

# SDM College of Engineering and Technology, Dhavalagiri, Dharwad-580002

## Department of Physics 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 vision and mission** established and also the additional focus suggested by the management keeping focus on National Educational Policy-NEP-2020. Mission statements are the **basic perspectives** driving the newer strategies 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:** Committed to move towards a sustainable growth

**Long term goals:** Offering minor or major Projects to UG and PG students.

**Short term goals:**

1. Curriculum up gradation as per current engineering requirement.
2. Quality research publications.

**SWOC Analysis:**

**Strength:**

1. 75% of the faculties are Ph.D. holders with average teaching experience of more than 18 years.
2. Team work

**Weakness:**

1. Not succeeded in receiving research funding.

**Opportunities:**

1. Curriculum upgradation with respect to current engineering requirement

**Challenges:**

1. Change in education policies

**PLANNING INCREMENTS:**

1<sup>st</sup> year to 5<sup>th</sup> year, i.e. **2022-23** to **2026-27**; year commencing from 1<sup>st</sup> of January 2022 to 30<sup>th</sup> June 2027.

**CONTACT DETAILS:**

1. Dr.Kumar I. Maddani, Professor and Head, Department of Physics, SDM College of Engineering and Technology, Dharwad-580002.

Email: [ki\\_maddani@rediffmail.com](mailto:ki_maddani@rediffmail.com)

Contact No: 08362328177

2. Dr. P. V. Raghavendra, Faculty I/C- Strategic Plan, Department of Physics, SDM College of Engineering and Technology, Dharwad-580002.

Email: [pvrkaranth@gmail.com](mailto:pvrkaranth@gmail.com)

Contact No: 08362328180

Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]				
		2022-23	2023-24	2024-25	2025-26	2026-27
<b>F1 / M1</b> <b>Curriculum</b> <b>Relevance</b>	Re-establishing the relevance of critical thinking in Course outcomes and raising levels focusing on Experiential learning of NEP	<b>Activity-1:</b> BOS Meet. <b>Outcome/Target:</b> 1.To revise and reframe the syllabus to fulfill OBE. <b>Budget:</b> 0.05 Lakh	<b>Activity-1:</b> BOS Meet. <b>Outcome/Target:</b> 1. To revise and reframe the syllabus to fulfill OBE. <b>Budget:</b> 0.05 Lakh	<b>Activity-1:</b> BOS Meet. <b>Outcome/Target:</b> 1. To revise and reframe the syllabus to fulfill OBE. <b>Budget:</b> 0.05 Lakh	<b>Activity-1:</b> BOS Meet. <b>Outcome/Target:</b> 1. To revise and reframe the syllabus to fulfill OBE. <b>Budget:</b> 0.1 Lakh	<b>Activity-1:</b> BOS Meet. <b>Outcome/Target:</b> 1. To revise and reframe the syllabus to fulfill OBE. <b>Budget:</b> 0.1 Lakh
	Re-establishing the relevance of Program Articulation Matrix	<b>Activity-1:</b> DUGC Meeting <b>Outcome/Target:</b> 1. To conduct review meeting on the relevance of Program Articulation Matrix. <b>Budget:</b> NIL	<b>Activity-1:</b> DUGC Meeting <b>Outcome/Target:</b> 1. To conduct review meeting on the relevance of Program Articulation Matrix. <b>Budget:</b> NIL	<b>Activity-1:</b> DUGC Meeting <b>Outcome/Target:</b> 1. To conduct review meeting on the relevance of Program Articulation Matrix. <b>Budget:</b> NIL	<b>Activity-1:</b> DUGC Meeting <b>Outcome/Target:</b> 1. To conduct review meeting on the relevance of Program Articulation Matrix. <b>Budget:</b> NIL	<b>Activity-1:</b> DUGC Meeting <b>Outcome/Target:</b> 1. To conduct review meeting on the relevance of Program Articulation Matrix. <b>Budget:</b> NIL
	Conducting internal and External Audits	<b>Activity-1:</b> Annual Academic audit <b>Outcome/Target:</b> 1. Internal Annual academic audit by IQAC 2. External annual academic audit by experts from IIT or	<b>Activity-1:</b> Annual Academic audit <b>Outcome/Target:</b> 1. Internal Annual academic audit by IQAC 2. External annual academic audit by experts from IIT	<b>Activity-1:</b> Annual Academic audit <b>Outcome/Target:</b> 1. Internal Annual academic audit by IQAC 2. External annual academic audit by experts from IIT or	<b>Activity-1:</b> Annual Academic audit <b>Outcome/Target:</b> 1. Internal Annual academic audit by IQAC 2. External annual academic audit	<b>Activity-1:</b> Annual Academic audit <b>Outcome/Target:</b> 1. Internal Annual academic audit by IQAC 2. External annual academic audit

		NIT. <b>Budget: 0.05 Lac</b>	or NIT. <b>Budget: 0.05 Lac</b>	NIT. <b>Budget: 0.05 Lac</b>	by experts from IIT or NIT. <b>Budget: 0.05 Lac</b>	<b>2. External</b> annual academic audit by experts from IIT or NIT. <b>Budget: 0.05 Lac</b>
	Any Other	--	-	-	-	-
<b>Focus</b> [1]	<b>Perspective/ Key Areas</b> [2]	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
<b>F2</b> <b>M1,M2,M4</b> <b>Exam Results</b>	Bridge Courses	<b>Activity-1:</b> Identification of Slow learners <b>Outcome/Target:</b> 1.To identify slow learners who perform below the set target. <b>Activity-2:</b> Counseling of Slow learners for Extra classes <b>Outcome/Target:</b> 1.To improve the academic performance of the slow learners <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Slow learners <b>Outcome/Target:</b> 1.To identify slow learners who perform below the set target. <b>Activity-2:</b> Counseling of Slow learners for Extra classes <b>Outcome/Target:</b> 1.To improve the academic performance of the slow learners <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Slow learners <b>Outcome/Target:</b> 1.To identify slow learners who perform below the set target. <b>Activity-2:</b> Counseling of Slow learners for Extra classes <b>Outcome/Target:</b> 1.To improve the academic performance of the slow learners <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Slow learners <b>Outcome/Target:</b> 1.To identify slow learners who perform below the set target. <b>Activity-2:</b> Counseling of Slow learners for Extra classes <b>Outcome/Target:</b> 1.To improve the academic performance of the slow learners <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Slow learners <b>Outcome/Target:</b> 1.To identify slow learners who perform below the set target. <b>Activity-2:</b> Counseling of Slow learners for Extra classes <b>Outcome/Target:</b> 1.To improve the academic performance of the slow learners <b>Budget: NIL</b>
	Tutorials for complex courses	<b>Activity-1:</b> Tutorial classes on selected topics <b>Outcome/Target:</b> 1.To enhance the	<b>Activity-1:</b> Tutorial classes on selected topics <b>Outcome/Target:</b> 1.To enhance the	<b>Activity-1:</b> Tutorial classes on selected topics <b>Outcome/Target:</b> 1.To enhance the	<b>Activity-1:</b> Tutorial classes on selected topics <b>Outcome/Target:</b> 1.To enhance the	<b>Activity-1:</b> Tutorial classes on selected topics <b>Outcome/Target:</b> 1.To enhance the

		academic performance of the students <b>Budget: NIL</b>	academic performance of the students <b>Budget: NIL</b>	academic performance of the students <b>Budget: NIL</b>	academic performance of the students <b>Budget: NIL</b>	academic performance of the students <b>Budget: NIL</b>
	Strengthening Experiential Learning component	<b>Activity-1:</b> Identification of Topics/experiments for Case study <b>Outcome/Target:</b> 1. To improve the experimental learning ability <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Topics/ experiments for Case study <b>Outcome/Target:</b> 1. To improve the experimental learning ability <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Topics/ experiments for Case study <b>Outcome/Target:</b> 1. To improve the experimental learning ability <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Topics / experiments for Case study <b>Outcome/Target:</b> 1. To improve the experimental learning ability <b>Budget: NIL</b>	<b>Activity-1:</b> Identification of Topics / experiments for Case study <b>Outcome/Target:</b> 1. To improve the experimental learning ability <b>Budget: NIL</b>
	Industry Connectivity for Class room	--	<b>Activity-1:</b> Expert Lecture <b>Outcome/Target:</b> 1.To enhance learning interest of the students 2. To update knowledge in recent advances <b>Budget: 0.1Lac</b>	<b>Activity-1:</b> Expert Lecture <b>Outcome/Target:</b> 1.To enhance learning interest of the students 2. To update knowledge in recent advances <b>Budget: 0.15Lac</b>	<b>Activity-1:</b> Expert Lecture <b>Outcome/Target:</b> 1.To enhance learning interest of the students 2. To update knowledge in recent advances <b>Budget: 0.15Lac</b>	<b>Activity-1:</b> Expert Lecture <b>Outcome/Target :</b> 1.To enhance learning interest of the students 2. To update knowledge in recent advances <b>Budget: 0.2Lac</b>
	Any Other	--	--	--	--	--
<b>Focus</b> [1]	<b>Perspective/ Key Areas</b> [2]	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
<b>F3</b> <b>M3</b> <b>Research</b>	IPR: Copyrights and Patents	--	--	--	--	--
	Paper Publications	02	02	02	02	02
	Funded Projects	<b>Activity-1:</b> Funded Projects	<b>Activity-1:</b> Funded Projects	<b>Activity-1:</b> Funded Projects	<b>Activity-1:</b> Funded Projects	<b>Activity-1:</b> Funded Projects

		<b>Outcome/Target:</b> Submitting up to 02 research project proposals for funding <b>Budget:</b> NIL	<b>Outcome/Target:</b> Submitting 01 research project proposals for funding <b>Budget:</b> NIL	<b>Outcome/Target:</b> Submitting upto 02 project proposals based on previous outcomes <b>Budget:</b> NIL	<b>Outcome/Target:</b> Submitting upto 01 project proposals based on previous outcomes <b>Budget:</b> NIL	<b>Outcome/Target:</b> Submitting upto 02 project proposals based on previous outcomes <b>Budget:</b> NIL
	Analysis on project proposals for its quality relevance	<b>Activity-1:</b> Research Review committee <b>Outcome/Target:</b> Formation of Research Review committee <b>Budget:</b> NIL	<b>Activity-1:</b> Research Review committee <b>Outcome/Target:</b> Formation of Research Review committee <b>Budget:</b> NIL	<b>Activity-1:</b> Research Review committee <b>Outcome/Target:</b> Formation of Research Review committee <b>Budget:</b> NIL	<b>Activity-1:</b> Research Review committee <b>Outcome/Target:</b> Formation of Research Review committee <b>Budget:</b> NIL	<b>Activity-1:</b> Research Review committee <b>Outcome/Target:</b> Formation of Research Review committee <b>Budget:</b> NIL
	Any Other	--	--	--	--	--
<b>Focus</b> [1]	<b>Perspective/ Key Areas</b> [2]	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
<b>F4</b> <b>M2 &amp; M5</b>  <b>Value additions</b>	Learning for Placement	--	--	--	--	--
	Soft Skills	--	--	--	--	--
	Discussion Group	--	--	--	--	--
	English Communication Skills	-	-	-	-	-
	Use of ICT	<b>Activity-1</b> Utilization of Online resources <b>Outcome/Target:</b> 1. Utilization of online resources for teaching	<b>Activity-1</b> Utilization of Online resources <b>Outcome/Target:</b> 1. Utilization of online resources for teaching learning	<b>Activity-1</b> Utilization of Online resources <b>Outcome/Target:</b> 1. Utilization of online resources for teaching learning	<b>Activity-1</b> Utilization of Online resources <b>Outcome/Target:</b> 1. Utilization of online resources for teaching learning process.	<b>Activity-1</b> Utilization of Online resources <b>Outcome/Target:</b> 1. Utilization

		learning process. 2. Sharing of learning materials through Google class room and YouTube channel	process. 2. Sharing of learning materials through Google class room and YouTube channel	process. 2. Sharing of learning materials through Google class room and YouTube channel	2. Sharing of learning materials through Google class room and YouTube channel	of online resources for teaching learning process. 2. Sharing of learning materials through Google class room and YouTube channel
	Any Other	-	-	-	-	-
<b>Focus</b>	<b>Perspective</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
<b>F5</b> <b>Community Oriented Services</b>  <b>M3 &amp; M5</b>	Awareness Program	<b>Activity-1:</b> Awareness Program <b>Outcome/Target:</b> Importance of NEP-2020 in education for government high school students <b>Budget:</b> 0.01 Lac	<b>Activity-1:</b> Awareness Program <b>Outcome/Target:</b> Science awareness program in nearby villages <b>Budget:</b> 0.01 Lac	<b>Activity-1:</b> Awareness Program <b>Outcome/Target:</b> Health Awareness program in nearby villages. <b>Budget:</b> 0.05 Lac	<b>Activity-1:</b> Awareness Program <b>Outcome/Target:</b> Environmental awareness Program in nearby villages <b>Budget:</b> 0.05 Lac	<b>Activity-1:</b> Awareness Program <b>Outcome/Target:</b> Awareness program on model based teaching at nearby high schools <b>Budget:</b> 0.05 Lac
	Learning Programs	--	--	--	--	--
	Technology Transfer Programs	--	--	--	--	--
	Any Other	--	--	--	--	--
<b>Focus</b> <small>[1]</small>	<b>Perspective/ Key Areas</b> <small>[2]</small>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
<b>F6</b>	<b>No. of Offers</b>	-NA-	--	--	--	--



<b>Placement</b>	<b>No. of students getting Placed</b>	-NA-	--	--	--	--
	<b>pay packages being offered</b>	-NA-	--	--	--	--
	<b>MoUs</b>	--	-	-	-	-
	<b>Internship</b>	-NA-	-	-	-	-
	<b>Others- if any</b>	--	-	-	-	-
<b>Focus [1]</b>	<b>Perspective/ Key Areas [2]</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
<b>F7 Accreditation and Ranking</b>	NBA	Supporting for the attainment of department/institutional activity	Supporting for the attainment of department/institutional activity	Supporting for the attainment of department/institutional activity	Supporting for the attainment of department/institutional activity	Supporting for the attainment of department/institutional activity
	NAAC	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity
	NIRF ranking	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity	Supporting for the attainment of department/institution activity
	Any Other	--	--	--	--	--

<b>TOTAL BUDGET</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>2025-26</b>	<b>2026-27</b>
	0.11Lakhs	0.21Lakhs	0.30Lakhs	0.35Lakhs	0.40 Lakhs

**HoD, Physics**