SDM COLLEGE OF ENGINEERING AND TECHNOLOGY

Dhavalagiri, Dharwad-580002, Karnataka State, India.

Email: principal@sdmcet.ac.in, sdmcet.iqac@gmail.com

Internal Quality Assurance Cell

[Department of Information Science and Engineering]

REPORT
On
The Annual Quality Assurance Report AQAR

[2022-23]

1st Jan 2022 to 30th June 2023

Date of Publication: 1st July 2023

Prepared and Maintained
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Part – A

DATA OF THE INSTITUTION

1. Name of the Institution: SDM College of Engineering and Technology.

- Name of the Head of the institution: **Dr. K. Gopinath**

- Designation: **Principal**

- Does the institution function from own campus? **Yes**

- Phone no./Alternate phone no.: **0836-2464638**

- Mobile no.: **9538677470**

- Registered Email: **principal@sdmcet.ac.in**

- Alternate Email: **kgopinath@gmail.com**

- Address   : **Dhavalagiri, Kalghatgi Road**

- City/Town   : **Dharwad**

- State/UT   : **Karnataka State**

- Pin Code   : **580002**

2. Institutional status:

- Autonomous Status *(provide the date of Conformant of Autonomous Status):* **DD-MM-YYYY**

- Type of Institution: Co-education/Men/Women? : **Co-education**

- Location: Rural/Semi-urban/Urban: **Urban**

- Financial Status: Grants-in aid/ UGC 2f and 12 (B)/ Self-financing? : **Self financing**

- Name of the IQAC Coordinator/Director: **Dr. Umakant P. Kulkarni**

- Phone no. /Alternate phone no.: **9448915301**

- Mobile: **9448915301**

- IQAC e-mail address   : **sdmcet.iqac@gmail.com**

- Alternate Email address : **sdmcet.iqac@sdmcet.ac.in**

3. Website address: https://sdmcet.ac.in
- Web-link of the AQAR: (Previous Academic Year): **NA**   Prepared first time (2022-23)

4. Whether Academic Calendar prepared during the year? : **Yes**

if yes, whether it is uploaded in the Institutional website: **Yes**

Weblink: https://sdmcet.ac.in

5. Accreditation Details:

NBA   : All UG Programs (except Chemical Engineering) are **accredited under Tier-1.**

NAAC: Applied on 24th March 2023 (1st Time)

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1st	-	-	-	from: to:

6. Date of Establishment of IQAC: DD/MM/YYYY

7. Internal Quality Assurance System.

Quality initiatives by IQAC during the year for promoting quality culture		
Title of the quality initiative by IQAC	**Date & duration**	**Number of participants/beneficiaries**
Internal Audit Teaching & Learning Process/ Administrative & other aspects		
External Audit- Teaching & Learning Process/ Administrative & other aspects		
Other Quality Audit - Performance Based Self-Appraisal- **PBSA**		
Students Feedback		
Accreditation-NBA/NAAC/etc…		
Participation in NIRF		
Regular Meeting of IQAC		

Note: Some Quality Assurance initiatives of the institution are:
    (Indicative list)
- *Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analyzed and used for improvements*
- *Academic Administrative Audit (AAA) conducted and its follow up action*
- *Participation in NIRF*
- *ISO Certification*
- *NBA etc.*
- *Any other Quality Audit*

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

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount
Nil				

9. Whether composition of IQAC is as per latest NAAC guidelines? **Yes**
Weblink for latest notification of formation of IQAC: **https://sdmcet.ac.in/iqac/**

10. No. of IQAC meetings held during the year: XX

- The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website? **Yes**
- Weblink for latest minutes of meetings and action taken report: **https://sdmcet.ac.in/iqac/**

11. Whether IQAC received funding from any of the funding agency to support its
activities during the year? **No**

If yes, mention the amount: Year:

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

1	**Internal & External Audit** Teaching & Learning Process/ Administrative & other aspects
2	**Other Quality Audit** - Performance Based Self-Appraisal- **PBSA**
3	**Students Feedback**
4	**Accreditation**-NBA/NAAC/etc…
5	**Participation in NIRF**

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

Plan of Action	Achievements/Outcomes

14. Whether the AQAR was placed before statutory body?   **Yes**   (Institutional Performance in its own Format)

Name of the Statutory body: Academic and Governing Council
Date of meeting(s):
- GC: DD-MM-YY
- AC: DD-MM-YY

15. Whether **NAAC/or any other accredited body(s) visited IQAC** or interacted with it to
assess the functioning?   **Yes (NBA)**   Date: DD-MM-YYYY

16. Whether **institutional data submitted to AISHE**: **Yes**

Year: YYYY   Date of Submission: DD-MM-YYYY

17. Does the Institution have **Management Information System**? **Yes**

Brief description and a list of modules currently operational.
Module-1: XXXX

Module-2: XXXX

Module-3: XXXX

Module-4: XXXX

Module-5: XXXX

PART-B

CRITERION I – CURRICULAR ASPECTS (AN, VSV, SSJ)

Curriculum Design and Development

1.1.1   Programmes for which syllabus revision was carried out during the Academic year.

Name of programme	Programme Code	Dates of revision
UG		2016-17 (11 to 15 scheme- 200 credits)
		2018-19 (18 scheme – 175credits – I year)
		2019-20 (18 scheme – 175credits – II year)
		2020-21 (18 scheme – unit wise- 175 credits)
		2021-22 (21 scheme I year- NEP- 160 credits)
		2022-23 (21 scheme II year Nep-160 credits) --- (22 scheme I year in line with VTU)

1.1.2 Programmes/ courses focused on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Date of Introduction	Course with Code	Date of Introduction
Information Science and Engineering	2008	Principles of programming Using C	2022-23
		Introduction to Internet of things	2019-20
		Advanced C Programming	2022-23
		Innovation and Design Thinking	2022-23
		Data Structures	2009
		Unix with shell programming	2009
		Design and Analysis of Algorithms	2009
		Operating System	2010
		Object Oriented Programming with Java	2022-23
		Introductory Project	2019-20
		Micro Controller	2021-22

		Software Engineering	2010
		Java and Web Technology	2020-21
		Database Management System	2010
		Computer Networks	2010
		Minor Project-1 &2	2020-21
		Soft skills/Aptitude	2020-21
		Advanced Data Structures	2010
		Artificial Intelligence and Machine Learning	2020-21
		User Interface Design	2018-19
		ADBMS	2018-19
		Object Oriented Modeling and Design	2012
		Data mining	2015
		Unix System Programming	2010
		Agile Methodologies	2017-18
		Cyber Law and Ethics	
		Big Data Analytics	2017-18
		Storage Management	2021-22
		Major Project Phase-1	2011-12
		Internship	2021-22
		Mobile Communication and Computing	2017-18
		Deep Learning	2021-22
		Cloud Computing	2017
		Supply Chain Management	2021-22
		Cryptography and Cyber Security	2021-22
		Major Project Phase-2	2011
		Wireless Sensor Networks	2017-18
		Block Chain Management	2019-20
		DevOps	2021-22
		Data Sciences	2021-22

1.2 Academic Flexibility

1.2.1 New programmes/courses introduced during the Academic year

Programme/Course	Date of introduction
UG	
Advanced C programming	2022-23
Introduction to Internet of Things	2022-23
Innovative Design Thinking	2022-23
Communicative English	2022-23
Professional Writing Skills in English	2022-23
Scientific Foundations of health	2022-23
Financial Markets	2022-23
Universal Human Values-I	2022-23
Universal Human Values-II	2022-23
The Constitution of India and Professional Ethics	2022-23
Digital Circuits and Computer Organization	2022-23
Object Oriented Programming with Java	2022-23

1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of Programmes adopting CBCS	**UG**	**PG**	Date of implementation of CBCS / Elective Course System	**UG**	**PG**
Already adopted (mention the year)					

1.3 Curriculum Enrichment

1.3.1 Value-added courses imparting transferable and life skills offered during the year

Value added courses	Date of introduction	Number of students enrolled
	NIL	

1.3.2 Field Projects / Internships under taken during the year

Project/Programme Title	No. of students enrolled for Field Projects / Internships
NIL	**NIL**

1.4 Feedback System

1.4.1 Whether structured feedback received from all the stakeholders. Refer Annexure 1.4.1-

1) Students	2) Teachers	3) Employers	4) Alumni	5)Parents
Yes	Yes	Yes	Yes	No

1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (Maximum 500 words)

Feedback form/formats are designed for the stakeholders. This includes faculty feedback, alumina feedback, student feedback, course exit survey, etc. Faculty feedback from the students for the respective course is taken twice in a semester on various teaching/learning aspects and it is analyzed by the HODs and corrective measures if any, are informed to the respective faculties for further improvements. Course exit feedback and program exit feedbacks are taken to analyse the understanding capability of the students.

Feedbacks about the infrastructural facilities are taken from the final year students at the end of the program for improving the lab facilities, if any. The feedback so obtained is analyzed for further improvement. Feedbacks from the parents are taken by interacting with them during Parent Teacher Meet. Feedback is taken from alumni for suggestions or improvements in the curriculum. Feedback from the final year students are taken for their suggestions in improving the curriculum. Feedbacks from faculty are also taken for their suggestions in syllabus revision.

Feedback is also collected from the companies. We have also installed a suggestion box which is accessible to all the stake holders so that they can give their Feedback/ suggestions for improvements, if any. College level IQAC team conducts the exercise of student feedback every year. We have a system of taking feedback from students on infrastructure and also subject wise teachers. This is a feedback on 5-point scale, which measures parameters like Subject knowledge, expression, Teaching aids used, methodology etc. which is analyzed by our management for taking appropriate decisions for improving the infrastructure and also quality of teachers.

The alumni feedback and exit feedbacks are taken from all students. From these forms we are able to make out whether the proper teaching learning process is in place. Also, this process enables the institute to improve in the areas where ever necessary. The feedback is key tool which triggers in continuous improvement in the quality of education. The feedback is taken from students in order to analyze and implement as per their needs. Also, feedback is taken from experts on quality of our students. Based on the faculty feedback the probationers and regular faculty are counseled for the lacunae. Based on the above feedbacks and suggestions.

CRITERION II -TEACHING-LEARNING AND EVALUATION –

2.1 Student Enrolment and Profile

2.1. 1 Demand Ratio during the year(100%)

Name of the Programme	Number of seats available(Management)	Number of applications received	Students Enrolled
Information Science and Engineering	**18**	**60**	**18**

2.2 Catering to Student Diversity

2.2.1. Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2022-23	280	03	13	0	13

2.3 Teaching - Learning

2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of teachers on roll	Number of teachers using ICT *(LMS, e-Resources)*	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
13	13	-	03	-	02

2.3.2 Students mentoring system available in the institution? Give details. (maximum 500 words)

The students in the dept are divided into smaller sub-groups in each semester. These subgroups are assigned to individual staff as the local guardian to the student for all academic concerns, developments and monitoring. The faculty calls for the periodic meetings in department with their students on one to one basis and reviews their individual progress. The individual discussion report and progress in maintained in the student mentorship report book.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
=69+69+79	**14**	**15.5**

2.4 Teacher Profile and Quality   )

2.4.1 Number of full-time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D.
--	-	-	-	09

2.4.2 Honors and recognitions received by teachers *(Received awards, recognition, fellowships at State, National, International level from Government, recognized during the year)*

Year of award	Name of full-time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
NIL	**NIL**	**NIL**	**NIL**

2.5 Evaluation Process and Reforms Faculty In Chrage, Dr. Pushpalatha

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester-end/ year - end examination
Information Science and Engineering	2SDIS	I/1	16-03-2023	24-04-2023
Information Science and Engineering	2SDIS	III/2	16-03-2023	24-04-2023
Information Science and Engineering	2SDIS	V/3	22-12-2022	25-01-2023
Information Science and Engineering	2SDIS	VII/4	22-12-2022	25-01-2023

2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year
Do not include re-evaluation/ re-totalling)

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
NIL	NIL	NIL

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes) . for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://sdmcet.ac.in/ug/information-science-engineering/

2.6.2 Pass percentage of students				
Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final Semester /year examination	Pass Percentage
Information Science and Engineering	**2SDIS**	67	67	100%

2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink) – Refer Annexure 2.7.1 -https://drive.google.com/drive/folders/1PkAugSHEg-dH6YITcQROG_I6Q5-DitLu?usp=drive_link

STUDENT SATISFACTION SURVEY-(GRADUATION YEAR-2022-23)

NAAC (National Assessment and accreditation council) is conducting a Student Satisfaction Survey regarding Teaching – Learning and Evaluation, which will help to upgrade the quality in higher education.

A student will have to respond to all the questions given in the following format with her/his sincere effort and thought. Her/his identity will not be revealed.

1. How much of the syllabus was covered in the class?*
o   85 to 100%
o   70 to 84%
o   55 to 69%
o   30 to 54%
o   Below 30%
2. How well did the teachers prepare for the classes?*
o   Thoroughly
o   Satisfactorily
o   Poorly
o   Indifferently
o   Won't teach at all
3. How well were the teachers able to communicate?*
o   Always effective
o   Sometimes effective
o   Just satisfactorily
o   Generally ineffective
o   Very poor communication
4. The teacher's approach to teaching can best be described as*
o   Excellent
o   Very good
o   Good
o   Fair
o   Poor
5. Fairness of the internal evaluation process by the teachers.*
o   Always fair
o   Usually fair
o   Sometimes unfair

o   Usually unfair
o   Unfair
6. Was your performance in assignments discussed with you?*
o   Every time
o   Usually
o   Occasionally/Sometimes
o   Rarely
o   Never
7. The institute takes active interest in promoting internship, student exchange, field visit opportunities for students.*
o   Regularly
o   Often
o   Sometimes
o   Rarely
o   Never
8. The teaching and mentoring process in your institution facilitates you in cognitive, social and emotional growth.*
o   Significantly
o   Very well
o   Moderately
o   Marginally
o   Not at all
9. The institution provides multiple opportunities to learn and grow.*
o   Strongly agree
o   Agree
o   Neutral
o   Disagree
o   Strongly disagree
10. Teachers inform you about your expected competencies, course outcomes and programme outcomes.*
o   Every time
o   Usually
o   Occasionally/Sometimes
o   Rarely
o   Never
11. Your mentor does a necessary follow-up with an assigned task to you.*
o   Every time
o   Usually

o   Occasionally/Sometimes
o   Rarely
o   I don't have a mentor
12. The teachers illustrate the concepts through examples and applications.*
o   Every time
o   Usually
o   Occasionally/Sometimes
o   Rarely
o   Never
13. The teachers identify your strengths and encourage you with providing right level of challenges.*
o   Fully
o   Reasonably
o   Partially
o   Slightly
o   Unable to
14. Teachers are able to identify your weaknesses and help you to overcome them.*
o   Every time
o   Usually
o   Occasionally/Sometimes
o   Rarely
o   Never
15. The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.*
o   Strongly agree
o   Agree
o   Neutral
o   Disagree
o   Strongly disagree
16.The institute/ teachers use student centric methods, such as experiential learning, participative learning and problem solving methodologies for enhancing experiences.*
o   To a great extent
o   Moderate
o   Some what
o   Very little
o   Not at all
17. Teachers encourage you to participate in extracurricular activities.*

o   Strongly agree
o   Agree
o   Neutral
o   Disagree
o   Strongly disagree
18. Efforts are made by the institute/ teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work.*
o   To a great extent
o   Moderate
o   Some what
o   Very little
o   Not at all
19. What percentage of teachers use ICT tools such as LCD projector, Multimedia, etc. while teaching.*
o   Above 90%
o   70 – 89%
o   50 – 69%
o   30 – 49%
o   Below 29%
20. The overall quality of teaching-learning process in your institute is very good*
o   Strongly agree
o   Agree
o   Neutral
o   Disagree
o   Strongly disagree
21. Give three observation / suggestions to improve the overall teaching – learning experience in your department/institution.

Responses

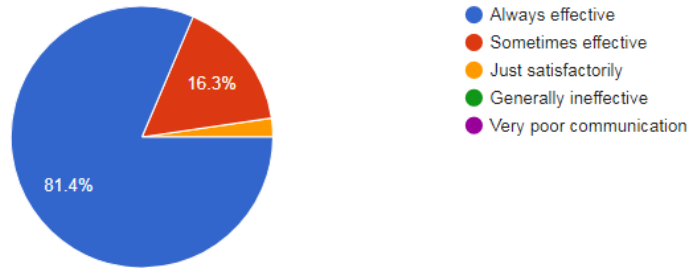## How much of the syllabus was covered in the class?

43 responses

- 85 to 100%
- 70 to 84%
- 55 to 69%
- 30 to 54%
- Below 30%

90.7%

9.3%
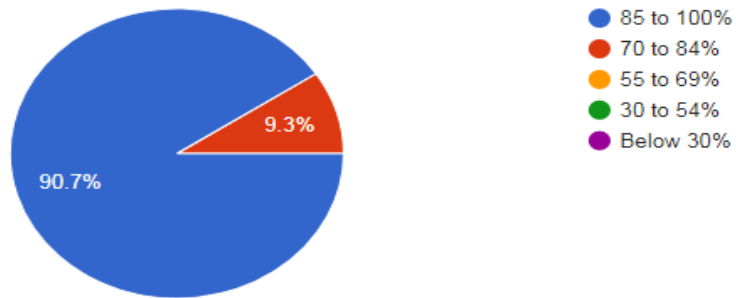
How well did the teachers prepare for the classes?

43 responses

- Thoroughly
- Satisfactorily
- Poorly
- Indifferently
- Won't teach at all

72.1%

27.9%
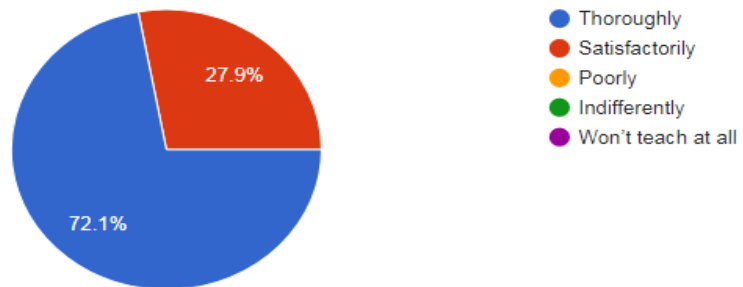
How well were the teachers able to communicate?

43 responses

- ● Always effective
- ● Sometimes effective
- ● Just satisfactorily
- ● Generally ineffective
- ● Very poor communication

81.4%
16.3%

The teacher's approach to teaching can best be described as

43 responses

- ● Excellent
- ● Very good
- ● Good
- ● Fair
- ● Poor

72.1%
20.9%
7%
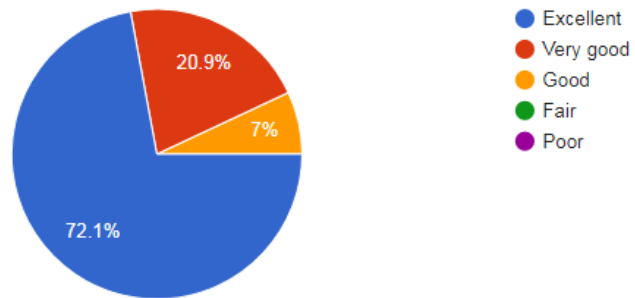
Fairness of the internal evaluation process by the teachers.

43 responses

- Always fair
- Usually fair
- Sometimes unfair
- Usually unfair
- Unfair

16.3%

79.1%
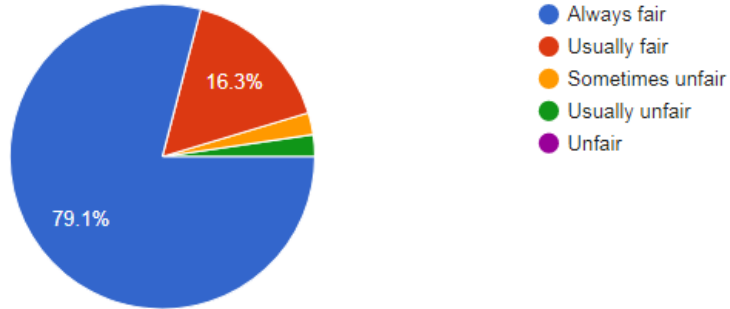
Was your performance in assignments discussed with you?

43 responses
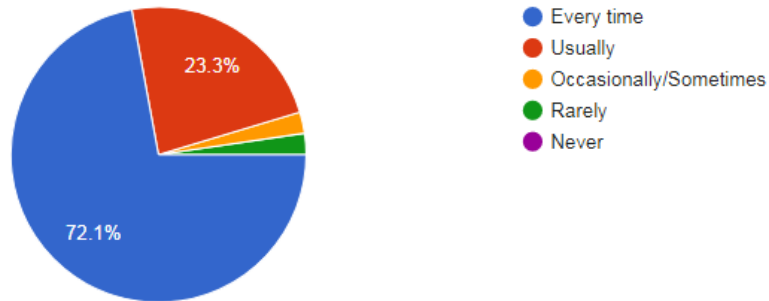
- Every time
- Usually
- Occasionally/Sometimes
- Rarely
- Never

23.3%

72.1%

The institute takes active interest in promoting internship, student exchange, field visit opportunities for students.

43 responses
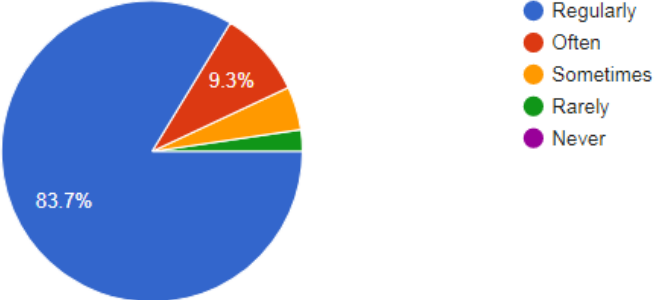
- Regularly
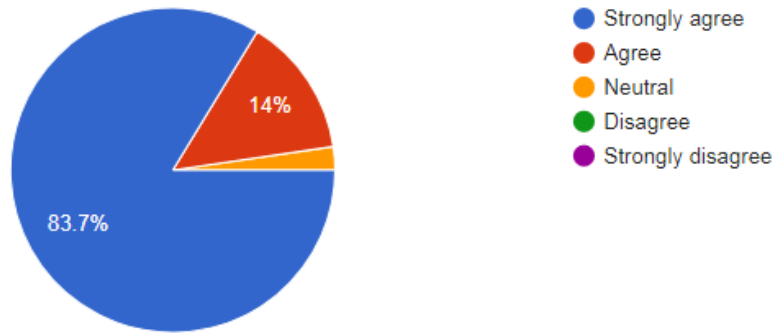- Often
- Sometimes
- Rarely
- Never

9.3%

83.7%

The teaching and mentoring process in your institution facilitates you in cognitive, social and emotional growth.

43 responses

- Significantly
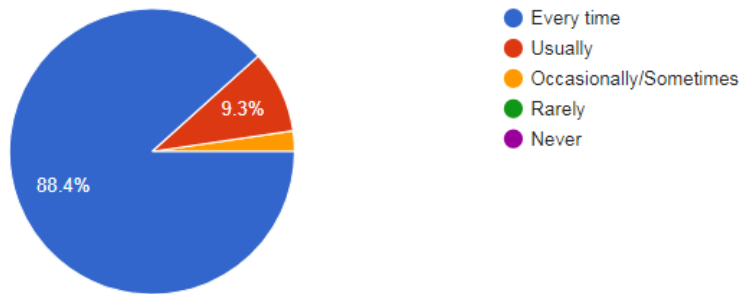- Very well
- Moderately
- Marginally
- Not at all

20.9%

74.4%
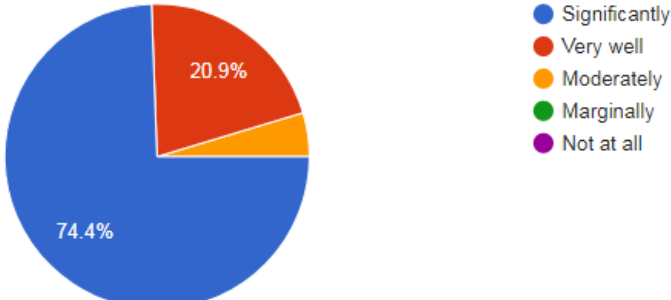
The institution provides multiple opportunities to learn and grow.

43 responses

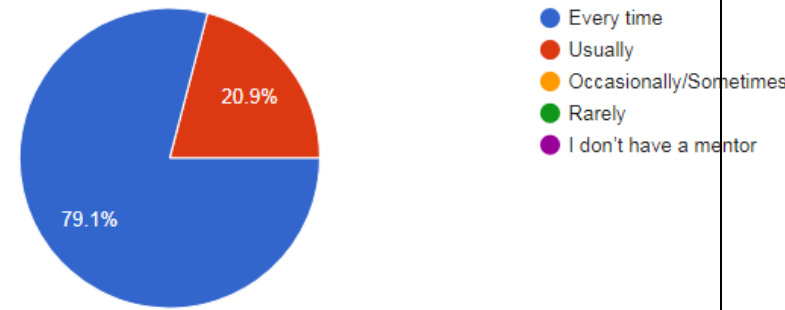- ● Strongly agree
- ● Agree
- ● Neutral
- ● Disagree
- ● Strongly disagree

14%

83.7%

Teachers inform you about your expected competencies, course outcomes and programme outcomes.

43 responses

- ● Every time
- ● Usually
- ● Occasionally/Sometimes
- ● Rarely
- ● Never

9.3%

88.4%

Your mentor does a necessary follow-up with an assigned task to you.

43 responses

- ● Every time
- ● Usually
- ● Occasionally/Sometimes
- ● Rarely
- ● I don't have a mentor

20.9%

79.1%

The teachers illustrate the concepts through examples and applications.

43 responses
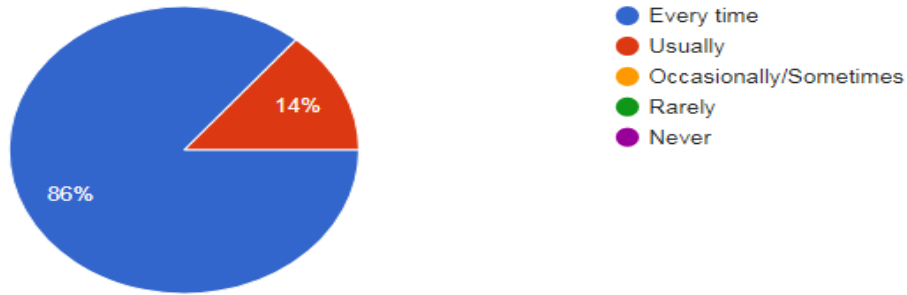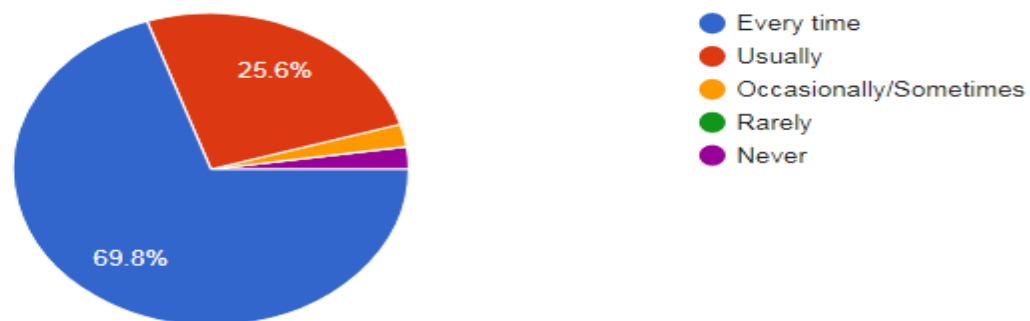
- Every time
- Usually
- Occasionally/Sometimes
- Rarely
- Never

14%

86%

The teachers identify your strengths and encourage you with providing right level of challenges.

43 responses

- Fully
- Reasonably
- Partially
- Slightly
- Unable to

20.9%

74.4%
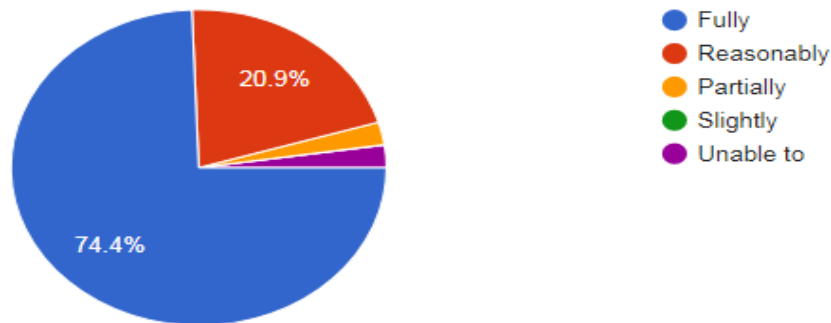
Teachers are able to identify your weaknesses and help you to overcome them.

43 responses

- Every time
- Usually
- Occasionally/Sometimes
- Rarely
- Never

25.6%

69.8%

The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.

43 responses
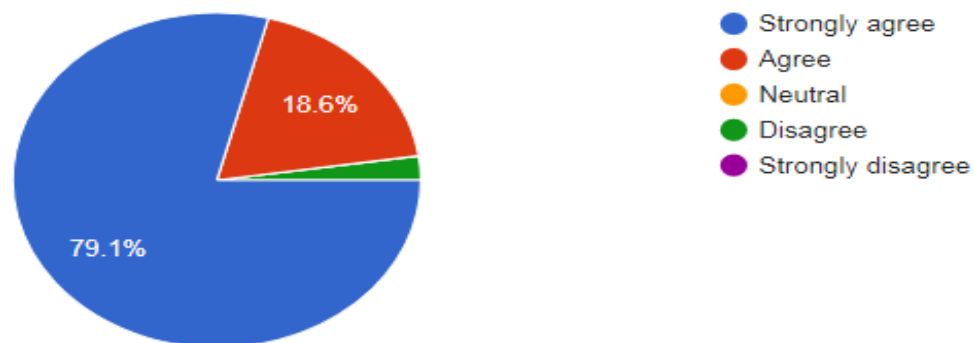
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

18.6%

79.1%

The institute/ teachers use student centric methods, such as experiential learning, participative learning and problem solving methodologies for enhancing learning experiences.

43 responses

- To a great extent
- Moderate
- Some what
- Very little
- Not at all

20.9%

76.7%
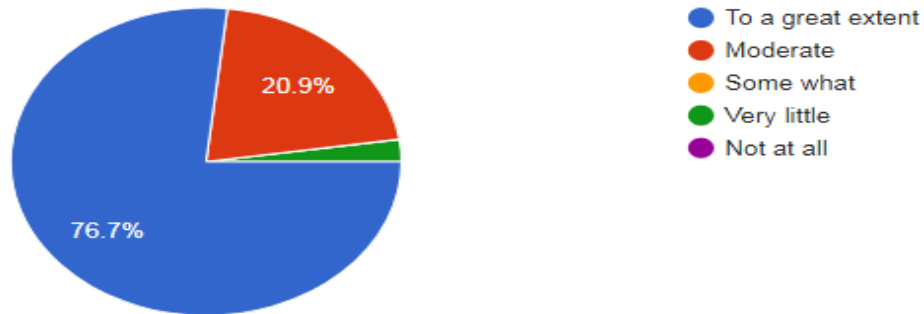
Teachers encourage you to participate in extracurricular activities.

43 responses
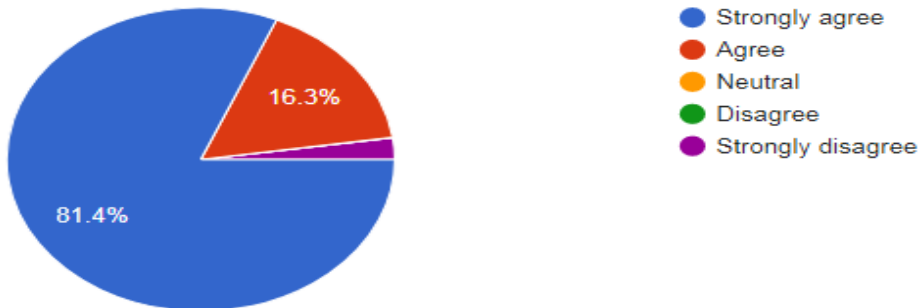
- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

16.3%

81.4%

Efforts are made by the institute/ teachers to inculcate soft skills, life skills and employability skills to make you ready for the world of work.

43 responses
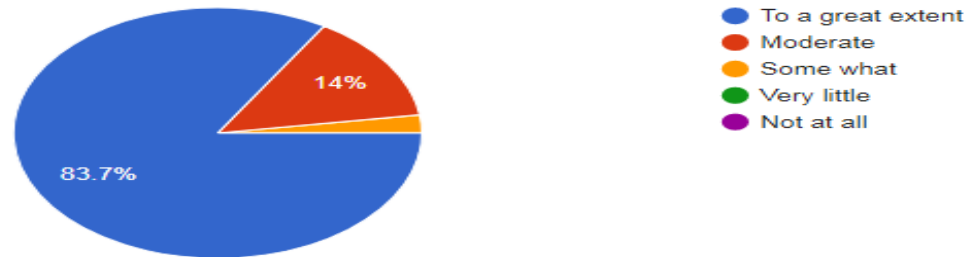
- To a great extent
- Moderate
- Some what
- Very little
- Not at all

14%

83.7%

What percentage of teachers use ICT tools such as LCD projector, Multimedia, etc. while teaching.

43 responses

- Above 90%
- 70 — 89%
- 50 — 69%
- 30 — 49%
- Below 29%

14%

86%

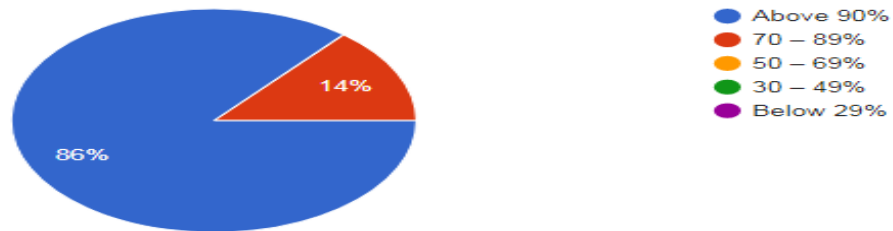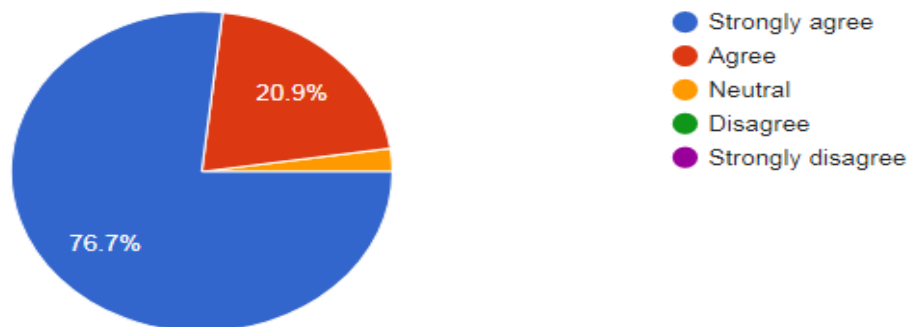## The overall quality of teaching-learning process in your institute is very good

43 responses

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

76.7%

20.9%

Give three observation / suggestions to improve the overall teaching — learning experience in your department/institution.

9 responses

.

Everything taught By faculty was very good
I would like to suggest
more Example and more problem solving to be given .
Initiate Fun Learning and Teaching sessions which are very interactive .

More projects compitition required and presentations to improve spoken English.

Need placement activities

Explaining, practical examples, how concepts actually work in real life

More industry experience, opportunity to peer learn, more dependency on digital

More workshop.
More hands on session.

CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

3.1 Promotion of Research and Facilities

3.1.1 The institution provides seed money to its teachers for research,

Yes.......... No. ....   if yes give details

Name of the teacher getting seed money	The amount of seed money	Year of receiving grant	Duration of the grant
Dr. S.R Biradar and Prof. V.K Parvati	50,000	2023	2 years
Dr. Vandana S. Bhat	30,000	2023	2 years

3.1.2 Teachers awarded National/International fellowship for advanced studies/ research during the year

	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National	NO	NO	NO	NO
International	NO	NO	NO	NO

3.2 Resource Mobilization for Research

3.2.1 Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the year
Major projects	NIL	NIL	NIL	NIL
Minor Projects	NIL	NIL	NIL	NIL
Interdisciplinary Projects	NIL	NIL	NIL	NIL
Industry sponsored Projects	NIL	NIL	NIL	NIL
Projects sponsored by the University/ College	NIL	NIL	NIL	NIL

Students Research Projects *(other than compulsory by the College)*	NIL	NIL	NIL	NIL
International Projects	NIL	NIL	NIL	NIL
Any other(Specify)	NIL	NIL	NIL	NIL
Total				

3.2.2 Number of ongoing research projects per teacher funded by government and non-government agencies during the years

NIL

3.3 Innovation Ecosystem

3.3.1 Workshops/Seminars Conducted on Intellectual Property Rights (**IPR**) and Industry-Academia Innovative practices during the year

Title of Workshop/Seminar	Name of the Dept.	Date(s)
NIL		

3.3.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
NIL				

3.3.3 No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Centre	Name	Sponsored by
NIL		

Name of the Start-up	Nature of Start-up	Date of commencement
NIL		

3.4 Research Publications and Awards

3.4.1 Ph. Ds awarded during the year(2022)

Name of the Department	No. of Ph. Ds Awarded
Information Science and Engineering	**02**

3.4.2 Research Publications in the Journals notified on UGC website during the year

	Department	No. of Publication	Average Impact Factor, if any
National			
International	ISE	07	

3.4.3 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher durin the year

Department	No. of publication
ISE	01

3.4.4 Patents published/awarded during the year

Patent Details	Patent status **Published/ Filed**	Patent Number	Date of Award
IOT,WSN and AI Based Real Time Traffic Monitoring using Spherical grid Routing	Published	2022241004201 A	

3.4.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation

Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
			July-22	9	SDM College of Engineering and Technology	1

3.4.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the paper	Name of the author	Title of the journal	Year of publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication

Deep learning Based Model For Table Detection Contenet and Lsyout Analysis in Compressed Document Images-A Comprehensive Approach	Dr. Jagadeesh Pujari	Journal of Theoretical and Applied Information Technology	July- 22	9	1	SDM College of Engineering and Technology

3.4.7 Faculty participation in Seminars/Conferences and Symposia during the year :

No. of Faculty	International level	National level	State level	Local level
Attended Seminars/ Workshops	Nil	Nil	Nil	Nil
Presented papers				
Resource Persons				

3.5 Consultancy

3.5.1 Revenue generated from Consultancy during the year

Name of the Consultant(s) department	Name of Consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
Nil			

3.5.2 Revenue generated from Corporate Training by the institution during the year

Name of the Consultant(s) & Department	Title of the Programme	Agency seeking training	Revenue generated (amount in rupees)	Number of trainees
Nil				

3.6 Extension Activities

3.6.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers **co-ordinated** in such activities	Number of students participated in such activities
NIL			

3.6.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited
NIL			

3.6.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers **co-ordinated** such activities	Number of students participated in such activities
NIL				

3.7 Collaborations   -

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of financial support	Duration
NIL			

3.7.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration **(From-To)**	Participant
Nil				

3.7.3 MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the

Organisation	Date of MoU signed	Purpose and Activities	Number of **students/teachers participated under MoUs**
NIL			

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
1700000/- (2021-22)	1405370/- (2021-22)
910000/- (2022-23)	Not Utilized (2022-23)

4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	895.7 Sq.mtr	
Class rooms	197.4 Sq.mtr	
Laboratories	599.6 Sq.mtr	
Seminar Halls	98.7 Sq.mtr	
Classrooms with LCD facilities	Yes (03)	
Classrooms with Wi-Fi/ LAN	Yes	
Seminar halls with ICT facilities	--	
Video Centre	--	
No. of important equipments purchased ($\geq$ 1-0 lakh) during the current year.	02	
Value of the equipment purchased during the year (Rs. in Lakhs)	1,40,5370/-	
Others	--	

4.2 Library as a Learning Resource

4.2.1 Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
-			

4.2.1 Library Services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	47532	13258295	139	77536	47671	13335831
Reference Books	13261	14529048	65	23835	13326	14552883
e-Books	11266	175449705	13469	1052250	24735	176501955
Journals	122	2679071	81	200277	203	2879348
e-Journals	1848	24989798	10445	1052250	12293	26042048
Digital Database	1	0	0	0	1	0
CD & Video	2993	45421	0	0	2993	45421
Library automation	1	60000	0	0	1	60000
Weeding (Hard & Soft)	85	1885	0	0	85	1855
Others (specify)	2026	NA	0	0	2026	NA

4.2.2 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS)

Name of the teacher	Name of the module	Platform on which module is developed	Date of launching e – content
NIL			

4.3 IT Infrastructure

4.3.1 Technology Upgradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available band width (MGBPS)	Others	
Existing	106	05	Yes	-	-	01	01	150 mbps		-
Added	-	-	-	-	-	-	-	-		-
Total	106	05	Yes	-	-	01	01	150 mbps		

4.3.2 B*andwidth available of internet connection in the Institution (Leased line)*

…150… MBPS /GBPS

4.3.3 Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
NIL	

4.4 Maintenance of Campus Infrastructure

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
--	--	26,10,000/-	1,40,5370/-

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities – laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words)
(information to be available in institutional Website)

CRITERION V - STUDENT SUPPORT AND PROGRESSION

5.1 Student Support

5.1.1 Scholarships and Financial Support

	Name /Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	NIL	NIL	NIL
Financial support from other sources			
a) National	SCHOLARSHIPS	76	20,96,724/-
b) International	NIL	NIL	NIL

5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved

5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year VSV

Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
-	-	-	-	-	

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year   **T**

Total grievances received	No. of grievances redressed	Average number of days for grievance redressal
Nil	**Nil**	**Nil**

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus		Off Campus	
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
=127 (2022 BATCH) +73 (2023 BATCH)	=138+84	=138+84	=138+84

5.2.2 Student progression to higher education in percentage during the year   VSV

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2023	01	BE	ISE	Western Michigan University	MS- Data Science

5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL /Civil Services/State Government Services)

Items	No. of Students **selected/ qualifying**	**Registration number/roll number for the exam**
NET	-	-
SET	-	-
SLET	-	-
GATE	-	-
GMAT	-	-
CAT	-	-
GRE	01	1234731
TOFEL	-	-
Civil Services	-	-
State Government Services	-	-
Any Other	ILTS	017638

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
1	National	01

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) VSV ????

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
-	-	-	-	-	-	-

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words) VS

Nil

5.4 Alumni Engagement

5.4.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words): **TAB ?????**

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 the Alumni Association by paying a onetime 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. he Association provides scholarship to poor , meritorious students, runs a blood 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 The individual discussion report and progress in maintained in the student mentorship report book.

5.4.2 No. of registered Alumni: **13500**

5.4.3 Alumni contribution during the year (in Rupees) **: 10 Lakhs**

5.4.4 Meetings/activities organized by Alumni Association **: 04**

CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Curriculum and course schedule is decided by each department as per the needs through the DUGC and BOS.

Each department prepares its own budget and its funds are allotted and approved.

6.1.2 Does the institution have a Management Information System (MIS)?

 Yes/No/Partial:

6.2 Strategy Development and Deployment

6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each)**:**

❖ Curriculum Development
❖ Curriculum Development Our institution is under VTU, Belagav,; it abides by the changes in curriculum as prescribed by the AICTE.
❖ Teaching and Learning

The following are the innovative processes adopted by the institute towards TLP:

- Value Added Courses
- Internships
- Educational projects in related area / topic.
- Content beyond the Syllabus.

- ❖ Pre-commencement Preparations;
  - Departmental Academic Calendar
  - Lecture plan and notes
  - Course Learning Objectives and Course Outcomes
  - Soft copy of the lecture notes.
  - Updating the library with appropriate books as suggested by the faculty
  - Modifying the laboratories to cater for the needs of revised regulation and recent trends
- ❖ Monitoring student's performance through;
  - Internal Assessment I, II & III
  - Re test for improvement and absentees
  - Assignments, group discussions, quiz, seminars and projects
- ❖ Monitoring the teaching process through;
  - Online feedback from students
  - Oral feedback obtained from students in the Class Committee Meeting
- ❖ Academic Audit by peer committee
  - Result analysis Meeting of Internal Assessment and Semester End Examination
- ❖ Addressing issues of individual student;
  - Additional classes for slow learners.
  - Personal guidance to the needy students
  - Issues related to the course are resolved by mentoring the students.
  - Addition periods are allocated in the time table based on the criticality of subject.
  - Symposium and Workshops are conducted.
  - Lectures are conducted on prerequisite topics.
- ❖ Addressing issues of faculty;
  - Mentoring and guidance given to the faculty for a course handled earlier by senior faculty members.
- ❖ Inputs from IQAC, and various feedback mechanisms are considered for improving the Teaching-Learning.
- ❖ Examination and Evaluation
  - The Institute designed the answer script for internal assessment same as that of the university answer script. The attainment of COs pertaining to the internal assessment can be viewed from the answer script.
  - Internal Assessment Question Paper with Bloom's Taxonomy (knowledge level) indication.
  - Two Internal tests are conducted per semester. Improvement test is conducted for students to motivate

- Additional coaching is provided for the slow learners.
- Model question bank, GATE questions with answers, Challenging Question papers are prepared by the faculty and distributed to the students.
- Timely assessment of tests is done and the result is displayed.
- Theory examination and practical/oral examinations are conducted.
- The faculty contributes in the examination work like- question paper setting, invigilation of theory examination, evaluation of answer scripts, internal examiner and subject experts & assessment of theory examinations' answer books.

❖ Research and Development
- Research and Development Cell is formed to promote Research and Development in the department .
- The cell includes faculty, academicians and researchers. The cell meets once in a fortnight and delivers guidelines for quality improvement in R & D.
- The department motivates the faculty to undertake research projects in AICTE, DRDO,DST, TNSCST, Young Scientist Scheme etc.
- Well-equipped Research Labs are developed for the funded projects to improve quality of the research.
- The department motivates the faculty and students to file patents for the research work.
- The department motivates the faculty to undertake research activities through doctoral Programs. It motivates them to publish research
- papers.
- Faculty members are encouraged to attend and present papers in conferences at abroad and financial assistance are provided.
- The department motivates the students to undertake complex engineering projects as a part of curriculum as well as for participating in external pr
- Students' project exhibition is organized every year and best projects are awarded.
- Potential research collaborators are identified and MoUs are established.

❖ Library, ICT and Physical Infrastructure / Instrumentation
❖ ICT
- The university regularly increases ICT facilities for classrooms, tutorial rooms, seminar halls and Laboratories.
- The university regularly enhances the Internet connectivity facility.
- The university regularly enhances the power backup facility for laboratories.
- The university has ERPSYSTEM for resource access.
❖ Library
- Central Library gives guidelines for improving the quality of library resource.
- IEEE institutional login enables the faculty and students for their academic and research works.
- Suggestions from students' committee for Library are used for improvement in quality of library resource.
- New books/journals are purchased every year to update the library.

- • Each Department has own Library facility that includes text books, project and research papers published.
- ❖ Physical Infrastructure
- • Physical infrastructure is increased to meet the demand of recent trends, new regulation and increase of intake.
- ❖ Human Resource Management
- • The recruitment procedures, service rules and promotion policies are made transparent and employees are benefitted with CL, EL, vacation, ML an
- • Employee's salary will be credited in the bank account directly.
- • Pay slips are issued to the employees every month.
- • For professional development of the human resource, the institute delegates the faculty and staff to undergo development programs outside the inst resources and financial assistance to undertake such development programs.
- • The university organizes HR development Programmes for faculty, staff and students for skill up gradation and training.
- • Faculty and students are felicitated for their academic achievements.
- • The College uses performance evaluation methods for the staff members. At the end of every year, performance evaluation of the staff is done by l
- • This is used for deciding promotions and increments. Self-performance evaluation is done by the faculty and reports are submitted to the Head of D
- ❖ Industry Interaction / Collaboration
- • MoUs signed with companies.
- • Industrial visits to companies are organized to understand the real time scenario.
- • Infosys Campus Connect programme to enrich faculty and students in the market trend.
- • Orientation programmes and guest lectures are conducted for the students by the Industry experts.
- • Alumni placed in the reputed industries are invited for dialogue about industrial trend and need with the students.
- • Entrepreneurship orientation activities are organized for the students.
- ❖ Admission of Students
- • Admission of the students is through counselling system from KCET/COMDEK.
- • The institute maintains this repute by adopting following strategies:
  - Maintaining good results in University examinations by means of recent trends of teaching learning, providing quality infrastructure and facili training and placement track records.
  - Encouraging extra-curricular activities like sports and other competitions.
- ❖ Maintaining Ragging-free environment

6.2.2 : Implementation of e-governance in areas of operations:

- ❖ Planning and Development ,
- ❖ Administration
- ❖ Finance and Accounts

- ❖ Student Admission and Support
- ❖ Examination

6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
-	-	Nil	-	-

6.3.2 Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the ye

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
-	-	-	-	-	-

6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)
Nil	Nil	-

6.3.4   Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime

6.3.5 Welfare schemes for

Teaching - Not Applicable	
Non teaching - Not Applicable	
Students - Not Applicable	

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

(with in 100 words each)

6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
Nil	**Nil**	**-**

6.4.2 Total corpus fund generated   Nil

6.5 Internal Quality Assurance System

6.5.1 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency/ Academic Staff	Yes/No	Authority
Academic	Yes	IIT- Dharwad	May 2022	
Administrative				

6.5.2 Activities and support from the Parent – Teacher Association (at least three)

PARENTS' MEET 2022 (JULY'22 TO JUNE'23)

- Parents Teachers meeting in the department and one to one counseling session for academic and non academic concerns. Feedback from the parents' toward the overall opinion of the Dept. for faculty, infrastructure, laboratory, internet etc facilities to students.

6.5.3 Development programmes for support staff (at least three) : NIL

6.5.4 Post Accreditation initiative(s) (mention at least three)

6.5.5

a. Submission of Data for AISHE portal   : (Yes /No)

b. Participation in NIRF   : (Yes /No) Yes

c. ISO Certification   : (Yes /No) NO

d. NBA or any other quality audit   : (Yes /No) Yes

6.5.6 Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to------)	Number of participants
-	-	-	-	-

CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

7.1 - Institutional Values and Social Responsibilities

7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period **(from-to)**	Participants	
		Female	Male
Nil			

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the College met by the renewable energy sources

7.1.3 Differently abled (Divyangjan) friendliness

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	-	
Provision for lift	-	
Ramp/ Rails	-	
Braille Software/facilities	-	
Rest Rooms	-	
Scribes for examination	-	
Special skill development for differently abled students	-	
Any other similar facility	-	

7.1.4 Inclusion and Situatedness

Enlist most important initiatives taken to address locational advantages and disadvantages during the year

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
-	-	-	-	-	-	-

7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
-	-	-

7.1.6 Activities conducted for promotion of universal Values and Ethics-

Activity	Duration (from-------to-------)	Number of participants

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five) -

SUMMARY OF NOTEWORTHY OUTCOMES

Year 2022-23
[July to June]

Department of:

Sl. No	Outcome	Baseline 2022 Jan-Dec	Current 2022-23 Jan-June 2022 July22- June23
1	Indexed Journal Publications	2	2+5=7
2	Other – Paper/article Publications	10	10+8=18
3	Book Publications	01	-
4	Book Chapter Publications	01	-
5	IPR Publications	01	-
6	IPR Granted	NIL	-
7	No. of Funded Projects sanctioned	Nil	Nil
8	Total Funds Received.	Nil	Nil
9	Total Projects- Ongoing	Nil	Nil
10	% Of Placement	91.7	70
11	No. of Offers	138	80
12	Highest Package L/A	12.34lakhs	12.5

13	Lowest Package L/A	2.4	**3**
14	% - of Students Graduated	**69**	**-**
15	No. of startups	**NIL**	**NIL**
16	Consultancy **Total Number:** **IRG generated:**	**NIL**	**NIL**
17	No. of Conferences Conducted	**Nil**	**Nil**
18	No. of Workshops/ Seminar/ conducted	**Nil**	**Nil**
19	No. of Workshops/ Seminar/ conferences attended (Faculty + Students= Total)	**01**	**01+01= 2**
20	No. of awards / recognitions received (Faculty + Students + dept/Institution= Total)	**-**	**01**
21	No. of New Infrastructure / Programs/space/laboratories created	**NIL**	**NIL**
22	No. of networking/society connect programs conducted.	**NIL**	**NIL**
23	No. of learning materials created and published	**NIL**	**NIL**
24	No. of new process/procedures added.	**-**	**-**

25	No. of products/ Applications created	**NIL**	**NIL**
26	Budget Sanctioned In Lakhs of rupees	**Apr-2021 to March 2022** **18,17,000=00**	**Apr-2022 to March 2023** **10,37,000=00**
27	Total Expenditure In Lakhs of rupees	**Apr-2021 to March 2022** **17,96,704=00**	**Apr-2022 to March 2023** **94,575=00**
28	Any other note-worthy events/activities	**-**	**-**

Note: Details of all these claims mentioned in the above table is to be given in the next section of this report under the title "**strategic plan implementation report**" along with evidences.

Best Practice

Title: **Case study**
Author(s):Dr. Anita Dixit
Scope:
Objectives:
1. To estimate the data usage by an individual
2. To study the various types of storage technologies used in different organization
3. To summarize the observation made during the visit to organization and prepare a report and present it orally

Methodology / Procedure:
1. **Each student is asked to record his/her data usage in mobile as well as in Laptop/Desktop for one week. They are asked to calculate total, average, maximum and minimum data usage. This assignment helps the student to know about the data generation per day. 30% of the CTA is allocated to this assignment**
2. **A group comprising of 3-4 members are asked to visit the organization of their choice such as, Insurance Company, AIR, BSNL, Passport office, LIC, Railways, RUDSET, etc.**
3. **Each group is expected to**
    a. **Study about the kind and amount of data generated every day.**
    b. **Note down the means of storage devices and technologies.**
    c. **Backup methods used to recover the data.**
    d. **Security measures used to protect the data.**
4. **At the end of their case study, they have to prepare a report of their observation and give a oral presentation of their work through PowerPoint slides**
5. **70% of the CTA is allocated to this case study**

Outcomes:

1. All 79 students were divided in a group comprising of 3-4 members visited the above mentioned organization , presented their work orally as well as submitted the written report of the same.

Cost: NA

Conclusion / Impact Analysis: This case study will help the students to have an exposure to the real world and study about the data generation, data dissemination, data storage, data protection in the real scenario. Also they study about the different storage devices and technology.

1. Introducing **trending programs** in ISE related domain.

2. Establishing **Recording studio** to create in-house high quality learning materials for students.

3. Greater **autonomy for faculty** members suggested in NEP-2020.

4. Improved **Industry readiness** of students.

5. Improving **National level ranking** (NIRF)

6. Building **data center** for quick access and enhancing efficiency of the system.

7. Improved and wider scope of **MIS operations** and **IT support**

8. To be **ready for NEP-2020:** Credit transfers/multi entry and multi exit as per directions of Govt.

   of Karnataka / VTU

Name & Signature of the Coordinator-IQAC   *Name &   Signature of the   Chairperson/Head*

Dr. Jagadeesh D. Pujari
HOD, ISE

Date: 03-07-2023

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Note Worthy Achievements
SDM College of Engineering & Technology – Dharwad
Department of Information Science & Engineering
(Jan 2022- June 2023)

1. Prof V.K.Parvati has been awarded as " Noteable Educationist of the year " under the Education Leaders award from WBR CORP- UK limited at oxford townhall Oxford UK on May 9th 2023.

2.Department has been awarded the " Most Promising Student Branch Chapter " under the banner ship of IEEE - Information theory Society Bangalore Chapter during the year 11th Jan 2022.-Dept.Co-ordinator Dr. Rajashekarappa

3.Two final year projects have been approved by KSCST for funding under the guideship of Dt. J. D. Pujari and Mrs. Varsha Jadhav during the year 2023.

4.Dr. S. S. Joshi, Dr. Leena I. Sakri and Dr. Deepa B. have been awarded Ph.D from VTU, Belagavi during the academic year 2022-202.

5.Dr Vandana S. Bhat, Dr. S.R.Biradar and Prof. V.K. Parvati have received Research Seed Money amounting to Rs 30,000 and 50,000 respectively from SDMCET- Dharwad.

6.Dr. J.D.Pujari, Prof. V.K. Parvati , Dr. S.R. Biradar and Mr. S.S. Joshi has published patent titled "IOT, WSN and AI based real time traffic Monitoring using Spherical Grid Routing during the year Feb. 4th 2022.

7.Mrs. Priya N has been awarded Ph. D from VTU, Belagavi under the guideship of Dr.Vandana S. Bhat from ISE R& D Center during the year 2022.

8.Mrs. Leena I Sakri been awarded Ph. D from VTU, Belagavi under the guideship of Dr.J.D.Pujari from ISE R& D Center during the year 2023.

9.Dr Anita Dixit has Published a paper online titled " Securing electronic health records using block chain technology for IoT in health care domain" in the Journal - Soft Computing June 2023, DOI:10.1007/s00500-023-08489-y

SDM College of Engineering and Technology
Dhavalagiri, Dharwad-580002

Department of Information Science and Engineering

[2022-23]

1st July 2022 to 30th June 2023

Date of Publication: 1st July 2023

Reference: 5 Year Plan   2022-23 to 2026-27

INTRODUCTION:

The purpose of this document is to record the progress of the Department based on their stated strategic plan for the year – **2022-23** (starting from 1st July and ending by 30th June).

In charge person indicted against each perspective/ Key areas have participated in the audit process and the records maintained by them are seen thoroughly by the audit team.

Audit Team:

1. **Chairman:** Principal, SDMCET, Dharwad

2. **Members:**

a) Dean Academic Program

b) Dean R & D

c) IQAC Coordinator – Member Secretary

Institutional Vision and Mission:

VISION:

To develop competent professionals with human values.

MISSION:

M1. To have contextually relevant Curricula.

M2. To promote effective Teaching Learning Practices supported by Modern Educational Tools and Techniques.

M3. To enhance Research Culture.

M4. To involve the Industrial Expertise for connecting Classroom contents to real-life   situations.

M5. To inculcate Ethics and soft-skills leading to overall personality development.

Additional Focus:

F1: Curriculum relevance- **M1**

F2: Academic/ Exam results- **M1, M2, M4**

F3: Research papers, Sponsored Projects, Root cause analysis for rejected papers and filling gap.- **M3**

F4: Value additions: Teaching, Soft skills, Use of ICT / Presentation, Discussion Groups

    (Communication skills)- **M2 & M5**

F5: Community oriented services- **M3 & M5**

F6: Placement.

F7: Accreditation and Ranking: NBA, NAAC and NIRF - **M1 to M5 & Establishment of strong IQAC to support quality checks and Institutional repository.**

F8: National Educational Policy- NEP-2020 – **M1 to M5. (Experiential Learning)**

Contact Details:

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Focus [1]	Perspective/ Key Areas [2]	Status as on 30th June 2023 - Year 2022-23			
		PLANNING [3]	Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
F1 / M1 **Curriculum Relevance**	**Re-establishing the relevance of critical thinking in Course outcomes and raising learning levels focusing on Experiential learning of NEP-2020.**	**Activity-1:** **BOS Meet[resolutions w.e.f 2022-23]** **Outcome/Target:** 1. Enhance essential learning and in developing skills such as collaboration, self-initiative, teamwork. 2. It empowers students with ideas, applications and problem solving skills. 3. Case studies in the domain of health care and agriculture. 4 .NEP implementation as multi-disciplinary activities **In-charge Faculty:** **Dr. S. R. Biradar**	• BOS meet was conducted on **11-08-2022.** • BOS report in full format is maintained and documented. • Discussion was carried out in the DUGC meeting and courses are selected to enhance essential learning and critical thinking. • Selected Finite Automata and Formal Language (FAFL) and Software Engineering (SE) courses to experiment. • Software Engineering course will be taught using hands-on learning i.e. project (SE) based approach. FAFL course we will be taught using case study base approach. • Software Engineering: 69 Students (Each batch contains 3-5 students) have completed projects. Total 4 Teams shortlisted for boot camp at Deshpande Foundation, Hubballi. • Introduced ability enhancement courses such as Financial Market as a part of ability enhancement course.		
		Activity-2: **[BOS meet resolutions w.e.f**	• In Progress		

		2023-24]		
	Re-establishing the relevance of Program Articulation Matrix-PAM	**Activity-1:** BOS meet **Outcome/Target:** 1. Implementation of mapping of CO-PO. 2. Projects to be implemented on environment and society and environment based. **In-charge Faculty:** Dr. Anita Dixit	• As the syllabus was revised during Academic Year 2020-21 all the COs were mapped to Pos in the discussion held in DUGC meeting. Hence PAM was improved. • The PAM matrix for the year 2019-20 is documented. • The PAM matrix for the year 2020-21 is documented. • Projects based on environment and society was implemented. • Report enclosed.		
	Conducting internal and External Audits	**Activity-1:** Internal Audit- [Academic year 2021-22 proceedings] **Outcome/Target:** 1. To verify the last year outcomes and progress. 2. External audit process. **In-charge Faculty:** Dr. Vandana S. Bhat	1. Both Internal and External Audit are completed and documented. 2. Internal Audit was conducted on 23/05/2022 by Department IQAC team. Verified and quantified by the IQAC and HOD. 3. External Audit was conducted on 28/05/2022 by an expert panel Dr. Tamal Das, Professor, IIT – Dharwad. The extract of his remarks are specified: • Department has well equipped infrastructure and experienced faculty members to offer state-of-the-art education in the area of Computer Science & Engineering. • The curriculum development is well aligned with OBE principles and is kept update with regular inputs from external subject experts and industry members. He has appreciated the way it was presented. He also appreciated the research work carried out at the department.		
		Activity-2: Internal Audit-	Activity-2 : Pending		

		[Academic year 2022-23 proceedings] Outcome/Target: 1. To verify the last year outcomes and progress. 2. External audit process In-charge Faculty: Dr. Anita Dixit			

Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
F2 **M1, M2, M4** **Exam Results**	Bridge Courses For all and specific to Slow learners & Learning Extensions	**Activity-1:** **Bridge Course** **Advanced Concepts in C programming.** **Outcome/Target:** Enhancement of Programming Skill sets. **In-charge Faculty:** **Dr. J. D. Pujari**	• Bridge course on Advanced Concepts in C programming was conducted for 3rd semester before the regular classes commenced. • Total participants are 69 and for a duration of 25 hours.		
	Tutorials for complex courses	**Activity-1:** **Slow learners classes for below the set target** **Outcome/Target:** 1. Classes conducted report and the change in observation improved. **In-charge Faculty:** **Ms. Arati Nayak**	• The slow learners are identified for the courses who have scored below the set target (below 8 marks/out of 20) in the 1st Internal Assessment as per the DUGC. • The Classes were conducted for identified slow learners. • Conduction of classes and improvement observed are maintained with the respective course instructors and the same is verified by IQAC. • A few samples have been enclosed with the report.		
	Strengthening Experiential Learning component	**Activity-1:** **Learning Extensions**	• Hands on Session were conducted in two slots for IV semester students. • First slot on was on 19th and 20th May 2022. • Second slot was conducted on 26th		

		Practice session on lex and yacc	and 27th May 2022.		
			• It enhances the working knowledge of the tools of the compiler.		
		Outcome/Target:	• Attainment is achieved at substantial level.		
		1. List of Programs.			
		2. Practice session conducted.			
		In-charge Faculty:			
		Dr. Pushpalatha			
	Industry Connectivity for Class room	**Activity-1:** **Identification of the courses for Tutorial classes and its implementation.** **Outcome/Target:** 1. Time table framed. 2. Classes conducted report. 3. Strengthening the problem solving skills. **In-charge Faculty: Dr. Pushpalatha N.**	• The courses such as FAFL are identified in the DUGC for conducting tutorial classes. • Time table is implemented for conducting tutorial classes by mentioning the scheme of the tutorial for the identified course in that semester. • The tutorial classes were conducted for subjects identified in the curriculum for tutorial classes as per the scheme designed in the BOS. • Course instructor maintains the report and is verified and quantified by Department IQAC for the same.		
		Activity-2: **Project-based learning -Project implementation using Micro-controller- IV Semester.** **Outcome/Target:** List of projects implementation. **In-charge Faculty:** **Prof. Deepa Bendigeri** **Prof. S.S.Joshi**	• Identified that Project based implementation using Microcontroller is required to strengthen experimental learning component for IV semester students in the DUGC meeting. • Conducted for IV semester students as a part of the curriculum - project implementation were based on ARM MicroController (LPC2148) as a part of project based learning.. • 13 projects were listed for the entire class. Each team comprises of 5-6 students. List of projects is enclosed.		

	Others, if any		NIL	

Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	Status as on 30th June 2023 - Year 2022-23		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
F3 M3 Research	Quality assessment of all research proposals	**Activity-1:** Research Faculty committee will be formed to check the quality of the submissions **Outcome/Target:** 1.Quality of Research proposal submission 2. Quality of Paper submissions **In-charge Faculty:** Dr. S.R. Biradar, Dr. Vandana S. Bhat Dr. Rajshekarappa	• Proposals submitted (01) to VGST were reviewed by a team of experts and action based on the observations were corrected. It is submitted to VGST and results waiting. Reports are documented. • Title : Innovation Laboratory (Artificial Intelligence and Machine Learning) • Proposals submitted to VGST and results awaiting • Date of submission: VGST Ref. No VRN/002019/21-22- Feb 28th 2022.		
	IPR: Copyrights and Patents **Paper** Publications **Funded Projects**	**Activity-1:** Research Faculty committee will be formed to check copyright, patent, paper submissions **Outcome/Target:** 1. Paper Submission 2. Book chapters 3. Proposals (FDP)	**Patent** • Title of the invention :IOT, WSN AND AL BASED REAL TIME TRAFFIC MONITORING USING SPHERICAL GRID ROUTING • Date of filing of Application :25/01/2022 • Application No.- 202241004201 A • Published a patent. Details Enclosed **Research Publications : Papers published (25)** • A meeting was convened in the department and it was decided that each faculty member must publish at least one paper to their credit. **SCOPUS : 05 , SCIE & WOS – 02, UGC- 00,**		

				NON-INDEXED - 18		
		In-charge Faculty: Dr. Anita Dr. Rajshekarappa The following faculty have planned to publish the Journal in SCOPUS JDP,SRB,VSB,RMB,LIS,PSN,VSJ,DB,AD,AN,SSJ		- Dr.J.D.Pujari / Dr,Vandana S Bhat – SCOPUS 02 - Dr.J.D.Pujari / Dr.Deepa Bendigeri – SCOPUS 02 - Dr.S.R..Biradar/Dr S S Joshi – SCOPUS 01 - Dr.Rajashekarappa – non-indexed 03 - Dr.Leena S. – non-indexed -01 - Dr.Pushpalata N. – non indexed – 2 - Mrs.Varsha J. – non indexed – 2 - Dr.Anita Dixit-SCI-01,Non-indexed-03 - Ms.Arati N. – non indexed -01 Refer **Annexure facultypublications** **https://drive.google.com/file/d/1M3T6q5mpb9ef5X** **HjMG0m6cQ5jWe7B1oz/view?usp=drive_link** **FDP – 01** - Proposals on FDP titled "Recent Trends on Cyber Security and Block Chain Applications", submitted (01) to VGST on 23rd Feb 2022 and were reviewed by a team of experts and action based on the observations were corrected. It is submitted to VGST and results awaiting.		
	Others- if any			- Final year students (2022) submitted a project proposal titled "Gender and age detection using deep learning approach for preventing unauthorized access". - Under the guidance of Dr.Vandana S. Bhat to KSCST. - Details enclosed.		

Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	Status as on 30th June 2023 - Year 2022-23	Reasons for any deviation [5]	Further action plan, if applicable [6]
			Outcomes achieved [4]		
F4 **M2 & M5** **Value additions**	**Learning for Placement**	**Activity-1:** **Aptitude Training during-2021-22** **Outcome/Target:** • Knowledge on numerical problem solving, and reasoning. **In-charge Faculty:** Dr. Rajashekarappa	• Aptitude training, in Collaboration with CIII, is conducted for 6th semester students. • The list and details in the form of booklet are maintained in the department. • The summary list is enclosed here with report.		
		Activity-2: **Aptitude Training during 2022-23** **Outcome/Target:** • Knowledge on numerical problem solving, and reasoning. **In-charge Faculty:** Dr. Sachidanand Joshi	• Training on soft skill was conducted for VI Semester students by college under CIII from 15th to 18th May 2023 and test was conducted to evaluate for the 1 credit on 18th May 2023. • Feedback is collected.		
		Activity-3: **Mock Interview** **Outcome/Target:**	• A Mock Interview was organized for third year students of Department of Information Science and Engineering, by the placed students of final year from 29th November to 1st December 2022, providing a thorough simulation of a real employment interview. • After every interview, the participants were given feedback on		

		• To help them get a better understanding of the procedures of recruitment process. **In-charge Faculty:** **Ms. Arati Nayak**	their Resume and interviewing skills including their confidence, presentation a.nd pertaining to projects. • The detailed report is documented and summary sheet enclosed.		
	Soft Skills	**Activity-1:** **Technical skills- Query writing.** **Outcome/Target:** To write queries that help the students for placement **In-charge Faculty:** Mrs. Leena I. S	• It was decided in the DUGC meeting that students should be trained on technical skills. • The main objective behind learning to write queries was to help the students prepare for placement. • It is Project Based Learning in Database Management Systems where queries are given to solve. • Students of the 5th semester at ISE are focused more on query writing and are given at least 150 queries from basic to complex. • List of lab assignment is enclosed.		
	Discussion Groups	**Activity-1:** **Included in curriculum for 1 credit course** **Outcome/Target:** 1.Training will be conducted 2.Test will be conducted **In-charge Faculty:** Dr. Rajashekarappa.	• Training for soft skill was conducted for V- semester students by college and test was conducted to evaluate for the 1 credit on 16th -17th Dec. 2022. • It is documents and maintained in the department.		
		Activity-1: **Mock interview including training on Group discussion** **Outcome/Target:** Communication Skill	• Training on Group discussion, as a part of Mock interview process was conducted. • 7th semester students conducted training for 5th semester students and conducted GD for them.		

		In-charge Faculty: Ms. Arati Nayak			
	English Communication Skills	**Activity-1:** **Training on Group discussion.** **Outcome/Target:** Better understanding of the recruitment process. **In-charge Faculty:** Ms. Arati Nayak	• A Mock Interview was organized for third year students of Department of Information Science and Engineering, by the placed students of final year. • The main objective behind arranging Mock Interview was to help them get a better understanding of the procedures of an interview. • The event was conducted in ISE department from 29th November to 1st December 2022, providing a thorough simulation of a real employment interview. • All the students were given a time slot for their interview, and accordingly the Mock Interview took place. • After every interview, the participants were given feedback on their Resume and interviewing skills including their confidence, presentation and pertaining to projects. • The detailed report is documented and summary sheet enclosed.		
	Use of ICT	**Activity-1:** **Training on English communication** **Outcome/Target:** Training will be arranged **In-charge Faculty:** Mr. Tanweer Ahmed B	• English communication was covered in soft skill training conducted by the college from 16th -17th Dec 2022.		
	Others- if any	**Activity-1:** **Massive Open Online Courses (MOOCs)** **Outcome/Target:** 1. Awareness program for Faculty and students. 2. Learning and up skilling 3. Its free or much cheaper than	• MOOC Awareness program will be conducted to encourage more faculty and students across Department and Colleges to take-up MOOC Courses. • Free online courses provide an affordable and flexible way to learn new skills and study new and emerging topics. • Learning from NPTEL, Udacity, Coursera, EDX from top university and industry experts. • www.nptel.ac.in, www.edx.org, www.coursera.org, www.udacity.com • Awareness workshop and organized along with IIT at Madras on 19 July, 2022. • Approximately 100 faculty members benefited from this program.		

			traditional education		
			4. Access to lectures from some of the top instructors and thought leaders of the world. **In-charge Faculty**: Dr. S. R. Biradar		

			Status as on 30th June 2023 - Year 2022-23		
Focus [1]	**Perspective/ Key Areas [2]**	**PLANNING [3]**	**Outcomes achieved [4]**	**Reasons for any deviation [5]**	**Further action plan, if applicable [6]**
F5 Community Oriented Services M3 & M5	Awareness Program	**Activity-1:** **Awareness Program** **Outcome/Target:** To visit nearby villages to bring awareness on health and career opportunity and among women. **In-charge Faculty**: **All faculty of the department) (Ladies)**	• Faculty members from the Department of ISE had been to Ambolli on 25th January, 2023 as resource persons to the event organized by BDSSS (Belagavi Divisional Samaya Seva Samsthe, Dharwad) in association with Caritas, India, New Delhi to give awareness on health and career opportunity among women. Around 30 women participated in the event. • Director of the BDSSS Fr. Peter Ashirwadappa, coordinator Mr. A.B. Pathan and community educator Ms. Shanta B. Kale were also present in the event.	• Status – Could not be conducted due to COVID restrictions. • Initiation is in the process of implementing during the first/second quarter (Q-I/II) in the year 2023.	
		Activity-2: **Awareness Program** **Outcome/Target:** **To visit nearby villages to bring awareness on digital literacy among people**	• Faculty members from the Department of ISE had been to kogilageri village as a part of community service to give awareness on health, secure mobile phone usage and education on 20th April 2023	•	

		In-charge Faculty: **All faculty of the department)**			
	Learning Programs through workshops	**Activity-1:** **Planning to conduct a workshop Computer awareness (MS Office) , Digital literacy** **Outcome/Target:** **1. Computer awareness (MS Office).** 2. **Digital literacy.** **In-charge Faculty:** Dr. Rajashekarappa	• Status – Could not be conducted due to COVID restrictions. It will be done during the first/second quarter (Q-I/II) in the year 2023.		
	Technology Transfer Programs	**Activity-1:** **Outcome/Target:** **In-charge Faculty:**	-		
	Others- if any				

Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	Status as on 30th June 2023 - Year 2022-23		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
F6 Placement	No. of Offers	114	• 114 offers in the department.		
	No. of students getting Placed	67	• 67 students are placed with good package and in the core sectors – • Documented and maintained in the department.		
	pay packages being offered		• Maximum -23.4 Lakhs • Average Pay Package 5 Lakhs		
	MoUs	01	• ALS- Technologies – Bengaluru. • MOU documents are maintained in the department		
	Internship	79	• Documented and maintained in the department.		
	Others- if any	-			

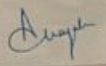| Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	Status as on 30th June 2023 - Year 2022-23		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
F7 Accreditation and Ranking	NBA	**Activity-1:** **NBA preparedness** **Outcome/Target:** 1. Document and data verification for submission. 2. Compliance report submission. **In-charge Faculty:** **Prof. Leena Sakri**	• To conduct a review meeting to discuss NBA compliance. • Documents pertaining to NBA are documented and the data is verified by NBA coordinator. • Compliance report – Uploaded.		
	NAAC	**Activity-1:** **NAAC preparedness** **Outcome/Target:** Document and Data collection for submission **In-charge Faculty:** **Dr. Rajashekarappa**	• Submitted all the data for NAAC.		
	NIRF ranking.	**Activity-1:**	• Review meeting could not be conducted due to COVID'19 • Plan to conduct in Q1/II during the year		

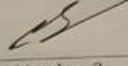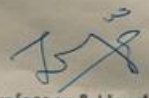|					
	NIRF preparedness **Outcome/Target:** Documents and data collection for submission **In-charge Faculty:** Dr. Pushpalatha N	2023.			
	Others- if any	-	-		

			Status as on 30th June 2023 - Year 2022-23		
Focus **[1]**	**Perspective/** **Key Areas** **[2]**	**PLANNING** **[3]**	**Outcomes achieved** **[4]**	**Reasons for any deviation** **[5]**	**Further action plan, if applicable** **[6]**
Others	**NIL**	**NIL**	**NIL**		

Remarks- by the auditing team.

The progress report mentioned above is presented by the concerned department team, verified for its correctness by the auditing team and approved by the concerned authorities mentioned below.

Year 2022-23	DUGC Member Secretary	IQAC Coordinator	Faculty I/C of Strategic Plan	Head of the Department	Member-3 Audit Team	Member-2 Audit Team	Member-1 Audit Team	PRINCIPAL
	Ms. Arati Nayak	Dr. Vandana S Bhat	Dr. S. R. Biradar	Dr. J.D.Pujari	Dr. U.P.Kulkarni			Dr. K. Gopinath

Name and Signature with Date of the concerned authority

Professor & Head
Dept. of Information Science & Engineering
SDM College of Engineering and Technology,
Dhavalagiri, Dharwad-580 002.