

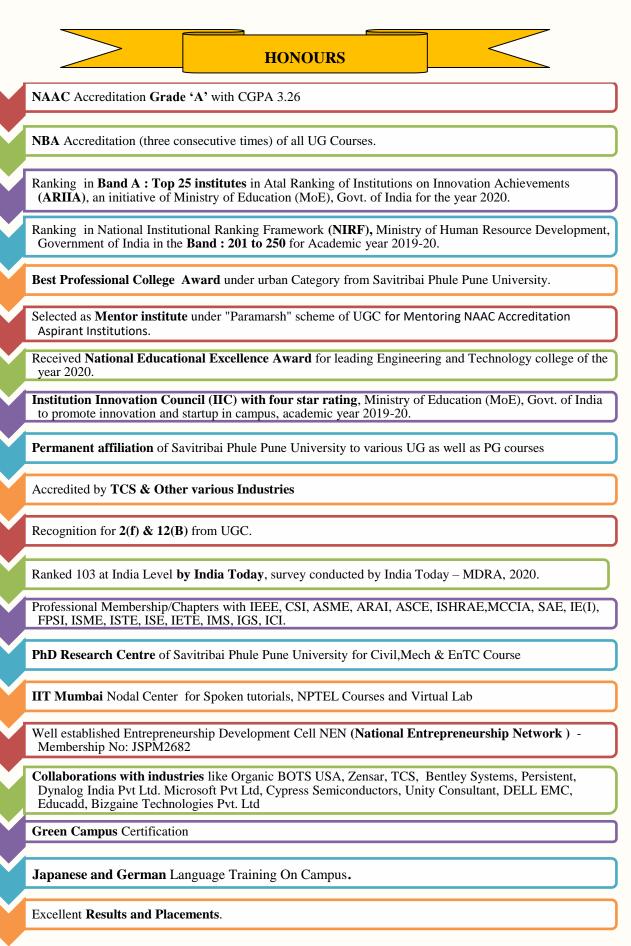
## JSPM'S RAJARSHI SHAHU COLLEGE OF ENGINEERING, TATHAWADE, PUNE-33

(An Autonomous Institute Affiliated To Savitribai Phule Pune University) Approved By AICTE, Accredited By NBA (UG Programs), Accredited By NAAC with "A" Grade, ARIIA ranking in the BAND: Top (6-25), NIRF ranking in the BAND: (201-250)



## Strategic Development Plan (2021-2025)

# **"RSCOE: VISION 2025"**

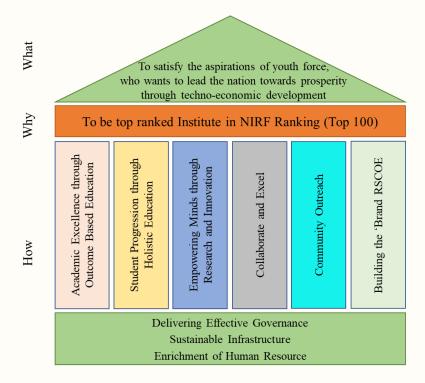


#### Preface

Strategic Development Plan (SDP) is done to evaluate the institute's goal achievement and fulfil stakeholder expectations of the institute. A well written SDP can play a pivotal role in an engineering institute's growth and success. JSPM's Rajarshi Shahu College of Engineering (RSCOE) focuses on strategic steps toward the next level of inclusive excellence by accomplishing institutional goals. The Institute Quality Assurance Cell (IQAC) constituted a subcommittee to prepare a SDP called "RSCOE: VISION 2025". This SDP Plan document is based on analysing present challenges and opportunities along with futuristic activities that leads to achieve goals and objectives.

The stakeholder expectation fulfilment and institute goal achievement are estimated by doing study of internal and external environment scan. Experts from Indian Institute of Technology Ropar (IIT Ropar) has conducted Strength, Weakness, Opportunities and Challenge (SWOC) analysis. This SWOC analysis has helped in defining the strategies. These strategies are divided into nine strategic goals. The plan is directional and broad, providing a focused, complementary set of goals, strategies, and activities. The plan addresses nine strategic goals selected as:

- 1. Delivering Effective Governance
- 2. Academic Excellence through Outcome Based Education
- 3. Sustainable Infrastructure
- 4. Enrichment of Human Resource
- 5. Student Progression through Holistic Education
- 6. Empowering Minds through Research and Innovation
- 7. Collaborate and Excel
- 8. Community Outreach
- 9. Building the 'Brand RSCOE'



All the stakeholders (Management, HoDs, Deans, Faculty, Students, Industry, Parents and Alumni) are vital in the success of the organization and hence they have been involved in the

formation of SDP and its implementation. A lot of efforts have been put together to prepare this document by identifying measurable outcomes. This plan stands a guiding document to RSCOE to attain the goals and to become the premier institute in terms of academic excellence and providing skilled engineers and managers to the society and nation.

#### Honourable Founder Secretary's Message

Jayawant Shikshan Prasarak Mandal (JSPM) and The Shetkari Shikshan Mandal Sangli, Pune (TSSM) have been established with the objective of creating centers of excellence for education in the field of Engineering, Medical, Pharmacy, Management, and Computing. We visualize that a social transformation can be brought about through the medium of dynamic education. JSPM and TSSM are thus institutions of higher education with social commitment.

Rajarshi Shahu College of Engineering is the flagship institution of JSPM. The institution is running 6 UG programs, 4 PG programs, MBA and MCA program, and recognized PhD research center. We, at RSCOE, have created a learning culture, a friendly environment that facilitates complete development of our students. Our three pronged focus on knowledge, skill and attitude is aimed at meeting the needs of our customers i.e. industry. To achieve this, we have hand-picked the best faculty from diverse fields & expertise. We have invested in state of the art facilities, infrastructure and skilled human resources to supplement the culture and environment of JSPM's and TSSM's good governance. The institute has earned a reputation of a college having student-centric and technology-driven learning environment that fosters budding aspirants to become confident and competent engineering professionals.

To continue the excellent progress of this institution, the "RSCOE: VISION 2025" would acts as guiding document for the next 5 years to assess and improve the institution towards delivering high quality education there by earning due recognition. The focus of SDP would be on good governance, best in class teaching learning, research & innovation and highly employable students who act as brand ambassadors for the institution. I congratulate and commend the quality work done by the Directors, Principal, Advisor, Deans, HODs, and Faculty towards developing SDP. The VISION 2025 plan has been thought through well and keeping in mind the college's robust ecosystem and dedicated team, I am confident that RSCOE will make rapid progress towards a private university in 2025.

Prof. Dr. T. J. Sawant Founder Secretary JSPM & TSSM Group of Institutions

#### **JSPM Director's Message**

It is heartening to note that JSPM's Rajarshi Shahu College of Engineering has embarked upon the scientific way of formulating "RSCOE: VISION 2025" a Strategic Development Plan document for 2021-2025. Progressive institution like RSCOE must clearly spell out and articulate vision, mission and set the direction. RSCOE has made its mark and is the most preferred institution in the Maharashtra state as well as at National level. This is right time that the institute decides its direction of growth in the next decade.

I am confident that the distinguished faculty members under the leadership of Principal, Deans and HoDs brought out the best possible detailed vision, mission, high level goals, strategies and its implementation plan. Any good Strategic Development Plan will be successful, when fully implemented and its outcomes are evaluated. I am sure that this leadership will implement the Strategic Development Plan in its total spirit. I take this opportunity to congratulate all the leadership team, HODs, faculty and staff who relentlessly worked towards bringing out this strategic development plan document as a master piece reference mentor for the period of 2021 - 2025.

With Best Wishes!

Dr. Ravi Joshi Director (Planning and Development) JSPM and TSSM Group of Institutions

#### **RSCOE Director's Message**

JSPMs Rajarshi Shahu College of Engineering is a premier institute in the state of Maharashtra, established and started in the year 2001 with the aim of providing quality technical education and excellence in the ever expanding horizon of technical revolution of the 21st century. At RSCOE we are striving to Impart Education 4.0 to cater the need of Industry 4.0, where human beings and technologies combine to enable new possibilities. We facilitate our students to excel in academics and develop their personalities in diverse fields. Driving in this direction, we have complemented academics with other developmental activities such as performing arts, sports, hobbies and technical clubs, to name a few. Our ultimate aim has always been to bring the best out of every student – grooming to be a 'Complete Professional', ready to conquer the globalizing world by the end of their stay in the institute.

Taking a cue from our experience, RSCOE undertook a comprehensive planning exercise and prepared this strategic development plan document titled as "RSCOE: VISION 2025". The goals in this document have been formulated in a manner that builds on the strengths of the institute and the aspirations of the faculty, staff and students. The vision laid out by this plan 2020 -2025 is to be a premier autonomous institute, by being a regional leader in research and education, which will benefit society around us and the environment.

The strategic development plan formulates a clear vision, mission, quality policy, core values, institutional strategic goals and long/short term strategies to achieve these goals. The successful implementation and evaluation aspects of this document lies on "key measurable parameters". I have full confidence on the capabilities of "team RSCOE" in a true implementation of this plan. I am placing on record, the guidance received from the members of Governing Body, Academic Council, BoS, Stakeholders, especially alumni participation and timely feedback are commendable.

Active contribution and participation of Deans, HODs, Faculty members and Staff has helped in the formulation of "VISION 2025". My heartfelt appreciations to all the members who are directly & indirectly involved in articulating an implementable document.

Wishing good luck!

Dr. R. K. Jain Ph. D (Civil Engineering) Director RSCOE

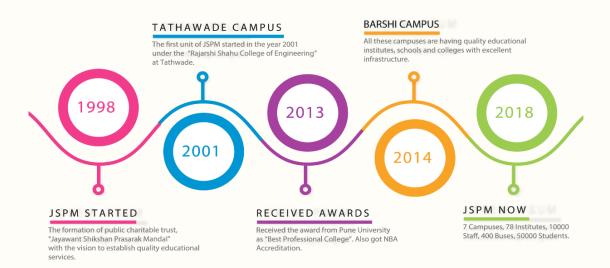
## **Drafting Committee**

- 1. Dr. R. K. Jain
- 2. Dr. Prashant Kumbhalkar
- 3. Dr. Sagar Dhage

#### **About JSPM Group of Institutions**

Jayawant Shikshan Prasarak Mandal (JSPM) was established in 1998 to create centres of excellence for education in the field of Engineering, Medical, Pharmacy, and Management.

This is by the vision of Prof. Dr. T. J. Sawant, an Electrical Engineer who thinks that, "Development of Techno – Entrepreneurial Society" is the key to achieve the vision, as perceived by our Former President of India, Dr. Abdul Kalam. Prof. Sawant is strongly convinced that the establishment of excellent technical institutions is the solution to the problem of development of techno-economic society. Driven by a mission of providing an excellent quality education JSPM's society has left no stone unturned in setting up Educational Institutes in Pune. At present there are five Campuses in and around Pune and one campus is in Solapur district, Maharashtra.



JSPM offers education from KG to Ph.D. Under the JSPM umbrella, we have Engineering colleges, MBA colleges, MCA colleges, Pharmacy colleges, B.Ed. and D.Ed. Colleges as one of the best in Pune vicinity. At present, there are five Campuses in and across Pune, having 78 Institutes, 1000+ staff, and 71000 students.

JSPM Group of Institutes has been successful in establishing a Best Engineering, MBA, MCA, Pharmacy Colleges and Schools, spread across six campuses in Pune. JSPM imparts quality education through right curriculum and innovative teaching methodologies at all its campuses. JSPM Group of Institutes has evolved from a single institute to 75+ institutes, spread in the vicinity of Pune.

JSPM provides latest curriculum and innovative teaching methodologies at all its campuses. JSPM implements a series of vibrant education and leadership strategies for gaining unbeatable competitive advantage from countrywide experts for a matchless growth beyond the ordinary.

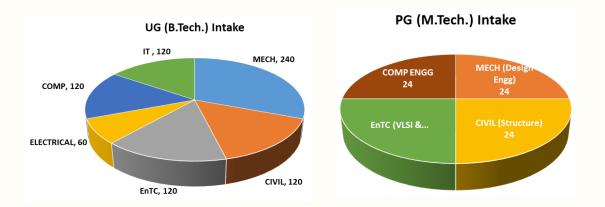
JSPM provides students a vibrant academic experience that adheres to stringent international quality standards, imbibes life skills among its students, and prepares them to take up competitive careers and be successful in life. Through extra curriculum activities, JSPM prepares dynamic students, personally and professionally, to take up future leadership roles in a global environment. The underlying vision of the JSPM is to nurture and engender creativity in thought and innovation, thereby encouraging their students to follow an unconventional path.



#### **About RSCOE**

Rajarshi Shahu College of Engineering is one among the hallmark institutes of Pune, established in 2001 with the aim of providing quality technical education and excellence in the ever expanding horizon of technical revolution of 21st century. The institute is becoming an icon in the field of engineering education in the state of Maharashtra. It is nurtured and managed by Jayawant Shikshan Prasarak Manadal Trust. The Institute is approved by the All India Council for Technical Education (AICTE), New Delhi and Govt. of Maharashtra affiliated to Savitribai Phule Pune University. All UG programs have been accredited three times by **National Board of Accreditation (NBA)** New Delhi. RSCOE is also accredited by **NAAC** with "A" grade (CGPA 3.26). Recently UGC has accorded Autonomy to RSCOE which empower RSCOE to design contemporary curriculum, which is relevant to industry so as to maximize employability of graduates. The institute has received "**Best Professional College award (Urban Category)**" by SPPU, Pune. The institute is also listed in 2(f) and12(b) category of UGC. Institute is winner of AICTE-CII award in Platinum Category for consecutive two years2017- 18, 2018-19.

Govt of India, **MHRD** – **ARIIA** has placed RSCOE in the Band 'A' of top 25 institutes in India under the category of private institutes in India. **MHRD-NIRF** has also ranked RSCOE in the Band of top 201 to 250 colleges in India for the year 2020. RSCOE is ranked 103 at India Level by **India Today**; survey conducted by India Today–MDRA, 2020. Recently, RSCOE received **"Leading Engineering & Technology College of the Year"**, in National Educational Excellence Awards 2020.



#### VISION

"To satisfy the aspirations of youth force, who wants to lead the nation towards prosperity through techno-economic development."

#### MISSION

"To provide, nurture, and maintain an environment of high academic excellence, research and entrepreneurship for all aspiring students, which will prepare them to face global challenges maintaining high ethical and moral standards."

#### **CORE VALUES**

#### • Leadership and Cultural Heritage

RSCOE is committed to promote cultural heritage of nation with a view to developing appropriate leadership qualities amongst youth.

#### • Integrity

Teaching and research activity shall be performed with truthfulness and honesty.

#### • Excellence

RSCOE is committed to perform its teaching-learning and research process with highest quality and value.

#### Professionalism

Faculty, staff and students are committed to maintain culture of professionalism through their behaviour, attitude, and communication.

#### • Empathy

RSCOE is committed to improve the condition of weaker section of society through research, innovation and education programmes of the institute.

#### • Innovation

RSCOE is committed to serving the nation through identification of a novel idea that helps to provide solution to technical challenges.

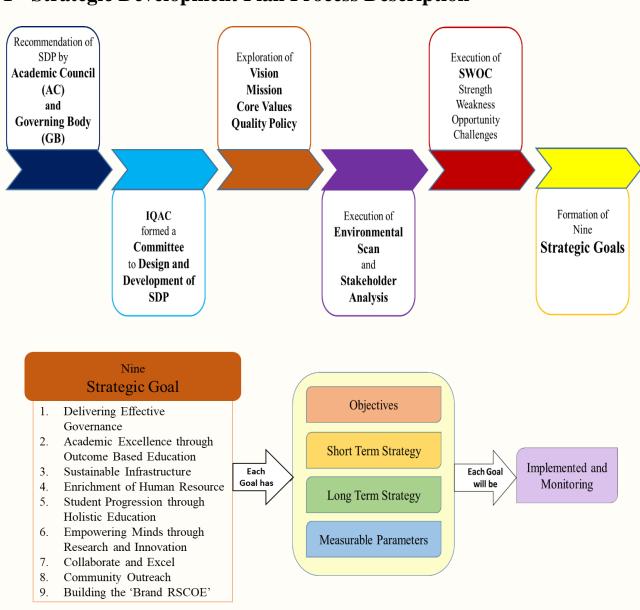
### **Quality Policy**

We, at Rajarshi Shahu College of Engineering, are committed to maximize student's satisfaction through improved performance by imparting value based quality education.

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## 1 Strategic Development Plan Process Description

### 2 Environmental Scan

There are two significant components to an environmental scan; the external environment scan (market analysis) and the internal environment scan (internal institute level). Conduction of the internal and external environmental scan provides the information about the positioning of the institute in the market and amount of goals and stakeholder expectations are achieved.

#### 2.1 External Environment Scan

#### 2.1.1 Location

The top engineering colleges in Pune host thousands of students every year coming from different states and countries. Also, Pune city is known as the east's oxford, it offers pleasant weather and the famous institutes like Symbiosis, Ferguson, and Savitribai Phule Pune University (SPPU), etc.

#### 2.1.2 Industry cluster in and around Pune

Pune is known as an IT, automobile, and manufacturing hub. The major and renowned industries in and around Pune are providing excellent opportunities for aspiring candidates.

#### 2.1.3 Engineering Education Scenario: An Overview- At National Level

Multidisciplinary and emerging technologies are increasingly getting popular as opposed to traditional engineering disciplines.

#### 2.1.4 Competition in Pune region

There are seven private universities offering engineering courses in Pune. More than 50 engineering institutes affiliated with SPPU, and more than 30 are in and around Pune. Out of these, a total of nine institutes has autonomous status. There are nine other competitors from Pune has ranked in the top 200 NIRF ranking list scores higher than RSCOE.

#### 2.1.5 Student preference in Pune Region

- Collage of Engineering Pune is obvious choice, moreover, in the last three years, few private universities are also attracting the students.
- Computer Engineering and information technology is the most demanding branch across all institutes.
- Institute's brand is an important deciding factor for prospective candidate.
- RSCOE is ranked in the top 10 private institutes.

# 2.1.6 What new program or specializations competitors are offering to confront the challenges?

Considering the emergence of new technologies in the industries and future job prospects, competitors have started introducing such technologies into the curriculum. MIT ADT,

MIT WPU, and BV are offering specialized programs to the students. Some institutes have chosen to provide specialization by introducing courses like artificial intelligence, machine learning and data analytics in the undergraduate engineering program.

#### 2.1.7 New Education Policy 2020

The major shift in policies of Higher Education Institutes (HEI) is recommended by the New Education Policy 2020 (NEP 2020). As per NEP 2020, RSCOE must evolve from current status to fit in guidelines of NEP 2020. Some of the major attributes to be achieved by RSCOE are as below:

- A single stream institutes has to offer multidisciplinary courses.
- New accreditation systems will be in place, and norms are more focused on quality, teaching pedagogy, and research.
- All affiliated colleges must transform themselves into an autonomous degree-granting college (Type 3) by 2030, or merge entirely with the university they are affiliated with or develop into a university themselves (Type 1 or 2).
- The curriculum must be designed to facilitate multiple exits for students during their UG program.
- Open Distance Learning (ODL) and online programs.
- High-performing Indian universities allow to set up campus in abroad and the top 100 universities in the world to facilitate operation in India.

#### 2.1.8 Education industry scenario in coming years in Pune region

Current private universities have strategic advantages to fit in Type 2 institutes. Few education groups planning to convert their educational institutes into autonomous and subsequently into private universities by 2030.

#### 2.2 Internal Environment Scan

#### 2.2.1 Management Commitment

Institute management is committed to provide all necessary resources for growth of the institute.

#### 2.2.2 Institute Administration (Director, Deans and Head of Departments (HODs))

All post of Deans has been created in the academic year 2019-20 as institute become autonomous. All the administrators are having more than 15 years of working teaching experience in university-affiliated institutes. RSCOE typically worked as "a well-oiled machine," where all will look at the administrative hierarchy for decision making. Being new to an autonomous institute environment, the demarcation of each administrative post's 'key responsible area' is thinly defined. Though many Dean's posts have been created, they are complimenting each other in the present situation. However, coming time, they are expected to work independently so that decentralisation can be achieved.

#### 2.2.3 Faculty perception

Faculty members are feeling proud to work in an autonomous institute. Many faculty members have achieved many milestones since foundation.

After becoming autonomous institute, HR practices and welfare schemes should be revised. To enhance teaching-learning process, faculty needs stronger internal support system which will reduce their administrative and redundant work. Therefore, faculty are in the opinion to have revised standard operating procedures and policies which suits the autonomous institute.

Currently, faculty are working on various teaching and research activity at the department level. However, in a future, faculty needs to work on interdisciplinary approach.

#### 2.2.4 Support systems

Support systems consist of student support and faculty support. There is a need to augment the support system so that students and faculty can be teaching-learning, research and other creative activities.

#### 2.2.5 Research Activities

Institute is having a PhD research centre in the department of Mechanical, Computer and Civil engineering. So there is scope of having research centres in other departments. RSCOE has good number of publications and many journals. However RSCOE has scope of publication in well referred and peer reviewed journals. Similarly, many product developed by students under various projects can be filed for patents.

#### 2.2.6 Student Enrolment

RSCOE has adequate enrolment of students from Maharashtra state. However, there is a scope of student enrolment from other states.

#### 2.2.7 Student performance

- Good university results and university toppers in every year.
- Success in extracurricular and co-curricular activities.
- Students need improvements in soft skills.

#### 2.2.8 Student Progression

• RSCOE provides better placement to its students. As per the recent trends students are more willing to join IT and associated industries.

#### 2.2.9 Extension and outreach activity

- Collaboration with two universities situated in Thailand.
- MoUs with many MSMEs
- Scope for improvement in industry interaction activity such as industrial consultancy or R&D project

- Active collaboration with TCS and IIT Ropar and, many other industries and institutes of excellence.
- Students are engaged with society through various clubs such as NSS, student welfare, etc. Moreover, RSCOE adopted five villages through Shashwat club under Unnat Bharat Abhiyan program.

## Stakeholder expectations

	Table 1 Stakeholder Expectations
Stakeholder	Expectations
Governing Body Faculties	<ul> <li>RSCOE as Brand</li> <li>Good Governance</li> <li>Attract Brighter Students.</li> <li>Achieve High Academic Excellence</li> <li>Research and Entrepreneurship Opportunity to Students</li> <li>Students to be Globally Competitive.</li> <li>Centres of Excellences</li> <li>Financial Stability</li> <li>Social Responsibility.</li> </ul>
and Staff	<ul> <li>Job Security</li> <li>Academic Freedom</li> <li>Professionalism</li> <li>Conducive Environment and Better Welfare Schemes</li> <li>Faculty and Staff Development</li> <li>Incentives for Research</li> <li>Transparent and Uniform Process</li> <li>Opportunity to Grow</li> </ul>
Students	<ul> <li>Good Academic and Experiential Leaning Experience.</li> <li>Industry Relevant Learning</li> <li>Equipped to Face Global Challenge</li> <li>All-round Development</li> <li>International Learning at Affordable Cost</li> <li>Quality Placement, Career Guidance and Entrepreneurial Opportunities</li> <li>Support for Co-curricular &amp; Extracurricular activities</li> <li>State of the Art Infrastructure</li> </ul>
Parents	<ul> <li>Branding</li> <li>Quality Teaching and Learning Process</li> <li>Disciplined Students</li> <li>Good Placement</li> </ul>
Industry	<ul> <li>Industry Ready Professionals with Right Attitude</li> <li>Strong Fundamentals Knowledge</li> <li>Strong Industry-Institution Interface: Joint Research, Consultancy</li> <li>RSCOE as Brand</li> </ul>
Society	<ul> <li>Social Service and Extension Activities by the Institute</li> <li>Skill Development and Continue Education Centre</li> <li>Resource Centre for Other Institutes</li> <li>Consultancy</li> <li>Graduates with Moral, Ethical and Responsible Citizenship</li> </ul>
Government	<ul> <li>New Education Policy 2020</li> <li>Better Citizen</li> <li>Better Engineer</li> </ul>

## 4 SWOC Analysis

For SWOC analysis, RSCOE has conducted survey among the stakeholders with the help of experts from IIT Ropar. Based on the result, below table describe the strength, weakness, opportunities, and challenges.

Based on the SWOC analysis, strategies are defined. These strategies are then categories into nine goals as mentioned in section 5 to 13.

<ul> <li>Three times NBA Accredited, NAAC Accredited (CGPA- 3.26), NIRF Ranking (201 to 250) &amp; India Today Ranking- 87</li> </ul>
• Discipline and focus on classroom teaching.
• Working under the pressure and at the last minute. This however puts much of the stress on the people associated with the institute.
• The institute has a considerable number of teachers who are doctorates in their field.
Quality Education / Academics
Dedicated faculty • Good Infrastructure
Positive Management • Discipline (among staff and faculty)
• Jobs from tech companies such as TCS, Infosys for Mechanical Engineering students
• RSCOE is confirming 100% placements (however, not in student's core fields)
Decentralisation of governance
• Not providing sufficient placement in core areas for mechanical and civil graduates.
• Poor Infrastructure and funding (insufficient space, lab space including workshop, and lab equipment/resources and sport facilities, other facilities such as ICT)
• No Sport and cultural activity (low motivation and infrastructure)
• More weight-age for theoretical teaching' less to practical
Less technical teacher from industry experience
• Lack of Consultancy, R&D, Collaborative research, industry interaction
• Less headcount of nontechnical staff which increases workload of teaching faculty.
• Not enough involvement of faculty in decision making and work distribution, policy-implementation

	Strategic Development Plan, "RSCOE: VISION 202
	• Insufficient training program (e.g. no opportunities for faculty development)
	• Old curriculum w.r.t. current industry standards, and old pedagogy
	• Urban students are not preferring in recent years. Poor in perception. No spending on marketing.
	Lack of rules and regulations
	• Rigid exam assessment structure. Faculty not able to assess as per his subject requirement, means marks are fixed for each units.
	• Students are weak in communication and in English.
	• Student weak in basic concept of physics and maths.
	• Science faculty teaching without context of engineering. No hobby based courses are present. We are not able to give unjoyful environment to students.
	• Faculty retention problem.
	• <b>Connection with various industries:</b> RSCOE have opportunity to connect with various industries in and around Pune, in terms of internship, industrial projects, placement and inviting them for delivering lectures.
OPPORTUNITI ES	• <b>Modernisation of curriculum</b> : it includes development of curriculum based on need of industry, courses for skill development, interdisciplinary knowledge, inclusion of different value added courses, societal problems, internship, industrial projects adapting the modern techniques in teaching-learning process etc.
	• <b>Placement</b> : placement of students can be opportunity in IT as well as core sectors considering RSCOE is in vicinity of various industries. Placements should be targeted with a mix of large industries as well as the smaller ancillary units that operate in and around Pune.
	• <b>Collaboration with foreign universities</b> : Internship opportunities through foreign collaboration, language training
	• <b>Competition</b> : As Pune is education Hub, lot of competition from other colleges with best infrastructure, modern equipment, best libraries, research and quality staff.
	• <b>Industrial development</b> : Rapid changes in industrial requirements due to fast-changing / emerging technologies,
~	Emerging Online education
THREATS	• Economy due to COVID-19

### 5 Strategic Goal I: Delivering effective governance

The term "governance" indicates the formal and informal arrangements that allow RSCOE to make decisions and take action. The Governance overlaps considerably with management which is seen as the implementation and execution of policies effectively. Following Objectives are set to promote good governance across a wide variety of situations at RSCOE. These objectives are framed by considering major principles of "Good Governance such as Academic Freedom, Shared Governance, Clear Rights and Responsibilities, Meritocratic Selection, Financial Stability, Accountability, Team Building and Transparency.

#### 5.1 Objectives

- Inculcate Vision, Mission and Institution Goals among the stakeholders.
- Delegation of power and accountability to all administrators for effective governance.
- Streamlining of academic and governance process
- Inclusivity of students in decision making process.
- Redefining budget practices and financial management.

#### 5.2 Short Term Strategy

#### 5.2.1 Creating and implementing Standard Operating Procedures (SoPs) and Policies

RSCOE shall develop standard operating procedures for various academic and administrative activities for standardisation and quality assurance in academics, as well in administrative levels. RSCOE will revised byelaws for Board of Studies (BoS) meeting, Academic Council (AC), Finance Committee (FC) and Governing Body (GB). Moreover, RSCOE will prepare various forms, SOPs related with students and faculties. The same shall be available on website.

#### 5.2.2 Decentralisation of administrative mechanism

Decentralization of administration with clear cut roles, responsibility, and accountability, will allow the institution to make significant strides towards realizing the goals of better administration. Therefore, RSCOE will modify existing committee structure (including Deans, HODs etc) and assign defined roles, responsibilities, and objectives. Moreover, key performance indicators, a set of targets and goal has to identify by members. Progress towards the goal realisation will be measured in administrative audit and/or through appraisal.

#### 5.3 Long Term Strategy:

#### 5.3.1 Establishing E-Governance- MIS- Data analysis

RSCOE is committed to provide complete transparency in all its academic and administrative process for effective and transparent governance. Establishment of paperless e-Office for efficient, responsive and accountable administration is to be implemented. RSCOE shall automate all the administrative tasks by implementing an ERP system.

#### 5.3.2 Revising human resource policies

RSCOE will also explore new avenues of incentives, awards & welfare measures to attract and retain experienced staff for effective Human Resource Management following steps shall be taken:

- Periodical faculty and staff development programmes.
- Comprehensive and effective performance appraisal of faculty and staff.
- Team building initiatives and good interpersonal relations.
- Implement the online performance appraisal system based on API.
- Time bound plan for filling in the vacancies with qualified faculty and staff.

#### 5.3.3 Participation of students in governance

Efficient Students' Council with wide representation of students in decision making, execution of policies and developmental aspects of the college is considered.

#### 5.3.4 Revising Budget Practices and Financial Management

For effective Financial Management following steps will be taken

- Growth oriented budgetary allocation.
- Financial flexibility within the allocated budget.
- Effective internal control, monitoring mechanism and forecast & estimation of expenditure
- Continuous efforts to obtain development grants from funding agencies such as UGC, ICSSR, DBT, DST, University etc.

#### 5.3.5 Academic Administrative Audit

Academic Administrative Audit shall be carried out every year for the continuous improvement of administrative performance. The objective of administrative audit should be:

- To understand the existing system and assess the strengths and weaknesses of the departments.
- Suggest the methods for improvement and for overcoming the shortcomings.
- To identify the bottlenecks in the existing administrative mechanisms and to determine the opportunities administrative reforms.
- To evaluate the optimum utilization of financial and other resources.

#### **5.4 Measurable Parameters**

- Departments are aligning their strategic plan, procedures, activities to meet the defined goals as per vision and mission statement and institute strategic plan.
- Assign portfolios, key performance indicators, a set of targets. Accordingly, Performance appraisal is analysed, and necessary measures will be taken.
- Revised bylaws of BoS, AC, FC and GB; standard operating procedures and policies are approved from academic council and governing body and uploaded on RSCOE websites and execution.

- Revised human resource policies are in place.
- Smooth academic and admin activities using ERP/MIS system.
- Students are actively participating in various governance bodies.

## 6 Strategic Goal II: Academic Excellence through Outcome Based Education

Student must be equipped with the skillsets to be in pace with rapidity of knowledge upgradation. Outcome Based Education (OBE) is a changing trend modern and 21st century institutes by sifting education from "teacher-centered" classrooms towards "Students-Centered" classrooms with focus on learning outcomes. RSCOE is determined achieve academic excellence through adopting modern Outcome Based Education (OBE) methods and techniques.

#### 6.1 Objective

- Curriculum development considering graduate attributes, contemporary technologies and trends.
- Tie-up with institute of eminence/reputed industry for curriculum development.
- Establishing of Teaching and Learning Centre (TLC).
- Holistic development of student with multidisciplinary approach for progression.

#### 6.2 Short term strategy

#### 6.2.1 Designing the Curriculum of upcoming batches asper New Education Policy 2020 (NEP 2020) and by taking inputs from reputed industry and institute of eminence such IITs/NITs

NEP 2020 emphasise on recognizing, identifying, and fostering the unique capabilities of each student, by sensitizing teachers as well as parents to promote each student's holistic development in both academic and non-academic spheres. RSCOE has taken a consultancy from expert team of IIT Ropar for developing curriculum structure for undergraduate programme of RSCOE, further expert team of IIT Ropar will design detailed curriculum for undergraduate mechanical engineering programme.

#### 6.2.2 Offering Minors and Honours along with major degree.

RSCOE will offer the options of pursuing minors and honours to students joining B. Tech degree program. This allows students to have additional knowledge in some focus areas, providing them a career edge or pursue an area of specialised study in their field of interest.

#### 6.2.3 'Handbook of Information' for students [continuous process]

RSCOE will publish and circulate 'Handbook of Information' for students giving information about UG and PG programs, courses, electives, grading system, rules and regulations, fees structure, clubs, professional chapter and other information. Handbook will be made available for every batch through website before the commencement of new academic year.

#### 6.2.4 Establishing Teaching and Learning Centre (TLC)

Teaching and Learning Centre (TLC) will be established for the design, development and monitor the implementation of curriculum as well as; study, research, development, and implementation of innovative methodologies/technologies in the teaching-learning processes. The committee will also help RSCOE to streamline various academic processes.

#### 6.3 Long term strategy

#### 6.3.1 Restructuring of the department

Department of humanities and social science (HSS) will be formed. Under the department of humanities and social science, courses on languages, home science, music, economics can be offered. In a long term, RSCOE has to check the response of students for various minors. Depending upon the response, splitting of department of Applied science in department of physics and department of chemistry will be taken.

#### 6.3.2 Learning Management System (LMS) and Virtual Learning Environments (VLE)

In response to COVID 19, all educational felt the need of digital education. In the new era of post-COVID 19, RSCOE will have a comprehensive learning management system that will facilitate student and teacher comprehensive platform with ease in teaching and learning. LMS will also facilitate the academic credit bank of each student. VLE of RSCOE will have stronger discussion, forum, or student collaboration features.

#### 6.3.3 Inclusion of value addition courses, training, or certification

Currently, RSCOE is organizing many technical sessions as extra activity, such as robotic certification courses and training courses for developing soft skills for final year students who appear for campus interviews. Such courses shall be part of the curriculum.

# 6.3.4 Move away from high-stakes examinations towards more continuous and comprehensive evaluation.

This objective can be achieved by using more continuous and formative, and alternative assessment methods. The alternative assessment method can be reconfigured for online assessment methods. The current practice of sharing detailed readymade notes, question and answer bank and asking questions from the same in examination shall be stopped. Assessment should encourage the critical thinking, analysis ability of students.

#### 6.3.5 New UG and PG Programs on Emerging and Market Relevant Technologies

Once the Major and Minor programs are reached a certain level of maturity, RSCOE shall diversify its educational offering. The offering will be of two types, new undergraduate programs (Example: B.Tech in Biotechnology) and the other is starting new programs in disciplines currently not present in the Institute (B.Tech in Robotics and Automation). Similarly, RSCOE shall offer new M.Tech. programs based on current industry demand and need.

#### 6.4 Measurable Parameters

- Each BoS will design the curriculum in association with at least one institute of eminence and/or industry of repute.
- Curriculum as per NEP 2020
- Introduction of courses on niche areas in domain, arts and HSS.
- Inclusion of value addition courses, training, or certification courses.
- Publication of 'Handbook of Information' before commencement of revised curriculum pattern.
- Streamlines curriculum development, monitoring and evaluation process.
- Digitalisation of students' academic record and academic credit bank.
- Online lecture delivery by LMS and hassle-free proctored exam
- More comprehensive examinations.
- Full admissions and job placement for new UG and PG Programs

## 7 Strategic Goal III: Sustainable Infrastructure

Effective infrastructure planning is pivotal to create positive and conducive atmosphere for students learning, research and innovation in their quest for higher education. The key mantra for effective infrastructure planning is space utilization, proper classroom design, seating and furniture, good facilities for both teachers and students. Pedagogy complemented with supporting infrastructure can create wonders in a student's learning and outcome. With the growth of the RSCOE, it is imperative to prepare phase wise plan for the period of five years to develop the infrastructure needed for academics, curricular and extracurricular activities. It is not only important to build new infrastructure it is also essential to maintain, renovate and augment the existing ones.

### 7.1 Objectives:

- Make upgradation in laboratory and classroom infrastructure
- Maintain green campus
- Enhance student facility infrastructure
- Infrastructure for Centres of Excellence
- Creating multidisciplinary centre
- Modernise the Teaching- Learning Infrastructure

### 7.2 Short term strategy

#### 7.2.1 Modernisation of laboratory and classroom infrastructure

RSCOE shall modernise existing laboratory and classroom infrastructure to meet the curriculum requirement and to improve hand on learning experience of students.

#### 7.2.2 Transforming and maintaining the green campus

RSCOE is committed towards the green movement to mitigate the impact of climate change. RSCOE will contribute it's a bit by tree plantation activity, install rainwater harvesting, and adopt the policy of zero use of plastic. RSCOE will also aim to generate and use of at least 5% electricity out of total consumption through renewable energy resources. RSCOE will also install water recycling plant and will aim to use the recycle water for plantation and gardening activities.

#### 7.2.3 Provide infrastructure for various students' facilities.

RSCOE is always given the priorities and conscious to students' health. Thus, RSCOE will provide adequate medical facility in the campus with well-trained doctors and nurses.

#### 7.2.4 Creation of indoor sport facility

Sport ground is one of the desired facilities that every student wants into the campus. However, with the space limitation, the best option would be RSCOE shall provide an indoor sport facility such as separate room for carom, chess, table tennis etc.

#### 7.3 Long term Strategy

#### 7.3.1 Creating research Infrastructure

In the next five years, RSCOE shall establish a Centre of Excellence (CoEs) in the selected thrust areas. These CoEs shall have state of the art equipment to enable world-class research and innovation. The equipment will also be made available for industries, outside researchers on chargeable basis. The CoE shall house cabins for the faculties and designated seating cubicles for research scholars and other PG students.

#### 7.3.2 Modernised Library & Information Centre

RSCOE will update the library by buying latest eBooks and e-Journals from renowned publications based on latest technology and as per futuristic syllabus.

#### 7.4 Measurable Parameters

- Modern lab instruments, equipment and software available in the laboratory and classroom equipped with ICT facilities.
- Installation of rainwater harvesting project and water recycling plant
- Generation of 5% electricity through renewable energy sources out of total consumption
- Modernisation of medical facility and availability of medical staff 24x7
- Availability of indoor sport facility
- Research infrastructure enabling research activities in place
- Availability of ebooks/books and journal publications based on latest technology and as per curriculum requirement

## 8 Strategic Goal IV: Enrichment of Human Resource

The strategic goal of RSOCE is to attract, develop and retain a high performing, inclusive and diverse workforce and fosters a healthy, safe, well-equipped and productive work environment for all stakeholders in order to maximize individual potential and expand organizational capacity.

This goal provides general information about the services and the strategies to address current and future human resource needs of RSCOE.

#### 8.1 Objectives

- Standardised human resource (HR) processes and practices
- Critical talent management
- Attraction and retention policies implementation
- Employee welfare

#### 8.2 Short term strategy

#### 8.2.1 Streamline the Recruitment and Selection procedures

RSCOE will streamline the recruitment and selection procedure to recruit best talent. The Recruitment and Selection is the paramount importance to recruit staff with proper skills and attributes to enable the institution to fulfil its objectives.

Being apart, the institution adheres to the AICTE/UGC/Affiliating University Guidelines attracting the right talent through the panel of Staff Selection Committee. RSCOE under the ambit of JSPM and Savitribai Phule Pune University, an effective roster approval may seem challenging for regular appointments, but it can be streamlined by having separate roster for RSCOE.

The incumbent who got shortlisted will then join the RSCOE institution with proper joining and induction formalities.

# 8.2.2 Recruitment of faculty for Humanities and Social Science (HSS) & niche engineering domain

RSCOE have to introduce /have many courses related to Humanities and Social Sciences such foreign languages, courses related to economics and other courses. Currently, these courses are taught by engineering faculty. Therefore, RSCOE will recruit faculty of HSS background. Similarly, latest subjects such as robotics and automation, mechatronics are taught by mechanical engineering faculty who has expertise in other areas. Therefore, RSCOE will recruit faculty having the desired area of specialisation.

#### 8.2.3 Faculty Performance Appraisal and Career Advancement Schemes

Faculties are being judged and evaluated by Students, HODs, and Director of RSCOE through Self performance Appraisal. The various parameters include the Results Analysis, Student's Feedback, Conferences / Workshops attended, Research Areas, etc so as to

distinguish between Evaluation, Assessment and Review. Based on appraisal, incentives, awards will be given and improvement measures (if required) will be suggested based on SoPs and policies. Suitable measures shall be taken for career advancement of faculty and staff. RSCOE encourages its faculties to update their Academic Performance Indicator (API) regularly. The objective of initiating this scheme is to ensure that the faculty would enhance their academic credentials in line with the institute expectations by participating more actively in academic, research and administrative duties.

# 8.2.4 Conducting workshops, refresher courses and training programs to the faculty for autonomy

As all faculties, Deans and HoD are in transforming stage from traditional affiliating system to autonomy; RSCOE will identify the training needs for effective governance and will provide the training through various workshops, seminars and through deputation to various institutes of eminence.

# 8.2.5 Recruitment of adjunct faculty from Industry or Eminent Institutes and skilled technical staff

The key thrust is to improve the employability prospects of the graduates, the quality and quantum of research. Therefore, it becomes imperative to involve experts, professionals and researchers from diverse fields to contribute to the emerging needs of engineering education system.

To enhance relationships with the industry, renowned academicians and its alumni, it is proposed to bring in professionals as adjunct faculty from the industry/academia. RSCOE may have 10% visiting/adjunct faculty from the industry or well-reputed universities or IITs.

Technical staff is one of the most critical parts of the support system in any institutes. Moreover, due to autonomy, admin and other work are significantly increases in the institute. Therefore, qualified, well trained, and a sufficient technical supporting staff should be available in the institute.

#### 8.3 Long term strategy

#### **8.3.1** Increase the number of doctorate faculty members.

RSCOE should focus on increasing the number of faculty with Ph.D. Faculty shall be hired from diverse and global backgrounds to ensure that they blend in a world-class curriculum and pedagogy. It is essential that the institution also works on a faculty development and retention strategy to harness their talent. Therefore, the percentage of researchers i.e. Ph.D. faculties, should be increased to 30% by 2022 and 50% by 2025 of total faculty. Faculty should have PhD degree obtained preferably from IITs/NITs and other top NIRF ranked institutes.

#### 8.3.2 Adoption of Tenure Track [from implementation of NEP 2020]

NEP 2020 emphasizes adapting appropriately designed permanent employment of tenure track system by 2020 across all HEI to stop the prevalent approach of ad-hoc, contractual positions. However, big debate is taking place there regarding the tenure track's success at the government level. But RSCOE should be prepared beforehand with its own designed Tenure Track system by 2030.

#### 8.4 Measurable Parameters

- Streamline and standardised HR policy document
- Number of faculty members who have been attaining career advanced schemes
- Recruitment of HSS and faculty of niche areas
- Minimum 30% faculty should be Ph.D. holders by 2022 and 50% by 2024
- 10% faculties are adjunct faculty from industry or institute of eminence.
- Sufficient and qualified staff available for lab and other teaching-learning process
- Faculties receiving various incentives for teaching-learning, research and other contribution.

## 9 Strategic Goal V: Student Progression through Holistic Development

Student experience in the RSCOE is not limited to class attendance. In fact, students may be involved in various out-of-class activities implying both horizontal interaction with peers and vertical interaction with faculty. The participation in these activities may influence both students' performance and career.

#### 9.1 Objectives

- Setting up holistic environment within the campus.
- Develop the creativity and critical thinking among students.
- Enhance the students' confidence, leadership qualities, management ability and communication skill.
- Increase the job placement opportunities and embedding entrepreneurship skills.

#### 9.2 Strategy

#### 9.2.1 Setting up holistic environment: Formation of student's clubs and other activities

NEP 2020 emphasis on setting up a holistic environment in the campus through various clubs and its activities. Through various clubs, extracurricular activities will be supported by the RSCOE, including support for the major technical and cultural festivals conducted in the campus. RSCOE shall fund the various clubs, activities organized by the students, and community projects. RSOCE will establish clubs under two categories: (1) Technical clubs and (2) Art and social clubs. Institute will financially support the activities organised

by various clubs. Such clubs shall kindle and nurture the love for technology, each club with its own specialization and guest lectures by prominent personalities in the world of technology and science. By participating in the various events organised by the clubs, Students equipped with soft skills required for new job opportunities. Also it will improve the students performance at state, national and international level technical and cultural competitions.

#### 9.2.2 Enhancing Job Competence

RSCOE will encourage student participation in GATE, CAT, cross-institutional competitions, talent hunt and technical competitions organised by industries and global internships. Through its alumni portal RSCOE will publicise the employer networks with the help of alumni and by training and placement cell.

#### 9.2.3 Representation of students in various institute bodies

To enhance the students' confidence, leadership qualities, management, and communication skills, students' representation shall be in placed in at various institute bodies such as placement cell, BoS, anti-ragging committee, student's grievance cell, and other bodies. The voice of student representative shall be seriously heard. Student inputs in the governance of the institute will be increased via meetings of student representatives with the Deans and the Board of Governors.

#### 9.2.4 Provide global perspective to students.

RSCOE shall collaborate with prominent universities at national and international level and facilitate student exchange programs of short-term visits (typically of 1 or 2week) of exchange students and research scholars in between semesters. Also, RSCOE will explore internship opportunities in reputed industries and universities in India and overseas

#### 9.2.5 Cultivating Entrepreneurial Spirit and Experience

RSCOE shall strengthen the platform to promote entrepreneurship through the IIRC and entrepreneurship cell. RSCOE will promote key concepts in of entrepreneurship through formal course offerings, extra-curricular activities, student societies, and outreach activities. Through the extension and outreach activities, institute will widen the students' exposure to entrepreneurial experiences by collaborating with local and regional entrepreneurial programmes and engaging them as volunteer mentors. RSCOE will also help in filing intellectual property rights (IPR) to boost entrepreneurship.

#### 9.3 Measurable Parameters

- Formation of various technical and cultural clubs
- Regular students' activities in various technical and arts clubs.
- Involvement of students in the governance of institutes.
- Increase the placement in industries, government sectors.
- Student's admissions in reputed institutes through GATE, GRE, GMAT etc.
- Increase in the entrepreneurships and incubation activities

- Number of Patents published by faculties and students.
- Alumni participation in the activities.

## 10 Strategic Goal VI: Empowering Minds through Research and Innovation

"Research is creating new knowledge." -Neil Armstrong

RSCOE strongly beliefs that in the new era of technology advancement, and globalization, educational institute will be sustainable if it strives towards the new knowledge creation through research. Our vision about the research is align with the vision of NEP 2020 which states that "Evidence from the world's best universities throughout history shows that the best teaching and learning processes at the higher education level occur in environment where there is also a strong culture of research and knowledge creation; conversely, much of the very best research in the world has occurred in multidisciplinary university settings."

#### **10.1 Objectives**

- Boosting research culture across the institute
- Create awareness and opportunities in Research and Development among the faculty and students.
- Motivate the faculty members of the group for R&D activities in the area of their specialization
- Undertake research and consultancy activities and development projects offered by various agencies

#### **10.2 Short term strategies**

#### **10.2.1 Develop 'Research Ethics Policy'**

It is important that research shall be conducted with the highest standards of integrity and probity. RSCOE shall set out the principles and code of conduct guiding the institution with regards to research of all kinds, in all the disciplines. Therefore, RSCOE shall develop a 'Research Ethics Policy'.

#### 10.2.2 Facilitation of research by providing seed grants.

A stable administrative support system is crucial for the research. A firm commitment of time, effort, money, and resources is required on top management, the administration, and the academic leadership. RSCOE shall invest in the research facility by upgrading or procuring the suitable instruments and equipment. RSCOE should support the research internally by providing seed grants to selected projects. RSCOE shall Supporting faculty members to work on research projects by providing resources and motivating for carrying out internal and external industry project. To further encourage the faculty members, Annual research event will be conducted in the every department.

#### **10.3 Long term policy**

## **10.3.1** Strengthening of Institutional Innovation and Research Councils (IIRC) at the institute level [continuous]

NEP 2020 policy is paving way of National Research Foundation (NRF). Centre of Excellence (CoEs) will be established in already existing state/central/private educational institutions of very high repute and will be guided by central NRF policies. These CoEs will work with local IRCs/institutions/researchers to develop research proposals as per the thrust area.

Considering the future possibility, RSCOE will strengthen the Institutional Innovation and Research Councils (IIRCs) at the institute level. Entrepreneur cell shall work in association with IIRC to help the commercializing the ideas and projects. The cell shall identify the potential students and projects in the first year and second year of program. The cell will help the commercialising of such ideas and projects and shall establish function ecosystem for scouting ideas and pre-incubation of ideas. The cell will also devise Start-up/ entrepreneurship supporting mechanism in the RSCOE.

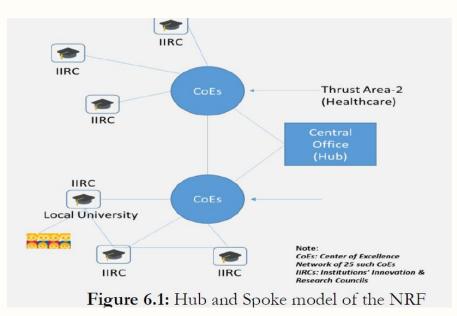


Figure 1 Snapshot taken from EQUIP document

#### 10.3.2 Having direction, niche, or strategy for research

A research culture is enhanced by determining a research theme or thrust areas. Thrust areas will be selected based on national and State priorities/missions. Thrust areas currently under consideration by the Ministry of Education are Healthcare, Sustainable Habitat, Information, and Communication Technology (IoT, AI, Cyber Security), Nanotechnology Hardware, Security and Defence, Environmental Sciences and Climate Change, Advanced Materials, Energy, and Manufacturing (Based on Imprint Program of MHRD).

National/ State Mission Energy Security and Efficiency	Industry relevance Information & Communicatio n Technology (IoT, Artificial Intelligence)	Import Substitution Manufacturin g Technology	Social Science and Humanitie s
Environmen t and Climate	Nano Technology	Security and Defence	
Healthcare Technology Water Resources Sustainable habitat	Advanced Materials		

Table 2Indicative Thrust Areas of Centre of Research and Innovation Excellence (CoEs)[21]

RSCOE will develop research expertise in some of the above thrust areas. This will create a niche, and it will differentiate the RSCOE from the rest of the institutes.

### **10.4 Measurable Parameters**

- Number of publications in reputed Scopus/WoS index journals.
- Faculty undertaking various research projects.
- Students' involvement in the Undergraduate research.
- Increase in admission in postgraduate and doctoral programs.
- Faculty receiving grants from various agencies for their research projects.
- In campus Start-ups are coming up.
- 5 Star Atal ranking ARIIA
- 'Research' is a differentiate factor for RSCOE from the rest of the institutes based on research capabilities.

## 11 Strategic Goal VII: Collaborate and Excel

In the world of globalization, the crucial thing to achieve excellence includes strong interaction, partnership and the development of associations with industries, universities, and other organizations. To become a world-class institute, it is important to be a partner with the best for knowledge enrichment, mutual exchange, and resource utilization. Enhanced and active collaboration with the industries, universities and other organizations at national and international level would help RSCOE to offer a holistic and experiential learning to the students and faculty members.

Industry Interaction is a mode of communication that encourages the faculty members and students of RSCOE to interact with the industry in all possible ways with the spirit of developing mutual benefit. The objectives of this industry interaction are based on the relationship pillars like the participation of industry experts in the academic process, industry exposure and visits to students/faculty, mutual agreements, joint programmes, sponsorship/fellowships, etc.

Global Interaction is the way to encourage foreign university engagement with RSCOE to augment academic resources, accelerate the speed of quality reform, create technology capacity of RSCOE excellence. This interaction helps to formulate and implement proposals for creating numerous opportunities like summer/winter internships, international exchange of students, joint research work, etc. The internationalization process of RSCOE should be fostered with the premier aim of providing direct benefit to RSCOE students and faculty members.

## **11.1 Objectives:**

- Development of national and international interaction culture across the institute
- Create awareness and opportunities for students and faculty members in industry and global level.
- Offer numerous industry exposure opportunities to students and faculty members.
- Develop sustainable activities and partnerships to improve academic and research quality.
- Collaboration with world-class universities/ research institutes

### **11.2 Short Term Strategy**

#### 11.2.1 Develop 'National and International Relation Policy'

It is vital that collaboration should be conducted with the highest intensity of relationship. RSCOE shall define the principles, standard procedures with regards to collaboration between partners at national and international level. Hence, there has to a standard policy at institute level.

#### 11.2.2 Facilitating industry and university alliances

For academic excellence, the RSCOE should deepen establish links with partners (industry, university, etc.). The institute would excavate existing or established network of

industries like TCS and global universities like King Mongkut's Institute of Technology Ladkrabang (KMITL), Thailand, University of Malaysia, Pahang, etc. Such type of initiatives will provide unique opportunities to all the students and faculty members of RSCOE. RSCOE will focus on knowledge transfer between RSCOE and university/industry through conferences, guest lectures.

## 11.3 Long Term Strategy

#### **11.3.1 Enhance Academic collaborations**

The institute will make deeper its engagement with industries to promote industry expert's participation in institutional process like curriculum design, course content development, industrial internship and projects. The students will have a choice to study abroad for a short duration under international internship programme. Similarly, the student and faculty exchange programme will entail the number of joint academic study. RSCOE will identify the higher education offering universities/countries and initialize collaborations with them. This will help to increase identity of RSCOE globally.

The strategic partnership will help to build a relation with industries and universities in the area of curriculum planning, development of courses, help in resource management like laboratory, technology, space, etc. Similarly, the collaborative research will involve student and faculty in a research center to promote research project, higher education (MS, PhD, PostDoc, etc.)

Student internship and exchange programs (3-4 weeks) in between two semesters in a year will groom the students at the global level. The RSCOE will plan faculty exchange programs to teach or learn new technologies or work on a research topic at other university. RSCOE will identify international universities to create joint programs that enables to transfer credits by the year 2022.

#### **11.3.2 Increased Industry Engagement**

To understand the requirements of industries, it is vital to have collaboration with industries. By leveraging talent, time and treasures from industry, the industry engagement would be productive. This productive work could cater the service that solves the society problems. To match the pace of industry, the RSCOE would agree on establishment of Center of Excellence (CoE), industry-oriented programs, research activities, etc.

### **11.4 Measurable Parameters**

- MoUs with partner universities as per 'National and International Relation Policy' of RSCOE.
- Student exchange program with at least two partner universities
- At least two joint research projects with industries and universities per year.
- Industry based Curriculum Design and Development for all years of B.Tech.

• At least 10% as a guest faculty from industry.

## 12 Strategic Goal VIII: Community Outreach

**Extension and Community Services** involves students and faculty members of RSCOE to serve community. This is one type of teaching pedagogy where students learn and develop through active participation in organized community service. The community means both industry and society. The aim is to meet local community needs, while developing their academic skills, civic responsibility and commitment to the community. The objectives of these activities are to strike and strengthen relations with industry, to contribute directly to society at large and to spread awareness in the community about the important contributions of RSCOE.

## **12.1** Objectives:

- Improve perception of RSCOE
- Spreading Awareness Programs to Empower the Citizens
- Mechanism to Understand Local Needs and Timely Delivery
- To Develop Vocational Training That Assist the Local Persons to Get Jobs

### **12.2 Strategies**

#### 12.2.1 Partnership with industries

The courses, such as Robotics & Automation, Mechatronics, are also being offered in many IITs and foreign universities. Many industries are also providing partnerships for such courses. RSCOE should collaborate with such institutes for the development of the curriculum. RSCOE shall also work with industry for R&D activities and consultancy activities. The collaboration will also be feasible in conducting social events or programs. The academic partner benefits in many ways, such as the enhanced impact of the research base and increased opportunities for students.

### 12.2.2 Organise community outreach programs.

RSCOE will extend its outreach to society by conducting various camps such as health awareness, basic educations. RSCOE shall also participate in Unnat Bharat Abhiyan and adopt village for its development by organising various activities and NSS camps.

To regain the share of admission count from Pune region, RSCOE shall organised career guidance seminars in Pune and PCMC region and published career articles in local newspapers. Digital marketing has become an inevitable part of all educational institutions. Therefore, to boost admissions with digital marketing is a prominent way for the institutes. RSCOE hall use various digital marketing strategy such as Search Engine Optimization (SEO), Pay-Per-Click Advertising, Facebook Ads, newspapers etc.

Organising guest lectures, international conferences, technical competitions etc

RSCOE shall build up image of reputed institute focused on academic excellence by organising conferences on emerging areas and invite prominent speakers across the globe.

#### 12.2.3 Betterment of poor and underprivileged people by providing technical solutions.

Faculty or students shall conduct research intended to respond to pressing problems or issues identified by local communities, state, national or international agencies, business, or other public and non-profit organizations.

#### 12.2.4 Involvement of students in social issues

RSCOE shall encourage students to establishing clubs such as Shashwat, NSS, Rotract and other clubs. These clubs will work for the cause which directly benefits the society.

### **12.3 Measurable Parameters**

- At least one course is designed by industry in each department.
- Industries helping in laboratory development in the form of equipment or donation.
- Social events organised in collaboration with industries.
- Number of projects executed or supported.
- Increase enrolment from Pune region.
- Secure position in first 5 place in Pune region
- One international conference every year.
- Provide techno-social solution of at least one identified society problem.

## 13 STRATEGIC GOAL IX: Building the 'Brand RSCOE'

Creating the brand name and then promoting it, is very essential to attract students from far off places. A brand name for educational institutions is defined by intangible factors like the quality of the education it imparts, its faculty, culture and resources available for students. Various other factors like campus size, infrastructural facilities available, quality of the graduating batch and their track recording getting jobs, assistance in placement of the students after completing their studies are very much relevant. RSCOE institute must define its brand, decide what it stands for, articulate its distinctive features, develop a brand plan and then implement it. Effective brand building should take a holistic view of the institute and capitalize on its strengths and unique qualities.

### **13.1 Objectives:**

- To regain top 5 position among engineering institute in Pune
- Design and Development of Brand Building Policy at Institute level
- Understand and analyze the institute's brand value from the stakeholders
- Financial support from management/leadership to enhance and execute branding activities
- Undertake the communication activities to increase the brand value of the institute
- Enhancing Academics and R&D Activities to gain brand value

#### **13.2 Short Term Strategy**

#### 13.2.1 Organising regular events and activity for stakeholders

To build up the brand in the society, RSCOE shall Invite renown personalities for events and arrange speech or sessions. Such event will be published widely through print, digital and social media to improve the perceptions of RSCOE.

#### **13.2.2** Tie up with media.

Without a proactive public relations (PR) effort, there won't be meaning behind your branding. Without PR, a limited audience will learn about, understand and internalize your company's unique message, visit your website. Therefore, RSCOE shall tie up with media for branding.

#### 13.2.3 Increase the access of RSCOE website.

RSCOE shall update the notice, forms, standard procedures, policies, syllabus and other information on website, so all stakeholders can retrieve necessary information when required.

#### **13.3 Long Term Strategy**

#### **13.3.1 Development of Brand Building Policy**

Higher education institutions are experiencing environmental changes like privatization, internationalization, decentralization, etc. Due to this, the competition is high and leading to form and execute branding activities. Hence, it is required to have standard system at RSCOE. This institute shall define the principles, standard procedures with regards to branding activities at regional, national, and international level.

#### 13.3.2 Enhance digital presence.

To gain the enrolment from Pune region, digital marketing strategy has to be adopted. Marketing has become an inevitable part of all educational institutions. Therefore, to boost admissions with digital marketing is a prominent way for the institutes . Today, marketing strategies to increase student enrolment revolve around online channels, like social, email, and search. Institute may adopt below marketing strategies.

### **13.4 Measurable Parameters**

- Increase enrolment from Pune region and other states.
- Improvement in placements.
- Attracting meritorious students
- Secure position in first 5 place in Pune region in terms of admission

## **14 STRATEGY IMPLEMENTATION AND MONITORING**

Upon receiving the approval of Strategic development plan "VISION 2025" from the Governing Body then the next immediate step is its implementation in true spirit. Strategy when being implemented, the progress shall be measured from time to time through the IQAC. SMART (specific, Measurable, Attainable, Realistic and Time bound) concept shall be used of while arriving at implementation plans. All the measures of success are clearly spelt out in the implementation document and Head of the Institute (Director) along with leadership team is the custodian for implementation and its success.

### **14.1 Implementation Plan at Institution Level**

Strategic Goal	Responsibility
Delivering effective	GB, Chairman, Members of GB
governance	
Academic Excellence	Principal, Dean (academics), HODs,
through Outcome	Faculty and Staff
Based Education	
Enrichment of Human	GB, Chairman, Director
Resource	
Sustainable	GB, Chairman, Director, HODs, Deans
Infrastructure	(Academics),
Student Progression	HODs and Faculty, Dean (SP&IR) and HoDS

through Holistic Development	
Empowering Minds through Research and Innovation	Dean (Research), Entrepreneurship Coordinator, Deans Academics,
Collaborate and Excel	Dean (SP&IR) and Dean (IR)
Community Outreach	Dean (Student affairs), HoDs, Faculty,
Building the 'Brand	GB members, Leadership team & Public
RSCOE'	Relations team

# 14.2 Measurable during Implementation

Strategic Goal	Measurable Parameters
Delivering effective governance	<ul> <li>Revised bylaws of BoS, AC and GB; standard operating procedures and policies are approved from academic council and governing body and uploaded on RSCOE websites and execution.</li> <li>Performance appraisal is analysed, and necessary measures are taken of all Deans, HoDs, and other administrators.</li> <li>Human resource policies are in place.</li> <li>Use of MIS/ERP for various approvals and data collection.</li> <li>Students are actively participating in various governance bodies.</li> </ul>
Academic Excellence through Outcome Based Education	<ul> <li>Each BoS will design the curriculum in association with at least one institute of eminence and/or industry of repute.</li> <li>Curriculum as per NEP 2020</li> <li>Introduction of courses on niche areas in domain, arts and HSS.</li> <li>Inclusion of value addition courses, training, or certification courses.</li> <li>Publication of 'Handbook of Information' before commencement of revised curriculum pattern.</li> <li>Streamlines curriculum development, monitoring and evaluation process.</li> <li>Digitalisation of students' academic record and academic credit bank.</li> <li>Online lecture delivery by LMS and hassle-free proctored exam</li> <li>More comprehensive examinations.</li> <li>Full admissions and job placement for new UG</li> </ul>

	and PG Programs
Enrichment of Human Resource	<ul> <li>Streamline and standardised HR policy document</li> <li>Number of faculty members who have been attaining career advanced schemes</li> <li>Recruitment of HSS and faculty of niche areas</li> <li>Minimum 30% faculty should be Ph.D. holders by 2022 and 50% by 2024</li> <li>10% faculties are adjunct faculty from industry or institute of eminence.</li> <li>Sufficient and qualified staff available for lab and other teaching-learning process</li> <li>Faculties receiving various incentives for teaching-learning, research and other contribution.</li> </ul>
Sustainable Infrastructure	<ul> <li>Modern lab instruments, equipment and software available in the laboratory and classroom equipped with ICT facilities.</li> <li>Installation of rainwater harvesting project and water recycling plant</li> <li>Generation of 5% electricity through renewable energy sources out of total consumption</li> <li>Modernisation of medical facility and availability of medical staff 24x7</li> <li>Availability of indoor sport facility</li> <li>Research infrastructure enabling research activities in place</li> <li>Availability of ebooks/books and journal publications based on latest technology and as per curriculum requirement</li> </ul>
Student Progression through Holistic Development	<ul> <li>Formation of various technical and cultural clubs</li> <li>Regular students' activities in various technical and arts clubs.</li> <li>Involvement of students in the governance of institutes.</li> <li>Increase the placement in industries, government sectors.</li> <li>Student's admissions in reputed institutes through GATE, GRE, GMAT etc.</li> <li>Increase in the entrepreneurships and incubation</li> </ul>

	<ul> <li>activities</li> <li>Number of Patents published by faculties and students.</li> <li>Alumni participation in the activities.</li> </ul>
Empowering Minds through Research and Innovation	<ul> <li>Number of publications in reputed Scopus/WoS index journals.</li> <li>Faculty undertaking various research projects.</li> <li>Students involvement in the Undergraduate research.</li> <li>Increase in admission in postgraduate and doctoral programs.</li> <li>Faculty receiving grants from various agencies for their research projects.</li> <li>In campus Start-ups are coming up.</li> <li>5 Star Atal ranking ARIIA</li> <li>Research is a differentiate factor for RSCOE from the rest of the institutes based on research capabilities.</li> </ul>
Collaborate and Excel	<ul> <li>MoUs with partner universities as per 'National and International Relation Policy' of RSCOE.</li> <li>Student exchange program with at least two partner universities</li> <li>At least two joint research projects with industries and universities per year.</li> <li>Industry based Curriculum Design and Development for all years of B.Tech.</li> <li>At least 10% aa a guest faculty from industry.</li> </ul>
Community Outreach	<ul> <li>At least one course is designed by industry in each department.</li> <li>Industries helping in laboratory development in the form of equipment or donation.</li> <li>Social events organised in collaboration with industries.</li> <li>Number of projects executed or supported.</li> <li>Increase enrolment from Pune region.</li> <li>Secure position in first 5 place in Pune region</li> <li>One international conference every year.</li> <li>Provide techno-social solution of at least one</li> </ul>

	identified society problem.
Building the 'Brand RSCOE'	<ul> <li>Increase enrolment from Pune region and other states.</li> <li>Improvement in placements.</li> <li>Attracting meritorious students</li> <li>Secure position in first 5 place in Pune region in terms of admission</li> </ul>

# **15 Strategic Plan Metrices**

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
D	elivering effective g	overnance					
1.	Decentralization of Institute Administration	Delegation of Powers of Deans, HoDs, etc	Director, RSCOE		March 2022	Assign portfolios, key performance indicators, a set of targets	Decentralisation document approved by authorities. •Performance appraisal is analysed, and necessary measures are taken
2.	Creating and implementing Standard Operating Procedures (SoPs)	Revision of byelaws for Board of Studies (BoS) meeting, Academic Council (AC) and Governing Body (GB)	Dean, Planning		March 2022	Byelaws for Board of Studies (BoS), Academic Council (AC) and Governing Body (GB).	Approval from GB.
	and Policies	Prepare various forms, SOPs related with students	Dean, Academics		March 2022	Forms, SOPs are prepared	Approved forms, SOPs are available on website.
		Prepare various forms, SOPs and forms related with faculty	Dean, Administration		March 2022		Approved forms, SOPs, policies are available on website.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
3.	Establishing E- Governance- MIS- Data analysis	Implementation of ERP Management and Digital Communication System	Dean, Planning		March 2022		Smooth academic and admin activities
4.	Human resource policies	Policy for incentives, awards & welfare	Dean, Planning		March 2022	Policy for incentives, awards & welfare	Periodical faculty and staff development programmes (at least one activity every year)
							Comprehensive and effective performance appraisal of faculty and staff (March every year)
							Team building initiatives and good interpersonal relations.
							Implementtheonlineperformanceappraisalsystembased on API from academic year2021
							Filling the vacancies with qualified faculty and staff before next 2021-22 academic year and then regularly (roster).
5.	Participation of students in governance	Formation of student council.	Director RSCOE		June 2022	Formation of student council.	Efficient Students' Council with wide representation of students in decision making, execution of

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
							policies and developmental aspects.
6.	Budgetary Practices and Financial Management	Setup efficient mechanism for financial management			June 2022	Mechanism in place with revised delegation of financial power.	Financial freedom within the allocated budget. Approval of financial documents.
7.	Academic Administrative Audit	Setting the mechanism for conduction of administrative audit	Dean, administration, and director	Dec 2021	At the end of every academic year	To understand the existing system and assess the strengths and weaknesses of the Departments Suggest the methods for improvement and for overcoming the shortcomings. To identify the bottlenecks in the existing administrative mechanisms and to determine the opportunities administrative reforms To evaluate the optimum utilization of financial and other resources. To suggest the methods for	Stakeholder satisfaction index. Declaration of timeline for the services offered by administrative office. Transparency and teamwork in the administration.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
						continuous improvement of quality keeping in mind criteria sets by other regulating bodies.	
Acad	lemic Excellence thr	ough Outcome Based Educ	ation				
8.	Designing the Curriculum of upcoming batches asper New Education Policy 2020 (NEP 2020) and by taking inputs from reputed industry and institute of eminence such IITs/NITs	Collaboration with reputed industry and institute of eminence such IITs/NITs for curriculum development	Dean- Academics, Director RSCOE		Aug 2022	Syllabus readiness for all UG programs Introduction of courses on niche areas in domain, arts and HSS.	Approval from Board of Studies (BoS), Academic Council (AC) and Governing Body (GB) Available on RSCOE website
9.1	Handbook of Information for UG/PG students	Committee formation to prepare handbook.	Dean- Academics Controller of Examination		2 months before the start of new academic year	Published and Available on RSCOE website	Available on RSCOE website

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
10.	Establishing Teaching and Learning Centre (TLC)	Formation of committee	Dean, Academics, Dean Planning		June 2022	Design, Development, Implementation & Monitoring of curriculum	Industry ready curriculum, Stakeholder satisfaction Students ready with required skills
11.	Offering Minors, and Honours along with major degree	Formation of committee Identification of areas, Structure and implementation mechanism Approval from BoS, AC, GB, and University	Dean Academic		June 2021	Guidelines for students to opt minors/honours. Structure and implementation mechanism	Improvement in institute ranking and branding. Admission of meritorious students Improvement in hiring and annual salary package. Increase in enrolment for minors and honours every year.
12.	Restructuring/incl usion of the departments	Formation of HSS, Mathematics and other necessary departments as per NEP 2020	Dean Planning		June 2024		Implementation of an aspect NEP 2020 Simplification in academic and administrative activities
13.	LMS and Virtual Learning	Preparing/revising LMS	Dean-Planning		June 2022	Creation of database of learning resources	Online lecture delivery by LMS. Hassle free proctored exam

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
	Environment (VLE)					Provision of online proctored exam, formative and summative assignments Availability of educational material Students profile, credit history card and curricular and extracurricular performance Digitalization of the continuous assessment process Blended assessment method that is a combination of online and offline assessment	Digitalisation of students' academic record Development of credit bank system of students
14.	Inclusion of value addition courses, training, and certification courses	List is to be prepared by each department with action plan	Dean- student progression		June 2022	At least one course by each department.	Student joining at least one course offered by each department. Student securing good positions in various competitions. Improvement in hiring and annual salary package.
15.	Move away from high-stakes	Inclusion of continuous assessment methods	Dean Academics		June 2022	Assessment should encourage the critical thinking, analytical	Student securing good positions in various competitions.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
	examinations towards more continuous and comprehensive evaluation.	instead of traditional method	Controller of Examination			ability of students. More freedom to faculty in assessment and evaluation.	Improvement in hiring and annual salary package. Higher percentage of students qualifying GATE, IES and other examinations
16.	New UG and PG Programs on Emerging and Market Relevant areas	Offering B. Tech. program on Robotics and Automation, B. Tech. in Computer Science and Business Systems etc	Director, Dean Academics		June 2022	Permission from authorities for offering B. Tech. program on Robotics and Automation, B. Tech. in Computer Science and Business Systems	100 % admissions No dip in revenue
Susta	ainable Infrastructu	re					
17.	Modernisation of laboratory and classroom infrastructure	Procurementandinstallationofrequiredinstrumentsandequipments for labs.ProcurementandinstallationofICTequipment for classrooms	Director RSCOE		July 2022	All labs are ready with installed instruments and equipments. All classrooms are equipped with ICT facilities.	Students are performing lab work using latest technology. Job ready students. Video lectures available on Moodle.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
18.	Transforming and maintaining the green campus	Tree plantation Installation of Rainwater harvesting project. Installation of water recycling plant.	Director RSCOE	June 2021	Continuous activity	Zero use of plastic in campus Collection and use of rainwater. Use the recycle water for plantation and gardening activities.	Plantation of trees in the campus Rainwater is collected and reused. Generate and use of at least 5% electricity out of total consumption through renewable energy resources
19.	Provide adequate facilities to students	Provide adequate medical facility, health insurance, adequate hostels, canteen, mess, cafeteria etc.	Director RSCOE			Phase wise setting up facilities: medical facility, health insurance, adequate hostels, canteen, mess, cafeteria etc. Mediclaim facilities to students and faculties Hiring nearby hostels if campus hostel is inadequate	Doctor and Nurses available 24x7 Students receiving benefits from the Mediclaim scheme Most of the students are staying in campus hostel and hostels identified by RSCOE Student satisfaction
20.	Creation of indoor sport facility	Provide indoor sport facility such as separate room for carom, chess, table tennis etc.	Dean Planning		June 2021	Availability of indoor sport facility for atleast 3 indoor sport activity.	Availability of indoor sport facility to stundets.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
21.	Creating research Infrastructure	Setting up CoEs Investing in state-of-the- art equipment Building cabins for faculties and setting up cubicles for research scholars and other PG students	Dean Research Director, RSCOE	June 2022	December 2028	Establishment of a Centre of Excellence (CoEs) State of art facilities	Enhancement in the research activities Revenue generation from facilities
22.	Modernised Library and learning resource centre	Procurement of latest eBooks and e-Journals from renowned publications	Director, RSCOE		Continuous	Availability of latest eBooks and e-Journals Establishing e-login facility of library MoU with learning platform like Coursera, EDX and libraries from IITs/NITs	Students accessing the eBooks and e-Journals remotely.
Enrie	chment of Human R	esource				-	
23.	Streamline the Recruitment and Selection procedures	Policy for recruitment Designing faculty induction program	Director, RSCOE	June 2021	Continuous	Recruitment based on policy Incumbent undergoing induction program immediately after joining.	Improvement in faculty cadre ratio which leads to teaching- learning, research and consultancy.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
24.	Faculty Performance Appraisal and Career Advancement Schemes	Revised policy for Continuing Professional Development (CPD)	Dean Planning		June 2021	Approval of new policy	Revised policy of performance appraisal based on outcome. Encouragement faculty for acquiring new knowledge. Faculty attending training/workshop at various agencies such as IITs, NITs or reputed industries Faculty proposing innovative courses
25.	Conducting workshops, refresher courses and training programs to the faculty for autonomy	Management improvement programs for HoDs and Dean Technical upgradation programs for faculty	Dean, Planning, Dean Academics	June 2021	Continuous	RSCOE is providing the training through various workshops, seminars and through deputation to various institutes of eminence	Effective governance and teaching-learning.
26.	Recruitment of faculty for Humanities,	Recruit faculty of HSS background Hire faculty for niche	Director, RSCOE		June 2021	Recruit faculty of HSS background Hire faculty for niche area	Improvement in teaching learning. Providing multidisciplinary courses to studnts

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
	Social Science (HSS) & niche engineering domain	area					
27.	Recruitment of adjunct faculty from Industry or Eminent Institutes and skilled technical staff	Out of total, 10% faculty are invited/guest faculty from Industry or Eminent Institutes	Director. RSCOE		June 2022	Out of total, 10% faculty are invited/guest faculty from Industry or Eminent Institutes	Students are industry ready Increase in average annual salary offering
28.	Increase the number of doctorate faculty members.	Minimum 30% faculty should be Ph.D. holders by 2022 and 50% be Ph.D. holders by 2025 Policy to recruit faculty from institute of excellence via campus interview.	Director. RSCOE		June 2025	Minimum 30% faculty should be Ph.D. holders by 2022 and 50% be Ph.D. holders by 2025	Improvement in quality of academics Foundation for research activities Foundation for brand building
29.	Adoption of Tenure Track		Director, RSCOE	from implement	June 2028	Performance based incentives and promotions	Quality in hiring process

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
				ation of NEP 2020			
Emp	owering Minds thro	ugh Research and Innovati	on	I	1		
30.	Develop 'Research Ethics Policy'	Publication of 'Research Ethics Policy' Appointing faculty members who have research experience or passion and inclination towards the research.	Dean, Research	June 2021	Continuous	Increase in number of SCOPUS Publications. Increase in full time PG enrolment	Increase in quality publications.
31.	Facilitation of research by providing seed grants	Provide institute seed grant to research. Supporting faculty members to work on research projects by providing resources and motivating for carrying out internal and external industry project. Annual research event in every department	Dean Research	June 2021	December 2021	Sufficient fund available for the various research projects. Innovative Projects	Faculty undertaking various research projects. Students' involvement in the Undergraduate research. Admission in postgraduate and doctoral programs. Faculty receiving grants from various agencies for their research

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
							projects.
32.	Strengthening of Institutional Innovation and Research Councils (IIRC) at the institute level	Reformation of IIRC by including various external experts. Entrepreneur cell shall work in association with IIRC to help the commercialising the ideas and projects. Establish Function Ecosystem for Scouting Ideas and Pre-incubation of Ideas. Start-up/ entrepreneurship supporting mechanism in the RSCOE	Dean Research Director, RSCOE	June 2021	Continues	Start-up are creating in the institutes. Increase in the patents. Industry investment increasing the research projects.	Improvement in institute ranking and branding. In campus Start-ups 5 Star Atal ranking ARIIA
33.	Having direction, niche, or strategy for research	Research strength analysis Finding out thrust areas	Dean Research	June 2022 onwards	June 2023	Establishment of centre of excellence in that niche area	Research is a differentiate factor for RSCOE from the rest of the institutes based on research capabilities. Faculty receiving grants from

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
							various agencies for their research projects.
	Establishing of PhD centre in Computer Science and MBA	Submit proposal to University. Set up PhD centre in the respective department	Dean Research	June 2021	June 2022	PhD centre in Computer Science and MBA	Enrolment in the PhD centres.
Stud	ent Progression thro	ough Holistic Development					
34.	Setting up holistic environment for overall development of the students	Formation and providing resources for students' clubs, professional chapters and training activities	Dean, Student Progression and Industry Relations Director, RSCOE	June 2022	Continuous	Technical clubs, professional chapter and Art/Social Clubs	Number of clubs/chapters and activities. Outcomes in terms students performance at state, national and international level Students equipped with soft skills required for new job opportunities
35.	Enhancing the employability	Training on aptitude, communication skills, branch wise fundamental concepts and interdisciplinary skills Enhancing student	Dean, Student Progression and Industry Relations HoDs	June 2021	Continuous	Incorporation of training modules in the curriculum. Student participation in GATE, CAT, cross- institutional competitions, talent hunt and technical	Increase in employability. Increase the placement in industries, government sectors

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
		participations Publicise the employer networks.				competitions Competition winners	
36.	Representation of students in various institute bodies	Identification of students for various institute bodies	Deans and the Board of Governors			Students participation in different bodies Students input/voice in placement cell, academic council, anti-ragging committee, student's grievance cell, and other bodies.	Student enhancement at different levels
37.	Provide global perspective to students	Collaborationwithprominent universitiesStudentprogramsStudentInternshipProgramme	Dean (IR), HoDs Director	June 2021		Number of active collaborations Internship offered to students Number of students exchanged	Improvement in quality of academics Increase the placement in industries, government sectors.
38.	Cultivating Entrepreneurial Spirit and Experience	Establish a platform to promote entrepreneurship. Students' exposure to	IIRC Dean (RnD) Director			Formal course offerings, extra- curricular activities, student societies, and outreach activities.	Start-up Patent granting Increase in the entrepreneurships.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
Colla	borate and Excel	entrepreneurial experiences Arranging seminar/workshop with alumni				Filing intellectual property rights (IPR) Increase in the entrepreneurships.	
39.	Develop 'National and International Relation Policy'	Defining standard procedures with regards to collaboration	Dean SPIR Dean IR		December 2021	Standard Principles, Standard Procedures	'National and International Relation Policy' in place.
40.	Facilitating industry and university alliances	Deepen links with partners (industry, university, etc.).	Dean IR Dean SPIR		Continuous	Excavate existing or established network of industries. Knowledge transfer between RSCOE and university/industry through conferences, guest lectures.	Contributionbyeminentuniversities/IITs/NITsandindustriesinsyllabusdevelopment.Facultyandstudentexchangeprogram with universities.Jointresearchprojectswithindustriesanduniversities.
41.	Enhance Academic Collaborations	Promote industry expert's participation in institutional process.	Dean IR Dean SPIR Director			Industry/University inputs in curriculum design, course content development, industrial internship, and	Enhancement in Academic Excellence Increase the placement in

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
		Promote Collaborative research				projects. Industry based Curriculum Design and Development for all the years of BTech Publications, Research project, higher education (MS, PhD, Postdoc, etc.)	industries, government sectors. Improvement in institute ranking and branding
42.	Increased Industry Engagement	Understand the requirements of industries Solve/Solutions to the society problems Engagement with alumni works in the various industries	Dean Academics Dean SPIR			Center of Excellence (CoE), industry-oriented programs, research activities, etc. Increased in internships and job placement with the help of alumni At least 10% aa a guest faculty from industry.	Enhancement in Academic Excellence Increase in research outcomes. Increase in placement.
Com	munity Outreach						
43.	Partnership with industries	Academic collaboration R&D and Consultancy activities	Director, RSCOE Dean, Research		Continuous process	Industry expert assisting in curriculum designing, laboratory development. RSCOE collaborates with industry for R&D activities	Courses are designed by industries. Industry experts conducting experts' sessions. Students receiving internship and project support.

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
		Social connect				and consultancy activities. RSCOE in collaboration with industry, conducting social events or programs.	Helpinginlaboratorydevelopment.Donation in theform of equipment etc.Socialeventsorganisedincollaboration with industries.
44.	Organise community outreach programs	Conduction of various camps such as health awareness, basic educations Adoption village under Unnat Bharat Abhiyan Organising NSS camps in the villages Organised career guidance seminars in Pune and PCMC region Published career articles in local newspapers. Digital marketing strategy: Search Engine	Director, RSCOE		Continuous process	Creation of brand of JSPM Reach out to the entire Pune, PCMC and Marathwada region	Improvement in admissions Attracting meritorious students Increase enrolment from Pune region. Secure position in first 5 place in Pune region

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
		Optimization (SEO), Pay- Per-Click Advertising, Facebook Ads, newspapers					
45.	Organising guest lectures, international conferences, technical competitions etc	RSCOE shall organised conferences on emerging areas and invite prominent speakers across the globe	Director, RSCOE Dean Research		Continuous process	Will build up image of reputed institute focused on academic excellence	One international conference every year.
46.	Betterment of poor and underprivileged people by providing technical solutions.	Conduct research intended to respond to pressing problems or issues identified by local communities, state, national or international agencies.	Director, RSCOE Dean, Research		Continuous process	Provide solution to community problem.	Provide techno-social solution of at least one identified problem.
	Involvement of students in social issues	Establishing clubs such as Shashwat, NSS, Rotract and other clubs	Director, RSCOE		Continuous process	Provide solution to community problem.	Provide techno-social solution of at least one identified problem.

Strategic Development Plan, "RSCOE: VISION 2025" Strategy **Action Point** Responsible Expected Deliverable **Success Criteria** Start date complete Sr. person of No. implementa implemen tion date tation **Building the 'Brand RSCOE'** comprehensive Director, Policy document ready and Effective implementations. Dec 2020 47. Prepare Development of Brand Building policy RSCOE available on website Brand Building Improvement in admissions considering expectations Policy scenario. from all stakeholders. Improvement in placements. Increase enrolment from Pune region and other states 48. outreach by Director, Continuous in admissions Improve Improvement digital Enhance RSCOE Search Engine scenario. process presence Optimization (SEO), Pay-Improvement in placements. Advertising, Per-Click Improvement in perceptions of Facebook Ads, RSCOE. newspapers 49. Invite Director, Continuous Organising guest lectures in Improvement in perceptions of renown Organising regular personalities for events every 2 months. RSCOE. **RSCOE** process events and activity and arrange speech or for stakeholders admissions in Improvement sessions. scenario. Improvement in placements. Tie up with renown Improvement in perceptions of 50. Director, Continuous Tie up with media media RSCOE RSCOE. newspapers, process

Sr. No.	Strategy	Action Point	Responsible person	Start date of implemen tation	Expected complete implementa tion date	Deliverable	Success Criteria
		agency					Improvement in admissions scenario. Improvement in placements.
51.	Increase the access of RSCOE website	Regularly update the website with all necessary information for students, faculty and other stakeholders	Dean, Planning, Director	July 2021	Continues		Increase in access of website All stakeholders getting required information

## **16 CONCLUSIONS**

Strategic planning document is prepared by using scientific methodology available in the literature. RSCOE believe that strategic planning is a critical component for effective governance and management. Therefore, committee has taken rigorous efforts to analyse the education scenario at national and regional level, identified the expectations from various stakeholders. While designing the strategic planning, the New Education Policy 2020 has taken into consideration. All strategies are designed by keeping vision of RSCOE in the mind and these strategies are aligned to achieve the mission of the institute. By implementing all strategies successfully, various criteria of accreditation and many attributes of NEP 2020 will be automatically satisfied.

We, RSCOE, hopes that our strategic plan will push us towards the goal of achieving excellence in the education.



*"Quality is never an accident. It is always the result of intelligent effort"* John Ruskin