SDM College of Engineering and Technology, Dhavalagiri, Dharwad 580002

STRATEGIC PLAN
[5 Year Plan: 2022-23 to 2026-27]

OBJECTIVES:

The purpose of this document is to establish the **roadmap for next 5 years** to plan how we wish to see our Institution in the future. This plan is **based on the existing vision and mission** and the National Educational Policy- **NEP-2020**. Mission statements are the **basic perspectives** driving the key areas for the activities established in this report. This report will serve as baseline for **budgeting** and also to establish the Institutional level **ANNUAL performance appraisal**.

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.

Quality Policy:

Long term goals: Collaborative research with premier institutes.

Short term goals: Upgrading the curriculum with respect to current engineering requirement.

SWOC Analysis:

Strength:
1. Research in demanding areas like coordination chemistry, drug delivery, supercapacitors, nanotechnology etc.
2. Expertise in technical writing: Teaching material, laboratory manuals, chapters in books, papers in international & national journals.

Weakness:
1. Need to strengthen inter-institute, inter department research activities.
2. Need of fully furnished and equipped research lab.

Opportunities:
1. Increasing opportunities to present research outcomes in conferences. Publish papers in journals and patent innovations.
2. Opportunity to do collaborative research with industry/ R&D Labs.
3. Upgrading the curriculum with respect to current engineering requirement.

Challenges:
1. Changes in education policies
2. High expectations
3. Mushrooming of engineering colleges in specific locations and possible entry of foreign institutions.

PLANNING INCREMENTS:

1ˢᵗ year to 5ᵗʰ year, i.e. **2022-23** to **2026-27**; year commencing from 1ˢᵗJuly 2022 to 30ᵗʰ June 2027

CONTACT DETAILS:

1. **Dr. K. Gopinath**, Principal, SDM College of Engineering and Technology, Dharwad-580002.
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M1. To have contextually relevant Curricula.

Strategies/ Key Areas for M1	Baseline Status / Value as on 30th June 2022	Activities				
		2022-23 Jan 22 – June 23	2023-24 July 23 – June 24	2024-25 July 24 – June 25	2025-26 July 25 – June 26	2026-27 July 26 – June 27
Re-establishing the relevance of critical thinking in course outcomes focusing on experiential learning aspects of NEP-2020. [Revisiting application of Bloom's Taxonomy]	Routine activity by individual teachers while doing changes in the syllabus during BoS meeting. Implementation differences among faculty members at different time. Reasonable understanding of mapping COs to POs and therefore moderate compliance of assessment tool with COs.	**Activity-1:** • Conduction of Brain-storm sessions. • Understanding blue taxonomy • Revision of COs • Preparation of full syllabus with COs and POs mapping. • Discussion in BOS **Expected Outcome/Target for this year:** Final syllabus as per NEP2020 to meet OBE. **Budget : 00.05Lakhs** **Deliverables:** 1. Session proceedings. 2. List of COs rewritten. 3. List of change in mapping of COs to Pos and sample illustration of required evidences. **Faculty In-charge:** Name: Dr. A. A. Kittur Mobile:9945258096 Email: kittur1965@gmail.com	**Activity-1:** • Revision of COs • Addition of relevant content in syllabus. • Discussion in BOS **Expected Outcome/Target for this year:** Final syllabus with modifications as per NEP2020 to meet OBE. **Budget : 00.05Lakhs** **Deliverables:** 1. Session proceedings. 2. List of COs rewritten. 3. List of change in mapping of COs to Pos and sample illustration of required evidences. **Faculty In-charge:** Name: Dr. A. A. Kittur Mobile:9945258096 Email: kittur1965@gmail.com	**Activity-1:** • Revision of COs • Addition of relevant content in syllabus. • Discussion in BOS **Expected Outcome/Target for this year:** Final syllabus with modifications as per NEP2020 to meet OBE. **Budget : 00.05Lakhs** **Deliverables:** 1. Session proceedings. 2. List of COs rewritten. 3. List of change in mapping of COs to Pos and sample illustration of required evidences. **Faculty In-charge:** Name: Dr. A. A. Kittur Mobile:9945258096 Email: kittur1965@gmail.com	**Activity-1:** • Revision of COs • Addition of relevant content in syllabus. • Discussion in BOS **Expected Outcome/Target for this year:** Final syllabus as per NEP2020 to meet OBE. **Budget : 00.05Lakhs** **Deliverables:** 1. Session proceedings. 2. List of COs rewritten. 3. List of change in mapping of COs to Pos and sample illustration of required evidences. **Faculty In-charge:** Name: Dr. Shashidhar Mobile:9986971155 Email: shashidhar66111@gmail.com	**Activity-1:** • Conduction of Brain-storm sessions. • Understanding blue taxonomy • Revision of COs • Preparation of full syllabus with COs and POs mapping. • Discussion in BOS **Outcome/Target:** Final syllabus as per NEP2020 to meet OBE. **Budget : 00.05Lakhs** **Deliverables:** 1. Session proceedings. 2. List of COs rewritten. 3. List of change in mapping of COs to Pos and sample illustration of required evidences. **Faculty In-charge:** Name: Dr. Shashidhar Mobile:9986971155 Email: shashidhar66111@gmail.com

		Activities:	Activities:	Activities:	Activities:	Activities:
Gap Analysis and re-establishing the relevance of Program Articulation Matrix-PAM. [Introduction of new programs/courses/ course weightage (credits/Th/Lab) / laboratories, realignment/ re-ordering/ re-structuring / content up gradation etc..]	A session conducted to understand	• Conduction of Brain-storm sessions. • Reviewing current PAM with respect to meet POs through theory / labs to identify the gaps. • Establishing the PAM to overcome the gaps **Outcome/Target:** Bridging the gaps to meet OBE. **In-charge Faculty:** Dr. A. A. Kittur	• Evaluation of performance • Establishing the PAM to overcome the gaps **Outcome/Target:** • Status of progress in attainment	• Evaluation of performance **Outcome/Target:** • Status of progress in attainment	• Conduction of Brain-storm sessions. **Outcome/Target:** • Status of progress in attainment **In-charge Faculty:** Dr. Shashidhar	• Conduction of Brain-storm sessions. • Reviewing current PAM with respect to meeting POs through theory / labs to identify the gaps. • Establishing the PAM to overcome the gaps **Outcome/Target:** Bridging the gaps to meet OBE. **In-charge Faculty:** Dr. Shashidhar
Academic Audits [Procedures/process/ Information repository and access, credentials etc..]	Two internal audits completed External audit in the month of July	**Internal Audit by in-house IQAC team** • Two internal and one external audit • IQAC/DUGC team formation to review QP • External academician identified for audit **Outcome:** Verification Receive the suggestion for improvement **In-charge Faculty:** Dr. A. A. Kittur	**Internal Audit by in-house IQAC team** • Two internal and one external audit • IQAC/DUGC team formation to review QP • External academician identified for audit **Outcome:** Verification Receive the suggestion for improvement	**Internal Audit by in-house IQAC team** • Two internal and one external audit • IQAC/DUGC team formation to review QP • External academician identified for audit **Outcome:** Verification Receive the suggestion for improvement	**Internal Audit by in-house IQAC team** • Two internal and one external audit • IQAC/DUGC team formation to review QP • External academician identified for audit **Outcome:** Verification Receive the suggestion for improvement **In-charge Faculty:** Dr. Shashidhar	**Internal Audit by in-house IQAC team** • Two internal and one external audit • IQAC/DUGC team formation to review QP • External academician identified for audit **Outcome:** Verification Receive the suggestion for improvement
Any other						
TOTAL Budget for M1		**00.05** Lakhs	**00.05** Lakhs	**00.05** Lakhs	**00.05** Lakhs	**00.05** Lakhs

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

Strategies / Key Areas for M2	Baseline Status / Value as on 30th June 2022	Activities				
		2022-23 Jan 22 – June 23	2023-24 July 23 – June 24	2024-25 July 24 – June 25	2025-26 July 25 – June 26	2026-27 July 26 – June 27
Bridge Courses **For all and specific to Slow learners**	For fresher value added topics in terms of orientation programme conducted	Boot camp of value added topics in terms of orientation programme for new students	Boot camp of value added topics in terms of orientation programme for new students	Boot camp of value added topics in terms of orientation programme for new students	Boot camp of value added topics in terms of orientation programme for new students	Boot camp of value added topics in terms of orientation programme for new students
Tutorials **for complex courses**	Slow learners were identified. Topics for tutorials are planned. Planning for extra classes	**Activity-1:** Identification of the complex topics. Identification of slow learners based on performance Engaging extra classes every week. Parents meet **Outcome/Target:** Improvement in performance of slow learners. Enhancement in attainment **In-charge Faculty:** All faculty	**Activity-1:** Identification of the complex topics. Identification of slow learners based on performance Engaging extra classes Parents meet **Outcome/Target:** Improvement in performance of slow learners. Enhancement in attainment **In-charge Faculty:** All faculty	**Activity-1:** Identification of the complex topics. Identification of slow learners based on performance Engaging extra classes Parents meet **Outcome/Target:** Improvement in performance of slow learners. Enhancement in attainment **In-charge Faculty:** All faculty	**Activity-1:** Identification of the complex topics. Identification of slow learners based on performance Engaging extra classes Parents meet **Outcome/Target:** Improvement in performance of slow learners. Enhancement in attainment **In-charge Faculty:** All faculty	**Activity-1:** Identification of the complex topics. Identification of slow learners based on performance Engaging extra classes Parents meet **Outcome/Target:** Improvement in performance of slow learners. Enhancement in attainment **In-charge Faculty:** All faculty
Strengthening Experiential Learning	Case studies have given	**Activity-:** CTA conducted based on case study assignment	**Activity-:** CTA conducted based on case study assignment	**Activity-:** CTA conducted based on case study assignment	**Activity-:** CTA conducted based on case study assignment	**Activity-:** CTA conducted based on case study assignment

component: **Learning Extensions (LE)/ Beyond Syllabus(BS) / Case Studies/ Industry Visits/ Industry Connectivity for Class room.** **Use of Industry relevant tools** **Field visits/ Internship** **Students' Sponsored projects**	First quiz test given on this Case study Lab experiments framed	to bring industry relevant. **Outcome/Target:** Learning through experiments. Identification of experiments for Experimental based learning. Experiment based CTA activity Outcome/Target: 1. Revised Curriculum with Experimental based learning 2. Improvement in CO attainment	to bring industry relevant. **Outcome/Target:** Learning through experiments Identification of experiments for Experimental based learning. Experiment based CTA activitiy Outcome/Target: 3. Revised Curriculum with Experimental based learning Improvement in CO attainment	to bring industry relevant. **Outcome/Target:** Learning through experiments Identification of experiments for Experimental based learning. Experiment based CTA activitiy Outcome/Target: 4. Revised Curriculum with Experimental based learning Improvement in CO attainment	to bring industry relevant. **Outcome/Target:** Learning through experiments Identification of experiments for Experimental based learning. Experiment based CTA activitiy Outcome/Target: 5. Revised Curriculum with Experimental based learning Improvement in CO attainment	to bring industry relevant. **Outcome/Target:** Learning through experiments Identification of experiments for Experimental based learning. Experiment based CTA activitiy Outcome/Target: 6. Revised Curriculum with Experimental based learning Improvement in CO attainment
Creation of learning materials **Books/ Laboratory manuals/ Video Materials**	Existing manual is revised with new experiments	Ppts, study material, Lab Manuals and Video materials created	Book chapters, study material, Lab Manuals and Video materials created	study material, Lab Manuals and Video materials created	study material, Lab Manuals and Video materials created	Book chapters, study material, Lab Manuals and Video materials created
Awareness of Technology trends						
Online Course/ mode of learning and their connectivity with curriculum	Faculty registered for NPTEL course	Activity-1: Use of ICT for Online courses Outcome/Target: Upgradation of knowledge Certificates of Online course	Activity-1: Use of ICT for Online courses Outcome/Target: Upgradation of knowledge Certificates of Online course	Activity-1: Use of ICT for Online courses Outcome/Target: Upgradation of knowledge Certificates of Online course	Activity-1: Use of ICT for Online courses Outcome/Target: Upgradation of knowledge Certificates of Online course	Activity-1: Use of ICT for Online courses Outcome/Target: Upgradation of knowledge Certificates of Online course
		Activity: Use of online platforms like Zoom, Google	**Activity:** Use of online platforms like Zoom, Google	**Activity:** Use of online platforms like Zoom, Google	**Activity:** Use of online platforms like Zoom, Google	**Activity:** Use of online platforms like Zoom, Google

		meet and MS teams for the conduction of online classes if necessary Outcomes/Targets :Easily reachable to students Easily provide study material to students Faculty I/C Prof. Sahana Nayak	meet and MS teams for the conduction of online classes if necessary Outcomes/Targets :Easily reachable to students Easily provide study material to students Faculty I/C Prof. Sahana Nayak	meet and MS teams for the conduction of online classes if necessary Outcomes/Targets :Easily reachable to students Easily provide study material to students Faculty I/C Prof. Sahana Nayak	meet and MS teams for the conduction of online classes if necessary Outcomes/Targets :Easily reachable to students Easily provide study material to students Faculty I/C Prof. Sahana Nayak	meet and MS teams for the conduction of online classes if necessary Outcomes/Targets :Easily reachable to students Easily provide study material to students Faculty I/C Prof. Sahana Nayak

Community Oriented Service
 	
Awareness Program/
 	
Learning Programs through workshops/
 	
Technology Transfer Programs/
Hobby projects
 	
EPIC- Engg. Projects in Community Services etc
	Plan of topic to deliver in village school	Activity:
		Identification of village
		Visit to village school to bring awareness about health & Hygeine
		Outcomes/Targets :
		Awareness about health
		Faculty I/C
		    Prof. Sahana Nayak
			Activity:
			Visit to village school to bring awareness about health & Hygeine
			Outcomes/Targets:
			Awareness about health
			Faculty I/C
			Prof. Sahana Nayak
				Activity:
				Visit to village school to bring awareness about organic manure from waste
				Outcomes/Targets:
				Awareness about preserving the ecosystem
				Faculty I/C
				Prof. Sahana Nayak
					Activity:
					Visit to village school to bring awareness about organic manure from waste
					Outcomes/Targets:
					Awareness about preserving the ecosystem
					Faculty I/C
					    Prof. Sahana Nayak
						Activity:
						Visit to village school to bring awareness about Effective use of smartphone for the contemporary needs
						Outcomes/Targets:
						Awareness about preserving the ecosystem
						Faculty I/C
						    Prof. Sahana Nayak

Any other						
TOTAL Budget for M2		**00.05** Lakhs	**00.05** Lakhs	**00.05** Lakhs	**00.05** Lakhs	**00.05** Lakhs

M3. To enhance Research culture.

Strategies / Key Areas for M3	Baseline Status / Value as on 30th June 2022	Activities				
		2022-23 Jan 22 – June 23	2023-24 July 23 – June 24	2024-25 July 24 – June 25	2025-26 July 25 – June 26	2026-27 July 26 – June 27
Funded Projects	One project is ongoing Two proposals submitted to funding agencies	**Activity-1:** Preparation of project proposals for funding agency **Outcome/Target:** Submission of project proposals for funding agency Strengthening the existing labs **Activity-2:** FDPs on recent developments in Chemistry **In-charge Faculty:** Dr.A. A. Kittur & Dr. Shashidhar	**Activity-1:** Preparation of project proposals **Outcome/Target:** Submission of project proposals for funding agency **In-charge Faculty:** Dr. Kittur & Dr.Shashidhar	**Activity-1:** Preparation of project proposals **Outcome/Target:** Submission of project proposals for funding agency **In-charge Faculty:** Dr. Kittur & Dr.Shashidhar	**Activity-1:** Preparation of project proposals **Outcome/Target:** Submission of project proposals for funding agency **In-charge Faculty:** Dr. Kittur & Dr.Shashidhar	**Activity-1:** Preparation of project proposals for funding agency **Outcome/Target:** Submission of project proposals for funding agency **Activity-2:** FDPs on recent developments in Chemistry **In-charge Faculty:** Dr.Shashidhar
Paper Publications	04 publications Two papers under preparation	**Activity-1:** Submission of research papers for possible publication to reputed journals **Outcome/Target:** Improvement in research Publications Increase in number of publications **Budget :**	**Activity-1:** Submission of research papers for possible publication to reputed journals Sharing knowledge **Outcome/Target:** Increase in number of publications.	**Activity-1:** Submission of research papers for possible publication to reputed journals **Outcome/Target:** Increase in number of publications.	**Activity-1:** Submission of research papers for possible publication to reputed journals **Outcome/Target:** Increase in number of publications.	**Activity-1:** Submission of research papers for possible publication to reputed journals **Outcome/Target:** Improvement in research Publications Increase in number of publications **Budget :**

			Interaction with scientific community	Interaction with scientific community	Interaction with scientific community	
IPR: Copyrights and Patents		**Activity-1:** Attend the workshops related to IPR and gain the knowledge **Outcome/Target:** Try to patent the research outcomes	**Activity-1:** Attend the workshops related to IPR and gain the knowledge **Outcome/Target:** Try to patent the research outcomes	**Activity-1:** Attend the workshops related to IPR and gain the knowledge **Outcome/Target:** Try to patent the research outcomes	**Activity-1:** Conduct the workshops related to IPR and gain the knowledge **Outcome/Target:** Try to patent the research outcomes	**Activity-1:** Attend the workshops related to IPR and gain the knowledge **Outcome/Target:** Try to patent the research outcomes
Knowledge Sharing.	04 publications 02 conferences attended	**Activity-1:** Presenting papers in conferences **Activity-2:** Publishing the research outcomes in reputed journals	**Activity-1:** Presenting papers in conferences **Activity-2:** Publishing the research outcomes in reputed journals	**Activity-1:** Presenting papers in conferences **Activity-2:** Publishing the research outcomes in reputed journals	**Activity-1:** Presenting papers in conferences **Activity-2:** Publishing the research outcomes in reputed journals	**Activity-1:** Presenting papers in conferences **Activity-2:** Publishing the research outcomes in reputed journals
Research Quality Review		**Activity-1:** • Formation of core team to assess quality and review. • Identification of emerging and interdisciplinary areas of research **Outcome/Target:** Improving success rate of research proposal acceptance. Secure external	**Activity-1:** Formation of core team Research in interdisciplinary areas **Outcome/Target:** Secure external funding	**Activity-1:** Formation of core team Research in interdisciplinary areas **Outcome/Target:** Secure external funding	**Activity-1:** Formation of core team Research in interdisciplinary areas **Outcome/Target:** Secure external funding Retrospection of first four years progress and correcting if necessary	**Activity-1:** • Formation of new core team to assess quality and review. • Identification of emerging and interdisciplinary areas of research **Outcome/Target:** Improving success rate of research proposal acceptance.

					Secure external funding
Any other					
TOTAL Budget for M3	**00.25** Lakhs	**00.25** Lakhs	**00.25** Lakhs	**00.25** Lakhs	**00.25** Lakhs

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

Strategies / Key Areas for M4	Baseline Status / Value as on 30th June 2022	Activities				
		2022-23 Jan 22 – June 23	2023-24 July 23 – June 24	2024-25 July 24 – June 25	2025-26 July 25 – June 26	2026-27 July 26 – June 27
Talks from Industry personnel.		One /Two lectures arrange by calling industry persons		One /Two lectures arrange by calling industry persons		One /Two lectures arrange by calling industry persons
MoUs with industries						
Training Programs for Students from Industry personnel.						
FDPs from Industry personnel.		Activity: Faculty attend the FDP Target outcomes: Faculty upgrade their knowledge	Activity: Faculty attend the FDP Target outcomes: Faculty upgrade their knowledge	Activity: Faculty attend the FDP Target outcomes: Faculty upgrade their knowledge	Activity: Faculty attend the FDP Target outcomes: Faculty upgrade their knowledge	Activity: Faculty attend the FDP Target outcomes: Faculty upgrade their knowledge
			Activity:	Activity:		

Strategies / Key Areas for M4			Calling alumini to deliver a talk Target outcomes: Studentscame to know the experience of alumini Prepare themselves for corporate world.	Calling alumini to deliver a talk Target outcomes: Studentscame to know the experience of alumini Prepare themselves for corporate world.		
Alumni connected activities for students and faculty members						
Sabbatical Leave for faculty members						
Course projects/ Project based learning						
Any other						
TOTAL Budget for M4		**00.05** Lakhs	**00.05** Lakhs	**00.05** Lakhs	**00.05**Lakhs	**00.05** Lakhs

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

Strategies / Key Areas for M5	Baseline Status / Value as on 30th June 2022	Activities				
		2022-23 Jan 22 – June 23	**2023-24** July 23 – June 24	**2024-25** July 24 – June 25	**2025-26** July 25 – June 26	**2026-27** July 26 – June 27
Awareness Programs						
Training programs		Arrange personality				Arrange

Soft Skills/ Discussion Group/ English Communication Skills/ Use of ICT		development related programme				personality development programme
Any other						
TOTAL Budget for M5		**00.02** Lakhs	**00.02** Lakhs	**00.02** Lakhs	**00.02** Lakhs	**00.02**Lakhs

Other Key Areas/ Strategies

Strategy/ Key Areas- Others		Activities				
		2022-23 Jan 22 – June 23	2023-24 July 23 – June 24	2024-25 July 24 – June 25	2025-26 July 25 – June 26	2026-27 July 26 – June 27
NEP-2020		Curriculum design to meet the NEP requirements Attend the workshops related to NEP Discussion in BOS				Curriculum design to meet the NEP requirements Attend the workshops related to NEP
Branding / Ranking		Aiming for ranking within 200 Strengthening the institute by quality teaching, good results, innovative research, publication in high impact journals, by getting more fund from external agency.	Aiming for ranking within 150 Strengthening the institute by quality teaching, good results, innovative research, publication in high impact journals, by getting more fund from external agency.	Aiming for ranking within 100 Strengthening the institute by quality teaching, good results, innovative research, publication in high impact journals, by getting more fund from external agency.	.	Aiming for ranking within 100 Strengthening the institute by quality teaching, good results, innovative research, publication in high impact journals, by getting more fund from external agency

	NAAC, NBA	Activity-1: NAAC preparedness Outcome/Target: Data collection and Documentation for submission				Activity-1: NAAC preparedness Outcome/Target: Data collection and Documentation for submission
Accreditation						
Autonomy and University status						
Starting of new Programs/ Courses						
Industry Collaboration						
MoUs						
University / Institutional Collaboration						
Admission Quality						
Faculty Support and Facilities						
Infrastructure						
Research Laboratories and Center of Excellence		Upgrade the existing labs with new experiments				Upgrade the existing labs with new experiments
Automation and Use of ICT						

Any other					
TOTAL Budget for Others	**00.15** Lakhs	**00.15** Lakhs	**00.15** Lakhs	**00.15** Lakhs	**00.15** Lakhs

TOTAL BUDGET	**2022-23** **Jan 22 – June 23**	**2023-24** **July 23 – June 24**	**2024-25** **July 24 – June 25**	**2025-26** **July 25 – June 26**	**2026-27** **July 26 – June 27**
	00.55 Lakhs	**00.55** Lakhs	**00.55** Lakhs	**00.55** Lakhs	**00.55** Lakhs

HoD, Chemistry
Date: 20/07/2022