were trained. In this scheme total of 360 candidates were trained. Institute is actively involved in interdisciplinary and multidisciplinary in collaboration with University of Agricultural Sciences, Dharwad and SDM University, Dharwad.

https://sdmcet.ac.in/center-of-industry-institute-interface-ciii/

https://sdmcet.ac.in/startups-incubation/

https://sdmcet.ac.in/institution-innovation-council-iic/

File Description	Document
Upload any additional information	<u>View Document</u>
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: 29

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
7	7	11	4	0

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

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: 2.33

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

Response: 119

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

Response: 51

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:** 1.59

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
56	60	47	45	61

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

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

**Response:** 0.44

### 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
13	11	16	15	19

File Description	Document
List books and chapters in edited volumes / books published	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 - hindex of the Institution

### **Response:**

File Description	Document
Bibiliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

### 3.5 Consultancy

### 3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

**Response:** 59.02

### 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
9.85	7.56	17.76	15.62	8.23

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

Page 49/98 24-03-2023 08:33:03

### consultancy during the last five years (INR in Lakhs).

Response: 48.08

### 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
14.02	7.63	16.79	7.2	2.44

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

#### 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:**

There is a dedicated National Service Scheme (NSS) cell in the institution which allows the students to participate in community-based activities and societal concerned projects. The students participated in Swachh Bharat Abhiyan and Unnat Bharat Abhiyan (UBA). As a part of UBA, Shalege Banni Shanivar (Come to School Every Saturday- classes for rural High school students by SDMCET Faculty members) and tree plantation events are regularly organised. The demonstration of UBA project on animal friendly bullock cart was conducted for the villagers and awareness programs on basic education, career guidance, energy conservation, green energy and environment were organised and conducted. Five village were adopted in the Adarsh Samsad Gram Yojana scheme. The technical barrier reduction (TBR) program for rural students to expose them to the engineering laboratories and instruments was organised. Skill development activities are conducted for unemployed youth. The participation of students in these kinds of activities as per the AICTE requirements will create awareness about the socially relevant issues and prepare them for the future challenges with holistic approach.

File Description	Document
Paste link for additional information	<u>View Document</u>

### 3.6.2 Number of awards and recognition received by the Institution, its teachers and students for

Page 50/98 24-03-2023 08:33:03

### extension activities from Government / Government recognised bodies during last five years

Response: 10

### 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
01	02	03	02	02

File Description	Document
Number of awards for extension activities in last 5 year	View Document
e-copy of the award letters	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:** 26

### 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
04	09	05	05	03

File Description	Document
Reports of the event organized	<u>View Document</u>
Number of extension and outreach Programmes conducted with industry, community etc for the last five years	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: 10.7

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
370	350	240	335	260

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: 122.2

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
419	46	42	80	24

File Description	Document
Number of Collaborative activities for research, faculty etc	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: 69

Acsponse. 02

### 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
21	22	13	8	5

File Description	Document
Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years	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:**

The campus is spread over an area of 40.22 acres with built up area of 60,966.6 Sqm. Out of which 3727.72 Sqm is allocated to administration which accommodates Principal's office, Dean's office, COE, admission, accounts, security and maintenance etc.,. Academic area is spread over an area of 17,726.53 Sqm, which includes classrooms, laboratories, seminar halls and research centres etc.,. Campus has 43 classrooms, 54 laboratories and 9 seminar halls.

Campus has Central computing facilities (CCF & P-CAD lab) in addition to department computer laboratories. Campus has library facility spread over an area of 2412 Sqm with different sections like issue section, reference section, reading rooms digital reading section (webinarium). All the academic blocks and hostels are connected by Wi-Fi with access to online learning materials, e-books, e-journals etc.

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:**

The campus has a playground spread over an area of 3 acres for outdoor games being used for more than 35 years. SDMCET has two auditoriums ,one with 800 seating capcity and another of 250 capcity ( DVH Hall). Based on the size of the audiance, the various cultural activities are being conducted.. The campus has indoor sports complex spread over 1301 Sqm for indoor games is being established recently in this year 2023, with facility for basketball, badminton, table tennis, carrom etc... The campus has Central Dining and Recreation Facility (CDRF) which houses gymnasium, establised in the year 2010.YOGA being conducted in the outer lobby space of 250 capacity (DVH Hall) auditorium. The space enmarked for YOGA is 117 square meters.

The campus houses a lord Ganesha temple with unique architecture. It is also being used for meditation.

File Description	I	Document	
Paste link for additional information	Vie	ew 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: 84.62

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

Response: 44

File Description	Document	
Institutional data in prescribed format	<u>View Document</u>	
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: 100

### 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
140.64	76.25	144.90	112.95	134.33

File Description	Document
Upload Details of Expenditure, excluding salary during the last five years	View Document
Upload any additional information	<u>View Document</u>
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 is state-of-art facility for self-learning, spread over 2401 sq m area. Consists of

Page 55/98 24-03-2023 08:33:03

one main issue section, one reference section, magazine section and multiple reading rooms etc.,.

? The centre has seating capacity of 600 students. The centre is fully automated (bar-coded all the records) and uses EPAC as a tool to manage (browse, search, availability) the records. The centre is open on all seven

days of the week. The whole building is Wi-Fi enabled.

- ? The centre has 60833 print books, 20729 titles, 86 print journals, 12293 e-journals, 24735 e-books for both UG & PG. The centre is member of VTU consortium, consortium, IEEE and professional bodies like DELNET, IEI.
- ? The centre has access to ebooks from Elsevier ebooks, Taylor and Francis ebooks, Mcgraw Hill Education ebooks, New Age International ebooks, Packt ebooks, Pearson ebooks, etc.
- ? The centre has access to ejournals from Elsevier, Springer, Taylor & Francis, IEEE, Emerald, Proquest etc.
- ? The periodical section of the centre has subscribed to 86 national / international print journals and magazines. 14 No. of daily newspapers are available in reading rooms.
- ? The centre uses technology platforms such as Knimbus, netanalytiks sententia, turnitin (plagarism s/w) to enhance learning experience.
- ? The centre maintains institutional repository of previous year Question papers and articles by scholars.
- ? The centre is also a member of National digital library an initiative by Ministry of Education through National Mission on Education through Information, Communication and Technology.
- About Easylib Software
- ? Entire Automation System for Libraries. Includes Web OPAC, Student Login, Requisition, Acquisition, Cataloguing, Accessioning,

Membership, Circulation, periodicals, SMS, Emails, Reports, Security, Set Up, Website for library. eResources Management, Machine Learning and AI.

File Description	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:** B. Any 3 of the above

File Description	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: 32.42

### 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
33.94	32.10	34.80	30.96	30.30

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

### 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: 6.96

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

Response: 215

File Description	Document
Details of library usage by teachers and students	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:**

### **IT Policy**

SDMCET has good and adequate IT infrastructure. We maintain all the IT gadgets in-house with competent technical expertise to maintain and manage IT infrastructure. We write off old, unusable IT equipment from time to time. All computers, projectors, Wi-Fi hotspots etc., more than 10-year-old are replaced every year. Every year we augment out IT infrastructure to an extent of 65 – 70 lakhs. Staff and students are given login IDs to access internet. Students can access college resources using their personal laptops in common area such library, hostels, etc. IT infrastructure is accessible on roll of the user such as principal, deans, HoDs, professors, UG-students, ministerial staff etc.,

### IT Facility:

IT facility of the campus is maintained by Central computing facility (CCF). SDMCET has 4km of OFC cable laid throughout the campus. All the academic, hostel and administrative blocks are connected by campus wide network Campus is enabled with Wi-Fi since 2007-08. All the devices are compatible with 802.11 b/g/n protocols. The whole network is integrated with OFC, powered by 500GBPS internet switch.

CCF itself houses 117 computers, which are reserved for 1st year students. Eight Engineering departments have total 570 computers. These 570 computers are installed with versatile application software. All the computers are maintained by in-house expert team.

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:** ?50 MBPS

File Description	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:** D. 1 of the above

File Description	Document
Upload Additional information	<u>View Document</u>
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:** 277.13

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
341.58862	230.06705	355.14154	386.94462	340.38046

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	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:**

The college has been accorded autonomous status from the Academic Year 2007-08 by UGC and VTU also institutional autonomy by VTU from 2016. The Academic Council provides the rules and regulations for the smooth conduct of academic programs with the approval of the Governing Council and shall continuously monitor the programs and makes appropriate amendments to the rules and regulations whenever required. Various committees have been constituted as per the norms and guidelines to recommend to the AC for consideration of the academic/infrastructure related proposals.

In accordance with the Academic Council and Board of Studies of various programs, the physical infra structure is created and are being used. Office if te dean - academic program will allocate these class room to each deprtment on need basis. The details as follows:

#### Classrooms:

Each Department is allocated a fixed number of classrooms every semester. The department with 120

Page 59/98 24-03-2023 08:33:03

student's intake is allotted 5 classrooms and department with 60 intake is allotted with 3 classrooms, apart from common classrooms for 1st year classes.

The Department prepares semester wise Timetables and the allottment of classrooms are mentioned in the Timetable. The classes are engaged according to the timetable.

#### Laboratories:

All the laboratories/ resources/facilities are under the control of HODs/ section heads. Timetable is prepared with adequate number of batches and number of students per batch. All the Laboratories are engaged according to the timetable.

Any batch/student wishing to repeat the laboratory experiments can do so with permission from the respective lab faculty in charge. Any student/ research scholars intending to use the laboratory for projects/research will have to take prior permission from HOD/Section head.

#### Library:

Library is centrally located in the campus housed in independent building having a plinth area of over 2412 Sq metres, having total seating capacity of 550 students at a time. The Library has over 60,000 volumes which are updated regularly by way of adding new collections in diverse formats in the form of text books, reference books, reports, proceedings, abstracts & indexes, encyclopaedias, data books, standards (National & International) Journals, Audio Visual resources, CDs, educational videos and thesis/reports.

The operating principle of library is well designed with student friendly environment for learning. The library rules are published in our college website. url: https://sdmcet.ac.in/library/

#### **Sports:**

Sports at SDMCET is considered an important component of overall personality development of our students and staff. We encourage all students to participate in a college sport as we firmly believe in its benefits. We want to teach our students and staff to be committed to their team and take responsibility for their actions.

All our sports facilities are maintained and managed by our physical director. Our sports department is working beyond college working hours such as morning 6.00 am to evening 8.00pm. All the faculty, staff and students have access to sports facilities.

#### **Campus Maintenance:**

The campus maintenance is carried out by the chief maintenance engineer (CME). He has a team of support staff for different expertise such as cleanliness, garden and greenery, electrical maintenance, housekeeping, civil maintenance, transport etc., Each team has a superintendent, supervisors, and qualified staff.

Housekeeping and routine seasonal maintenance work is carried out in a routine way by the concerned superintendent. They maintain the campus with utmost ambiance for teaching and learning.

In case of any maintenance support, user department will log a call with the CME, he in turn will assign the job to the concerned superintendent, the work will be done with utmost coordination and support.

File Description		Document	
Paste link for additional information	V	iew 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: 42.39

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
1436	1147	1160	1256	1150

File Description	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: 3.63

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
71	55	104	166	130

File Description	Document
Number of students benefited by scholarships and freeships 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
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:** 4.78

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
59	51	0	212	382

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

<b>Response:</b> B. 3 of the above		
File Description	Document	
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document	

### **5.2 Student Progression**

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

Response: 72.49

### 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
1108	559	455	441	338

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:** 2.68

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

Response: 22

File Description	Document
Upload supporting data for student/alumni	<u>View Document</u>
Details of student progression to higher education	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: 60

# 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
0	3	0	0	0

# 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
0	1	0	0	0

File Description	Document
Number of students qualifying in state/ national/ international level examinations during the last five years	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: 111

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
22	20	16	27	26

File Description	Document
Number of awards/medals for outstanding performance in sports/ cultural activities at interuniversity / 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:**

Every class in the college has a class committee comprising of a cross section of students and gives suggestions to the faculty mainly on academic delivery. Students Council is at the college level and in SDMCET it has been in existence since 2012. Every year students from each class elect their representative based on class strength and the entire group of such elected representatives forms the students' council.

It provides suggestions and raises concerns pertaining to students issues in both academic and non academic matters. Its recommendations are taken as serious input by the college administration.

In addition, on all statutory bodies of the college like Governing Council, Academic council, Cultural and Sports committees etc. we have student representation to reflect student opinion on all issues.

File Description	Document
Upload any additional information	<u>View Document</u>

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

**Response:** 7.8

### 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
8	9	8	6	8

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 Alumni Association of the college has been in existence since 2003. The college is in existence for more than four decades and has more than 10000 alumni who are now occupying significant positions in India and abroad.

The students passing out of the college are automatically made members of Alumni Association by paying a one time fee.

The Association has around 6000 members on its rolls. It conducts an Alumni meet annually in different parts of the country like Mumbai, Bengaluru, Pune, Delhi, Nashik, Mangaluru etc.

The Association provides scholarship to poor, meritorious students, runs a book bank and provides technical support to academics and also placement assistance.

The two major projects carried out by the Association include initiation of construction of a guest house and an indoor sports complex both of which have been built with alumni assistance.

File Description	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 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:**

#### Vision:

• To develop competent professionals with human values.

#### **Mission:**

- To have contextually relevant curricula.
- To promote effective teaching learning practices supported by modern educational tools and techniques.
- To enhance research culture.
- To involve the industrial expertise for connecting classroom contents to real-life situations.
- To inculcate ethics and soft-skills leading to overall personality development.

The Vision of the institute is to develop a technically competent and managerially superior professional with human values.

The mission places a strong emphasis on how we plan to realize the predetermined goal. Since the institute is an independent unit (Autonomous) affiliated to Visveswaraya Technological University, syllabus revision occurs once in every four years for UG programs and two years for PG programs while keeping in mind ever-changing industry requirements. As a result, the institution is in a better position to develop contextually relevant curricula and effectively implement information & communication technology (ICT) in the classroom. All the institution's activities and initiatives revolve around research, which enables the institution to quickly adjust to developments in the future. The institution places a high value on ethics and soft skills training since it believes in producing ethically strong graduates & postgraduates with good communication.

### **Nature of Governance**

- The Institute operates in accordance with the rules, decisions, and directives of the SDME Society, Ujire ® /Honorable Management.
- The Institute follows a democratic and participatory mode of governance with all stakeholders participating actively in its administration. The Secretary and the Principal get directions from the Governing Council, which they then pass down to the various levels. The Heads of Departments,

- the Conveners of various committees and cells along with the staff representatives on higher decision-making bodies play an important role in determining the institutional policies and implementing the same.
- Faculty members are nominated as representatives in the various statutory bodies to make decisions.(Finance Committee, Academic Council, Board of Studies, Research Advisory Committee, etc.)
- The Principal, Deans / HoD's meetings are conducted periodically wherein faculty input on academics, administration, and research is discussed and decisions are taken.
- The institute has clearly defined employee service, conduct, and disciplinary regulations, which makes it easier to monitor and regulate employees' behavior.

### **Perspective Plan**

A strategic plan has been envisioned by the Institute through discussions with stakeholders once in every five years. The strategic plan document is based on specific worldwide perceptions of the development and traits of an institution that is globally competitive.

### Participation of teachers in the decision-making bodies of the Institute:

The bodies such as Governing Council, Academic Council, IQAC, BoS, BoE, Finance Committee, and Research Council, have faculty as members and students as invitees in GC. HoDs in consultation with the faculty prepare budgets of their departments and submit it to the office of the Principal for onward submission to the SDME Society, Ujire for the approval and sanctioning.

File Description	Document
Any additional information	View Document

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

#### **Response:**

- The Institute has empowered the Deans and Heads of the Departments respective departments to take administrative decisions as per the guidelines set by the Management.
- Heads of the Departments have the power of making various decisions like revision of scheme, syllabus modification in line with the Industry requirement, subject allocation and conducting Internal Assessment. And also has the responsibility of preparing Time-Table, conducting placement trainings, and monitoring students' academic progress.
- o There are seven Deans and thirteen Heads of Departments to execute the plans of the Institute.

Section heads will be nominated by the Principal and they discharge their duties to keep their sections work smoothly. All the Deans, HoDs, and Section heads have well defined responsibilities and portfolios.

#### List of the Deans is as follows:

- Dean (Academic Programme)
- Dean (Administration)
- Dean (Infrastructure, Planning and Development)
- Dean (Research and Development)
- Controller of Examination
- Dean(Industry Institute Interaction)
- Dean (Student Welfare)
- All faculty members are given independent responsibilities like faculty member in-charge of laboratory, class advisors, faculty advisors, faculty in-charge of professional bodies and others.
- Department level faculty meetings are held periodically to discuss all matters of academic, administrative and infrastructure development.
- Budget preparation starts from the laboratory level in which the faculty member in charge of laboratories raise the budget requirements for the year which are subsequently consolidated at department level and it will be forwarded to the Institute level for approval.
- Faculty members have due representation in Governing Council, Academic Council, Board of Studies, Research Committee and Internal Quality Assurance Cell.
- The Institute adapts decentralized strategies to bring out transformational leadership amongst members of faculty.

#### **Case Study:**

o 'Societal project' an audit course has been introduced to the 1st year students of MBA 2022–23 batch. It was suggested in the model curriculum of VTU and discussed in departmental post graduate committee (DPGC). Further, it was put-forth before BoS for possible consideration. Understanding the importance of the audit course the same has been accepted with the minor modification. Subsequently the same has been presented in the academic council and got approved and therefore students of MBA 2022-23 batch are going to undertake a mandatory audit course called societal project after the end of 1st semester for the period of one week.

Based on the experts' opinion, the BoS held during 2020, the syllabus of the subject 'Design of Machine Elements-II' (18UMEC502) has been modified by 10%. The subsequent batches of Mechanical Engineering are studying the modified subject in the 5th semester as programme core subject.

File Description	Document
Any additional informatiom	<u>View Document</u>
Link for strategic plan and deployment documents on the website	View Document
Link for additional information	View Document

### **6.2 Strategy Development and Deployment**

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

#### **Response:**

Strategic Plan–The Institute has developed a strategic plan for the period of 2017-18 to 2021-22 and 2022-23 to 2026-27 which is a primary document that serves as a navigator to the Institute in which direction it supposed to proceed. The strategic plan helps the Institute to achieve its vision in a stipulated time.

The five-year strategic plans have been divided on yearly basis for easy monitoring / modification and effective implementation. Strategic plan has been developed to excel seven focused areas such as curriculum relevance, exam results, research, value additions community-oriented services, placement, accreditation and ranking.

The performance of the institute is discussed in the annual IQAC meeting with the external participation nominated by University

File Description	Document
Any additional information	<u>View Document</u>
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:**

#### Governing Council (GC)-

The GC is responsible for ensuring the effective management of the Institute. The GC will take necessary measures to enable the Institute to achieve the mission and primary objectives of teaching-learning and research. The GC meets minimum twice a year, makes policy decisions and approves budget & appointments.

### **Academic Council (AC):**

The academic council is responsible for strengthening the teaching- learning process, introduction of new programmes /courses, decide policy for examinations and other related academic activities.

#### **Board of Studies(BoS):**

Board of Studies designs and develops the curriculum and syllabi keeping in view the department vision, mission and programme educational objectives and recommends the same to academic council for approval.

#### **Board of Examiners (BoE):**

Every department will have BoE for the purpose of ensuring quality and scrutinize the question papers. The Head of the Department will be the chairman of the BoE. The BoE of every department will identify external question paper setter and review the question papers.

#### **Finance Committee:**

The finance committee prepares the budget, review the audited accounts of the Institute and recommends to GC for approval.

### **Internal Quality Assurance Cell (IQAC):**

The fundamental duties of IQAC are to guarantee quality in all aspects of the Institute's teaching, learning, and research. IQAC is in charge of creating and implementing quality benchmarks and parameters for the Institute's different academic and administrative procedures.

#### **Principal:**

The Principal is the Head of the Institute. He holds all executive power and is in charge of all the functions of the Institute viz. human resources management, finance, general administration, admission process and ensuring academic deliverables. He is also the chairman of all the internal committees.

#### **Dean Administration:**

Dean Administration is responsible for all administrative matters including HR, governance and monitoring overall administrative activities of the Institute under the directions of Principal.

#### **Dean-Academic programme:**

Dean–Academic programme is responsible for formulating and regulating the process for curriculum development of all programmes offered by the Institute.

#### **Controller of Examinations (COE):**

Controller of Examinations is responsible for all matters pertaining to smooth conduction of examinations, evaluation, grading, declaring the results, printing of grade cards, provisional degree certificates and

transcripts.

### **Dean-Industry-Institute-Interface:**

Dean Industry Institute Interface acts as an interface between industry and Institute. Responsible for rolling out different training programmes in order to bridge the gap between industry and Institute to enhance placeability.

#### **Dean Students Welfare:**

The Dean Students welfare acts as an interface between the students and Institute. He takes care of student well being in the campus through various students' centric activities like Annual Day, National day celebrations, college cultural festival, Sports meets, etc.

### **Dean Research & Development (R&D):**

Dean R&D is responsible for guiding to secure funded research projects, and facilitate consultancy, testing and other R&D related activities. He is also responsible for enhancement of research culture through publication of papers, patents, copy rights, etc.

## **Heads of Departments (HoD):**

HoDs are responsible for the smooth implementation of academic and administrative processes in their respective departments

File Description	Document
Any additional information	View Document
Link to Organogram of the Institution webpage	View Document
Link for additional information	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
Institutional data in prescribed format	View Document
ERP (Enterprise Resource Planning) Document	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:**

Welfare measures taken towards the staff and students reflect on the output and selfless contribution towards tremendous growth of any Institute. In our Institute staff and student's welfare is given foremost importance. In connection with this, existing welfare measures for teaching and non-teaching staff are itemized below:

- Health insurance / card.
- Medical Leave & Maternity leave for eligible staff members
- Faculty members are eligible for Earned Leave
- Gym is also accessible for the staff.
- Employee gets fees concession for their wards.
- In and around campus, various food centres have been established which are accessible by staff and students during the working and extended hours.
- Internet and free Wi-Fi facilities are also available in campus for staff and students
- Teaching and Non-Teaching Staff Club organizes tour, and sports activities for the staff.
- Faculty members are provided with individual cabin and system to facilitate good ambience.
- Skill development courses are organized for non-teaching staff to enhance their skills in working environment.
- The management also extends financial assistance to the needy students for pursuing higher education in our institution as per the requirement.
- Gratuity for the employees of the institute.
- Provident Fund facility
- 15 casual leaves plus 2 regulated holidays are given each year.
- Motivation through counselling is also available for staff members to create a healthy working environment. This not only increases the work life balance of the employees, it also helps us in increasing the productivity and allows our staff to work effectively with complete satisfaction.
- Women Empowerment Cell is established for creating venues for women members to flourish and gain momentum.
- Dress code will be supplied free of cost every year to Security, Garden Section and non-teaching staff ( Grade –C)
- 24X7 transport facility during medical emergencies for hostel students as well as for day scholars is made available.

In a nutshell, the Institute strives hard to keep our staff and students happy and healthy

File Description	Document
Any additional information	<u>View Document</u>

## 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: 2.7

# 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
1	0	10	8	4

File Description	Document
Institutional data in prescribed format	View Document
Any 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:** 5.8

# 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
8	12	4	1	4

File Description	Document
Institutional data in prescribed format	<u>View Document</u>
Any additional information	<u>View Document</u>

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: 45.99

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
69	80	79	75	86

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

## 6.4 Financial Management and Resource Mobilization

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

### **Response:**

The Institute continuously assesses how well and effectively the financial resources are being used for the improvement of the infrastructure and for teaching-learning methods. The chartered accountant thoroughly audits each transaction. Two-tier auditing, conducted alternately by internal and external auditors, is in place to ensure accuracy.

The Institute regularly conducts the internal and external financial audits through the designated auditors earmarked by the management. The Internal Audit Committee gives a detailed report including observations, if any, to the management. The management seeks replies for observations made in the report. The institute submits suitable replies for the observations. Any suggestions given for improvements are well received and implemented.

#### **Internal audit process:**

All the transactions are audited by an internal financial committee on half/yearly basis. The expenses incurred under different heads are thoroughly checked by verifying the bills (cash bills, credit bills with GST numbers) and vouchers. If any discrepancy is found, the same is brought to the notice of the Principal. The same process is being followed for the last five years.

#### **External audit process:**

The Institute will submit the budget proposals, income & expenditure statements to the external audit agency for the necessary audit. The External Auditor will visit the Institute for the purpose of verification of income, expenditure details.

## **Audit Objections:**

The Institute has an effective way to handle the audit objections.

Internal and external auditors' objections will be presented to the Principal, who will then address them

Page 76/98 24-03-2023 08:33:04

after consulting with the Management and determining whether they are feasible.

File Description	Document
Any 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: 185555

## 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
0	25000	110000	0	50555

File Description	Document
Institutional data in prescribed format	View Document
Annual statements of accounts	View Document

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

#### **Response:**

The major financial resource for the institution is obtained through student fees. The major part of expenditure is spent on salaries, maintenance and day-to-day expenses. In case of any additional requirement, management provides the support. For generation of revenue, sponsored research projects, financial assistance from the government for development of Institute and consultancies are considered, which support the required infrastructure. Management supports whenever necessary and extend financial support in procuring advanced equipment over and above the financial assistance obtained from external agencies. The receipts and payments are made in digital mode.

#### **Resource mobilization strategies**

### Financial Resources

- Shri Dharmasthala Manjunatheshwara College of Engineering and Technology Dharwad is sponsored by SDME Society, Ujire ®.
- The Institute generates funds through different sources apart from the Principal sponsors
  - Fees that students have paid

- The Institute seeks to mobilize funds/grants from government and nongovernment agencies such as UGC, AICTE, VTU, Govt of Karnataka, VGST, DRDO, ICSSR, etc.
- Internal revenue generation through consultancies.
- Conduction of various examinations of Government agencies like UPSC, NTA, KEA, different Banks, Police dept recruitment exams, etc.
- Organising special skill based training in different engineering disciplines like, Computerized Numerical Controlled Machines (CNC), Engineering Drawing, CATIA Software, etc.
- It solicits patronage from neighbourhood Institutes including banks, corporations, and civic organisations.
- It encourages contributions to the prize and endowment funds from staff members, alumni, and guardians in the form of memorial prizes, endowments, and donations.
- It actively seeks UNNAT BHARATH ABHIYAN (https://sdmcet.ac.in/unnat-bharat-abhiyan/) funding for the overall improvement of the Institute and community.
- The Institute is having a strong and active alumni network(https://sdmcet.ac.in/alumni-association/).

## **Space Utilization**

## **Resource Utilization strategy**

- Department-level budget recommendations are made after a discussion of the various types and methods for resource mobilisation and usage in staff meetings, with the aim of allocating the necessary funds to the proper activities at the proper times.
- Operatments are instructed to submit budget proposals by classifying their respective heads as recurring, non-recurring, seminars, research and development, hospitality, and maintenance separately. The Institute requests budget proposals from department heads and the Deans at the beginning of the fiscal year. Thus, each department will obtain its budgetary allotment in accordance with their requirements.
- The Institute has a well defined system in place to track how effectively and efficiently the available financial resources are being utilized to build infrastructure and academic processes. Budget planning and budget reviews are ongoing processes that take place every year.
- The Institute/departments abide by the Management's approval of the budget to use for academic and administrative purpose.

File Description	Document
Any additional information	View Document

## **6.5 Internal Quality Assurance System**

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the

Page 78/98 24-03-2023 08:33:04

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:**

Significant Contribution of IQAC for Institutionalizing the **Quality Assurance Strategies and Processes** are listed below:

- 1. Implementation of Outcome Based Education (OBE) philosophy.
- 2. Ensuring audits and accreditation for quality checks.

Noteworthy activities in implementing OBE philosophy and associated quality checks through audits and accreditation/ranking are as follows:

- 1. Defining the required **critical thinking for every course**based on Blooms taxonomy / IEEE/ACM guidelinesto make students industry ready.
- 2. Preparing **course plan** highlighting the learning expectations.
- 3. Reviewing quality of assessment tools for **compliance with defined course outcomes** by IQAC at department level.
- 4. Normalizing the procedure to **measure attainment of outcomes**.
- 5. Conducting Internal and External audit process to ensure quality adherence.
- 6. Acquiring accreditation status from National Board of Accreditation (NBA).
- 7. Participation in **NIRF ranking**process.

Sl. No	Content Description	
1	Defining the required <b>critical thinking for every course</b> based on Blooms taxonomy / IEEE/A make students industry ready.	CM
2	Preparing <b>course plan</b> highlighting the learning expectations.	
3	Reviewing quality of assessment tools for <b>compliance with defined course outcomes</b> by IQA level.	AC at
4	Procedure to measure attainment of outcomes.[Course Outcomes]	
5	Procedure to measure attainment of outcomes.[Program Outcomes]	
6	Acquiring <b>accreditation</b> status from National Board of Accreditation (NBA).  File:12- Metric_6.5_IQAC_IQAC_NBA Accreditation	•
7	Internal and External auditprocess to ensure quality adherence.	

	:Audit Report Format -INTERNAL	
8	Internal and External auditprocess to ensure quality adherence.	
	:Audit Report Format -EXTERNAL	
9	9 Internal and External auditprocess to ensure quality adherence.	
	: Sample Audit Report	
10	Participation in NIRF rankingprocess	

Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles:

Institution has made a major transformation in its education paradigm, a shift to Outcome Based Education (OBE), defining contextual relevant outcomes and its measurement procedures to prepare students for industry readiness. As OBE stands as a backbone for experiential learning components specified byNEP-2020, Institution is also making progress is implementation ofNEP-2020 guidelines. As a part of this initiative, all courses are rewritten with Course Outcomes +

(COs) at appropriate level of critical thinking as per Bloom's Taxonomy and mapping to Program Outcomes (POs). Accordingly, six out of seven UG programs have been NBA accredited under Tier-1, where OBE plays a major role in defining the quality of Teaching and Learning Process (TLP).

Sl. No	Content Description	
1	Course Description showing how COs are written and common layout across all branches of	f Engi
2	Workbook for measuring Course Outcomes.	
3	Workbook for measuring Program Outcomes.	
4	Accreditation by NBA	

File Description	Document	
Any 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

Page 80/98 24-03-2023 08:33:04

## quality initiatives )

## **Response:**

**IQAC works** at two different levels, one at Program/Department level and another at the Institute level.

- 1.**IQAC at Institute Level:** Focus of this is to perform external audits involving professors from premier Institutions like IITs and NITs to bring contextual relevance with emerging trends in the Industry.
- 2.**IQAC at Program/Department Level:** Focus of this is to review assessment tools to ensure its compliance with course outcomes defined based on Blooms Taxonomy. It will also ensure Course Teachers Assessment's (**CTA's**) quality for compliance with **experiential learning** perspective of **NEP-2020** and therefore **Industry readiness** along with other curricular components.

Sl.No	Content Description
1	Internal and External audit process to ensure quality adherence.
	:Audit Report Format -INTERNAL
2	Internal and External audit process to ensure quality adherence.
	:Audit Report Format -EXTERNAL
3	Internal and External audit process to ensure quality adherence.
	: Sample Audit Report

File Description	Document
Any 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:** 3 of the above

File Description	Document
Upload e-copies of the accreditations and certifications	View Document
Institutional data in prescribed format	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:**

One of the main objectives of the institution is to

- Promote education that would be sensitive to the needs of the various sections of society with special emphasis on gender equality and gender sensitivity.
- Students of both the genders are given equal opportunities to develop them into responsible citizens of the future.
- The institution constantly makes efforts to maintain gender balance among the faculty members.

Specific facilities provided for women in terms of:

### 1. Safety and security

- The institution has no compromise in the security issues.
- Right from the inception of the college, the management has taken serious steps to have the security to the entire campus.
- The security personnel (39 male/3 female) monitor the movements in the campus round the clock. There are 68 CCTV cameras installed in main places like entrance gate, library, auditorium, office, corridors, class rooms etc., for the safety of the students and staff.
- The security guards near the entrance physically check vehicles and belongings during entry to the campus and exit from the campus. Do's and Don'ts are displayed in each laboratory and students are briefed on safety precautions.
- Seating for girls and boys inside the classroom and college buses are made separately.
- 72 Fire extinguishers (Class A, B, C) are installed in various prominent places across the college.

#### 2. Women Grievance cell:

- Women Grievance cell deals with all the grievances faced by girl students and lady faculties.
- It regularly addresses the complaints filed by girl students and provides suitable solutions.
- Conducts awareness programs to emphasize the rights of women
- Highlights the importance of health and hygiene.
- Provides directions to Women's role in the society.
- Develops multi-disciplinary approach for the overall personality development.
- Formulates equity action plan in the development activities of the Institution.

## 3. Disciplinary committee:

- Disciplinary committee consists of a senior professor as chairperson and few experienced teachers as members.
- The committee gives utmost importance for maintaining student discipline in the class room as well

as in the campus.

- If a student is found violating disciplinary regulations of the college, the matter is referred to the committee.
- After proper enquiry, the committee sends its reports to Principal recommending suitable action.

### 4. Counselling

- A separate counselling room is available for student counseling.
- It helps students to solve their personal and academic problems to the possible extent.
- Students will be monitored and counseled on academic performances, attendance, regularity, punctuality, disciplinary matters, safety and security measures etc.

#### 5. Common Room

Common room is available in the Institution equipped with tables, chairs, beds with linen, drinking water coolers and wash rooms, exclusively for girls.

File Description	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
Annual gender sensitization action plan	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	<u>View Document</u>

# 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:**

The waste generated in the campus includes liquid and solid waste- both of biodegradable and non-biodegradable in nature. No classified hazardous waste is generated in the campus. E-waste is handled and reused as per the guidelines. The policy of the institute is to maintain campus ecofriendly, clean and hygienic. This is also done by green plantation throughout the campus. The college syllabus includes a subject on Environmental sustainability as part of the curriculum.

SDM CET (Autonomous) follows standard guidelines for management of degradable and non-degradable waste mentioned as under:

#### a. Solid Waste Management

The bins for collection of solid waste like paper, metals, dry leaves etc are located at prominent places throughout the campus. Metals and other non-bio-degradable wastes are given to external agencies. Separating waste at the source from the canteen, gardens, hostels, and rooms is the first stage in solid waste management. To separate wet and dry garbage, green and blue containers have been positioned throughout the campus in various locations. Mess, canteen, and cafeteria food waste is gathered and outsourced. All of the garden trash is collected, composted on-site, and used as fertiliser. Additionally, the college maintains a small nursery.

#### b. Liquid Waste Management

To prevent stagnation and improper discharge of waste water, liquid waste generated at various points on campus, including the college, hostels, canteen, and restrooms, is discharged into a suitable drainage system. This waste water collected from different points is treated using sewage treatment plant setup by the institute. The sewage treatment plant (STP) has a capacity of 300 KLD, and treats 2, 50,000 litres of waste water per day and it operates on the sequencing batch reactor principle.

#### c. E-waste management

Electronic equipment contains many hazardous metallic contaminants such as lead, cadmium, and mercury. Disposal of e-waste is global environmental and public health issue. Useful parts of electronic gadgets like resistors, capacitors, diodes, transistors and thermistors have been removed from the gadgets for reuse in practical/projects in physics, EEE and ECE departments. All the e-waste such as CPUs, monitors, keyboards, batteries and other electronic items are collected from every department and office, and given to external agencies where they are safely disposed off.

#### d. Biomedical waste management

The Bio Medical Waste from Girls hostel and college such as used Sanitary napkins are disposed of separately using incinerators.

## e.Waste recycling system

Biodegradable waste like leaves, wood, paper waste etc. are composted in the provided pit. Treated waste water is recycled and used for gardening purpose.

## f. Hazardous chemicals and radioactive waste management

There is no Hazardous chemical Waste at SDMCET but a little amount of chemical waste from Chemistry and Chemical Engineering labs is generated and it is taken into the sewage treatment plant after proper dilution. The used batteries are disposed through Government approved dealers through buy back policy.

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:

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

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

File Description	Document
Geotagged photographs / videos of the facilities	<u>View Document</u>

#### 7.1.5 Green campus initiatives include:

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

**Response:** 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
Certificates of the awards received	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

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:**

SDMCET enjoys the presence of students and staff from across the spectrum of various socio-cultural backgrounds. Many students are from outside Karnataka, with representation from different states and Union territories.

SDMCET provides equal opportunities to the young aspirants in admission into various programmes. No gender bias is adopted in admitting the students.

Students who are economically weak are admitted under Tuition Fee Waiver (TFW) schemes of AICTE and State Government. After admission, various scholarships are provided by Management and facilitated for different Government and private Schemes. Besides, students with meritorious record in sports, persons with disability, wards of ex-servicemen are given preference in the admission as per the norms of the DTE.

SDMCET ensures equity among different communities by strictly following the Reservation Policies of State and Central Government and currently has students from SC/ST, OBC and other categories and such students are provided equal facilities and access without any gender and caste discriminations.

In order to provide the career enhancement opportunities to the Diploma Candidates, Lateral Entry Scheme has also been implemented, where a Diploma holder can directly join second year of the UG Programme based on the Merit and other conditions.

Cultural sensitivity and respect for others is stressed upon in the orientation programs conducted for 1st semester students. The annual cultural festivals of the colleges under VTU provide a platform for students to learn about each other's traditions and heritage. The college also organizes National Festivals like Independence day, Gandhi Jayanti, Republic Day etc. Many Regional festivals like Kannada Rajyostava, Maharishi Valmiki jayanti, Kanakdas Jayanti ,Mahanavami, Ayudha pooja, etc. are celebrated in college campus.

SDMCET has always given great value to personality development of students through technical and extracurricular activities. The Institute is also known for its best practices in academics along with the values of innovations. Our students have been the great strength in all our endeavors. In order to provide a platform for our students to exhibit their talents and search for the excellence in their activities, we are organizing "INSIGNIA –a Techno-Cultural fest' the flagship event at our institute.

The event is spread over for a period of three days with various events such as Battle of Bands, Fashion Show, Dance, Singing, Fine Arts, Literary, Dramatics, Street Play, Photography, LAN Gaming, Offline treasure hunt, Nightout coding etc. and would be graced by renowned performers as well as artists of repute, who have reached to the zenith of success such as, Sunidhi Chauhan. Over the past 43 years, SDMCET has seen tremendous growth in terms of planning and execution of each event by showcasing their talents on a cultural platform. Events hosted by our college have been graced by eminent personalities and have always won their appreciation.

Karnataka Rajyostav also is an important event we celebrate in college. NSS in association with Physical

Page 88/98 24-03-2023 08:33:04

Education and Sports department organized many events like Tree plantation, Swachha Bharat Abhiyaan, Traffic rules awareness programme, Walkathon was organized on account of Azadika Amrut Mahostav.

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:**

SDMCET takes initiatives in organizing various events and programmes for moulding the students and faculties to become responsible citizens by sensitizing them to the constitutional obligations: values, rights, duties and responsibilities of the citizens.

Universal Human Values are the guiding principles of our lives and play an important role in the life of human beings at various stages including education and career. Education in Universal Human Value (UHV) is deeply essential to nourish the moral capabilities in the student & ultimately in society in a positive way. Truth, Love, Peace, Non-Violence and Righteous Conduct are the Universal Human Values. These are needed for well-being of an individual, society, humanity and ultimately to have peace in the world. To inculcate Universal Human Values in the students who are the building blocks of Nation various events are conducted.

The spiritual values breed the ideas of peace, unity, and wisdom. Similarly, moral values are crucial for the students to be appreciative of qualities of compassion, goodness and truthfulness. The holistic development of student is never complete without moral and spiritual growth, which in itself remains incomplete without the inculcation of the right values. The spiritual development of young people has the potential to strengthen youth work and its outcomes. Universal Human Value Cell at the institute arranged the invited talks by the spiritual Gurus. In this context, a discourse by Shri. Rajiv Lochan Das, ISKON Hubli was arranged for the students and faculties regularly.

To enhance the spirit of patriotism among the students on the account of 75 years of Independence, Azadika Amrut Mahotsav, the institute conducted the activity of rendering the Rashtragaan.

The institute observes Constitution Day, the sole aim of celebrating such functions is to instil a sense of national faith and integrity among the students. The fundamental duties of the Constitution to create and promote culture and enforce the duties vis-a-vis the fundamental rights are followed at every level in the institution. Indian Constitution, as a mandatory course, is taught to all students of UG thereby bringing awareness on constitutional values, rights duties and responsibilities among everyone.

The President of the Institution was awarded with the highest civilian award Padma Bhushan by the then

President of India for his contribution to the society and rural development.

Leadership of SDMCET promotes scientific temper, humanism and spirit of inquiry among students and faculty through mission, strategic initiatives, facilities, funds for different activities through seed grants, matching grants, instituting sponsorships and scholarships so as to strive for excellence in individual's and collective activities to reach higher levels in the operations.

Students and Faculty Members respond to the service-calls posed by the State and National level, responding to situations, like regulating traffic, safe-guarding public properties, guiding the crowds during festival seasons, local body elections, imposing lock-down (COVID-19), thereby facilitating, promoting harmony and spirit of common brotherhood. SDMCET maintains equity among the students and employees, regardless to their regions, religions and linguistic backgrounds and maintain the dignity of everyone, in particular women students and employees.

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

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

#### **Response:**

Every year Institution Organizes National / International Festivals and Birth and Anniversaries of great Indian Personalities with enthusiasm. Various programs and exhibitions are arranged during national Festivals and Birth Anniversaries of the great Indian Personalities to imbibe the importance of national integrity and patriotism. Days such as International Yoga Day, International Women's Day, National Science Day, are celebrated by conducting activities like talks, workshops and exhibition. In order to know about the sacrifice by freedom fighters, Philanthropists, social activists and to remind about our country's cultural heritage and history among staff and students every year college organizes the national festivals and commemorative days.

SDMCET, through systematic approach Clubs and Societies, Leadership Council, Department Associations, NSS, and Professional Chapters organize and celebrate (i) Cultural Festivals, (ii) Important National and International Days, (iii) Religious Festivals (iv) Commemorative Days. Institute allocates a budget for such events annually. During National Important days like Independence Day, Republic Day, Teachers Day, President, Secretary, Principal and the other invited chief Guests address the faculty members and students to showcase their commitment in such value based events and nurture patriotism, commitment and dedication to the profession and country. Ayudh pooja is a traditional festival celebrated to acknowledge the equipments and machinery.

Some of the key events, organized and celebrated, are given below.

- Sl. No. Name of the festival/ Activity
- 1 Independence Day
- 2 Mahatma Gandhiji and Shastriji Jayanti
- 3 Republic Day
- 4 Teachers Day
- 5 Engineers Day
- 6 World Environment day
- 7 Swami Vivekananda Jayanti
- 8 International woman's day

File Description	Document
Geotagged photographs of some of the events	<u>View Document</u>

## 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. Title of the Practice

Showing Evaluated Answer Scripts to students before the announcement of results (Academic Transparency)

Year of Induction: 2016

## 2. Objectives of the Practice

## This practice has been introduced with the following objectives:

- i. To ensure the correctness of paper evaluation in compliance with scheme and therefore correctness of the grade awarded with.
- ii. To enhance student confidence on examination system.
- iii. To reduce the number of applications for revaluation
- iv. To complete examination process intime.

#### 3. The Context

CoE office used to receive large number of applications for revelation. Many of them were not getting converted into changes in the grades finally. This has resulted into complexity in terms of managing application for revaluation and therefore meeting the academic deadlines. This has resulted into introducing this new procedure of showing answer scripts to students before the announcement of results. The main challenge in implementing this procedure is to manage large crowd without compromising academic security leading to absence of any kind of malpractice, ensuring highest level of student's satisfaction and completing the process in time.

#### 4. The Practice

The steps followed in implementing this practice include:

- 1. Controller of examination (CoE) announces the common dates and venues of showing evaluated answer scripts to students.
- 2. Departments in turn make arrangements of collecting evaluated answer scripts from CoE office, and necessary housekeeping at the venue.
- 3. Students are given proper instructions to be followed in the venue.
- 4. Students are provided with Scheme of evaluation.
- 5. Teachers justify their evaluation, incase students seek clarification.
- 6. Students file application with CoE for revaluation in case of any discrepancies
- 7. Subsequently office of the CoE continues routine process of evaluation and related notifications.

#### 5. Evidence of Success

This practice is unique in our region and students are very much happy with this practice due to the level of transparency it provides. This practice is also acclaimed by several committees like, Visveswaraya Technological University, Belagavi, NBA, Academic Council, etc. There has been a drastic reduction in the number of revaluation applications since this practice is adopted. This unique practice has enabled us to meet all the objectives which we had set for ourselves.

## 6. Problems Encountered and Resources Required

The problems that we normally face in this practice are:

- Availability of students in full strength.
- Meeting deadlines

Monitoring of academic discipline in the venue

### **Engineering Exploration.**

### 1. Objectives of the Practice

To adopt learner centric teaching by enabling experiential learning through creation of working model connecting science with engineering.

## Outcome of the practice:

#### **Students will:**

- Get exposure of Engineering Design Process, Multi-disciplinary work culture, problem solving, and data analysis, Team Building, Professional Ethics, and Project Management.
- Attain capability to connect prior science knowledge with real application.
- Get peer learning capabilities enabling future domain identification and trends.
- Get exposure to event organization and coordination capability.
- Have increased confidence and presentation skills.
- Get guidance to choose the mini and major project work to be done at higher semesters

#### 1. The Context:

Weak adaptability due to transition from conceptual background of science and application @ 12th std., to application based engineering design trends and possible implementation has resulted into introduction of this practice which makes students of FIRST YEAR to understand fundamentals of engineering and have hands on experience by creating working models.

#### 1. The Practice

#### The following steps are followed in implementing this practice

• Students make a team of four on their own. Then they select a problem pertaining to their field of

Page 93/98 24-03-2023 08:33:04

interest and current trends.

- After studying the problem in depth, process of design and implementation begins.
- They decide about the components required for implementation. After purchasing of components, they start implementation of working model.
- Each team submits a proposal of the working model comprising of the followings:
  - The team details
  - Design/drawing of the working model
  - Explanation about its working.

The amount of Rs. 25000/- is sponsered by the institute for this event.

#### 5. Evidence of Success

- Exploration of conceptual designs in their respective areas.
- Converting the ideas into reality.
- Working in cohesive team.
- Students are made to work in multi-disciplinary area.
- Finding simple solutions to the societal needs.
- Helps in developing leadership qualities among students.
- Implementing the project within the allotted budget.

## 6. Problems Encountered and Resources Required;

Students encounter following problems during the implementation of working model:

- Feasibility of the implementation of the problem identified.
- Technical guidance with proper literature survey.

### Resources Required:

- Components.
- Financial support.

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:**

## ENVIRONMENT FRIENDLY PRACTICES AND CONTRIBUTION TOWARDS RURAL DEVELOPMENT

"A healthier environment leads to a healthier brain". This phrase so well matches with SDMCET philosophy of developing a clean and green campus with zero waste. This is achieved by focusing on the following.

- 1. Use of ecofriendly, renewable energy sources for meeting partial energy requirement in the campus, hostels.
- 2. Spreading awareness among students and staff and public at large for protecting the environment and to use green technologies.
- 3. Recycling waste generated in the campus, hostels through eco-friendly practices.

Use of eco-friendly, renewable energy sources:

The institution Electricity demand is nearly 92000 units per month. We were totally dependent on HESCOM to meet the power requirements. As a part of ecofriendly, renewable energy source the college is installed solar PV system. This certainly reduced our power requirement from HESCOM. Nearly 40 % of electricity requirement is met by solar PV system. Solar water heaters (25000 ltrs) are installed in the College campus in hostels. For providing hot water to students.

Recycling waste generated in the campus, hostels through eco-friendly practices

- 1. Establishment of waste management system: The waste generated from office and hostel premises of the college is collected in separate dustbins. Recyclable waste such as paper, cloths and fallen leaves of trees is collected separately. E-waste generated from offices is also planned to be recycled back through e-waste dealers. A Sewage Treatment Plant (STP capacity of 300 KLD) has also been established by the College.
- 2. **Maintaining green cover in the college campus**: The College has maintained ample green cover in its campus by regular plantations in its premises. Different species of trees have been planted in the campus for enhancing the green diversity.
- 3. **Pollution, Polythene and Plastic-free campus:** Open fire is not allowed in the College campus. Movement of vehicles is restricted inside the campus. Use of single use polythene is strictly prohibited. College encourages use of public transport of college and bicycles by the employees.
- 4. **Water conservation facilities:** This includes rainwater harvesting structures, waste water recycling for gardening and maintenance of water bodies.

#### Spreading Environmental awareness among students and employees and public at large:

The College spreads environmental awareness among students and staff members by celebrating Environment Day. It also initiated Unnat Bharat Abhiyan of the Government of India to encourage and maintain cleanliness, health, hygiene environmental, digital awareness and other aspects in and around the campus and also to bring awareness among public and nearby school children.

Unnat Bharat Abhiyaan (UBA) is a flagship program of the Ministry of Education, Government of India, aimed at connecting higher education institutions with rural India to contribute to the development of the country. The program was launched in 2014 and has been successful in bringing together educational institutions and rural communities to share knowledge, technology, and resources to transform rural India

SDMCET Dharwad is actively involved in the UBA program since 2018. Being a Participating Institute, the college has adopted five villages under the UBA program, namely Yerikoppa, KanaviHonnapur, NayakanaHulikatti ,Harobelavadi and Kabbenur

One of the notable achievements of SDMCET Dharwad under the UBA program is the provision of cleaning of roads and play grounds of adopted villages. College has taken initiatives under the scheme of Swachha Bharat Abhiyan and brought awareness about cleanliness and usage of pure drinking water to the residents of villages

SDMCET Dharwad has also made significant contributions to the education sector in the adopted villages. The institution has brought awareness about computers and electronic gadgets by conducting various sessions for primary and high school students in its adopted villages. Programs have been organized to villagers to bring the gap between rural and urban areas in the field of Digital economy/literacy.

Unnat Bharat Abhiyan has also focused on empowering women in rural areas. The program has helped in the promotion of schemes on women's education, the provision of job opportunities, and the provision of financial assistance to women entrepreneurs. In this connection, SDMCET has been organizing several activities for improving the personal, professional, family and social life of rural women. Health related activities, Digital economy and mobile banking programs have been organized. These kinds of activities helped them to improve their not only health and finance conditions but also bringing gender equality.

Another noteworthy achievement of SDMCET Dharwad under the UBA program is the promotion of technology in Agricultural field. Using technology how they can lessen their work in farming and how to increase crop yield and income through which their standard of living will improve significantly.

The institution has also taken several initiatives to improve the health and sanitation facilities in the adopted villages. It has highlighted the importance of the usage of public toilets in the villages and has organized health camps to create awareness about health and hygiene. The institution has also conducted several programs on awareness on Covid-19 and its impact on health. How to take care of their health and surroundings from pandemic, Dr. M.R.Kappali, Professor, SDMCET, has designed and developed the Janata ventilator and demonstrated during pandemic. It was well appreciated by the authorities and people from various sections of the society. Prof. Kappali also carried out Project Under UBA; "Harnessing Device for Bullock-Cart". The project was sponsored by UBA and supported by college. The Institution also highlighted the importance of taking vaccination during pandemic through various programmes in the villages.

NCI-New Delhi is giving us guidelines and awareness to all of us through on-line or on-sight mode on regular basis. It is also funding for faculty research proposals. Our institute is already beneficiary of Rs.2.1Lakhs for their project proposals.

SDMCET Dharwad as a participating institute has made significant contributions to the UBA program and has brought about a positive change in the adopted villages. It also support and realize the concept of Skill India, Digital India, Start up India etc., These achievements have helped to improve the standard of living

of the villagers and have contributed to the overall development of rural India.	
File Description	Document
Appropriate web in the Institutional website	View Document

## 5. CONCLUSION

## **Additional Information:**

In addition to the regular academics the college conducts regular programs for the benefit of the student community:

- 1. Technical Baarrier Reduction Program (TBRP): This program is sponsered by Government of Karnataka. Under this program the institution conducts orientation sessions for the rural school children to educate and encourage them to take up technical education.
- 2. Cisco Network Academy: Under this program the institution conducts training and certifications in the field of networking for the benefit of the students in terms of skill enhancement and placement.
- 3. SDM Radio Engineer: The institution conducts series of technical talks through All India Radio (AIR), Dharwad to educate common people about latest trends and technologies and bring awareness about digital literacy and cyber frauds.
- 4. Regular Alumni Interaction Programs: It will be conducted trough Online/Offline mode by various departments for motivational speech, technical hand-holding, project guidance etc. Alumni also contribute in curriculum upgradation by giving their suggestion based on current trends and technologies.

The college is also given the privilege of carrying out document verification for CET, PGCET and DCET at our premises.

## **Concluding Remarks:**

Shri Dharmasthala Manjunatheshwara Educational [SDME] Society, Ujire was established with the primary objective of making education accessible and affordable to the rural youth. With the hallmarked vision of inculcating Value into Education.

Shri Dharmasthala Manjunatheshwara College of Engineering & Technology, Dharwad was established in the year 1979 under the flagship of SDME Society, under the able leadership of Dharmaadhikari, Reformer, Educationist, Philosopher and Philanthropist, Dr.D. Veerendra Heggadeji. It has grown into one of the nationally acclaimed premier engineering institutions in the country. The college stands in the band of 200 to 300 in NIRF ranking and most of the departments are NBA accredited for the fourth cycle. More than 20% of the faculty members have obtained their Ph.D from the premier institutes. Few of the faculty mebers are executive mebers of various state and central boards. Few of the faculty members are on the editorial board of peer reviewed journals. The college maintains a good placement record with a highest package ranging from 15 lacks/annum to 25 lacks/annum and an average package of 6 lacks/annum. The college has its existance for last 40+ years and is catering to the needs of rural student community.

In line with the vision of our president, the institution has adopted 5 villages in and around Dharwad to bring awareness among the villagers in terms of cleanliness, health, education, digital literacy etc.