



Rashtrreeya Sikshana Samithi Trust

RV COLLEGE OF ENGINEERING

R V Vidyanikethan Post, Mysuru Road, Bengaluru - 560 059.
(Autonomous institution affiliated to VTU-Belagavi)



2016-2021

“The very spring and root of honesty and virtue lie in good education”-Plutarch

Founder



Late Sri. Shivananda Sarma

The Rashtreeya sikshana samithi Trust (RSST) was founded by Sri. M.C. Shivananda Sarma, when education was a privilege of few in the pre-independent India. The vision of the founder was ***‘Excellence in Education with Societal Commitment’***. Sri M.C.Shivananda Sarma, an Educationalist in the year 1940 and Sri Meda Kasturi Ranga Setty, a business man & philanthropist joined hands together to pull this movement forward. Today six decades later, RSST through the (Rashtreeya Vidyalaya) RV institutions, are in the forefront among providers of quality education in the state of Karnataka.

Message

Rashtreeya Sikshana Samithi Trust (RSST), the driving force behind Rashtreeya Vidyalaya (RV) College of Engineering has set in motion a number of forward looking initiatives. The Trust has thirteen colleges, six schools and nine other training centres with more than 1000 committed faculty and 16000 students under its umbrella.

RV College of Engineering is the flag ship institution of RSST. The institution is running twelve Bachelor of Engineering programs, twenty one master of Technology programs, a Master of Computer application Program and sixteen Research centers. The strategic Development plan (SDP) 2016-2021 would acts as guiding document for the next six years to assess and improve the institution towards delivering high quality education there by earning due recognition. SDP's main focus 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 high quality work done by the Principal, Advisor, Deans, HODs, and Faculty towards developing Strategic Development Plan.

Wishing all the success!

Dr. M.K. Panduranga Shety

**President, RSST
Chairman, Governing Body, RVCE**

Message

It is heartening to note that R.V. College of Engineering has embarked upon scientific way of formulating strategic development plan document for 2016-2021. Progressive institution like RVCE must clearly spell out and articulate vision, mission and set the direction. RVCE has made its mark and is the most preferred institution in the Karnataka 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 plan will be successful, when fully implemented and its outcomes are evaluated. I am sure that this leadership will implement the strategic 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 2016 - 2021.

With Best Wishes !

A.V.S. Murthy
Hon. Secretary, RSST

Principal's Message

RVCE is the most admired institution both in the state Karnataka and also at national level. The institution has aimed at achieving centre of excellence status at par in line with IITs at national level. RVCE plans to secure ranking at Asia-Pacific level by 2021. It is heartening to note that all the hard work by Deans, HODs, Faculty and Staff has resulted in having well-articulated and clearly defined strategic plan document for RVCE 2016 - 2021.

RVCE has 5600+ students in undergraduate and 1200+ students in PG and 150+ research scholars. The theme for the strategic development plan covers all critical aspects of the institution. The SDP implementation in its full spirit may lead this institution towards the most preferred institution in Asia Pacific and also among all its stake holders. The strategic development plan formulates clear vision, mission, quality policy, core values, institutional strategic goals, strategies, sub strategies and goals. The key performance indicator of SDP is in its successful implementation and evaluation aspects. I have utmost confidence in the institution's human resources and management capability in true implementation.

I am placing on the record, committed management support, alumni performance and feedback from to time, Deans, HODs, Faculty and Staff's active participation in making this SDP possible. My heartfelt appreciations to all the members who are directly and indirectly involved in making an implementable document.

Wishing good luck!

Dr. K.N. Subramanya
Principal

Advisor's message

RVCE is most admired institution for pursuing technical education. The institution aims to provide support to faculty and students to attain the knowledge as well as the skills that they aspire for. The institution also aims at a good governance framework towards improving quality of technical education. RVCE enhances existing capacities of the institutions to become dynamic, demand-driven, quality conscious, efficient and forward looking. RVCE also aims at aligning with rapid economic and technological developments in new areas both at national and international levels.

RVCE emphasises on enhancement of Postgraduate education and Research apart from Outcome Based Education (OBE) for undergraduate programs. The mandate is also good governance at all levels focusing on the improvement of the quality of learning, teaching and research outcomes. Good governance focuses on effective leadership, planning, ethics, responsibilities and accountabilities, both within and outside institution. Towards achieving Good Governance, an attempt has been made with the involvement of management, all heads of department and senior faculty members to prepare this Strategic Development Plan 2016-2021.

I am sure SDP report will definitely give us direction & confidence in accomplishing vision and mission of our Institution.

Looking at a future with excellence!

Prof. K.N. Raja Rao
Advisor

Acknowledgements

We place on record our deep appreciations and thanks to the Management, Governing Body members, Alumni, Parents, Deans, Associate Deans, HODs, Faculty, Staff and students for their valuable inputs and active participation towards formulating the “Strategic Development Plan”.

We profusely thank Prof. K. Balaveera Reddy, former vice chancellor of VTU, Belgavi and Dr. D. Vasudeva Naidu Programme Facilitator for their valuable guidance and relentless persuasion towards developing “Strategic Development Plan”.

Principal

Preface

An Engineering institution like any other organisation requires high level goals with long range planning and strategies to accomplish the Vision and Mission, which it dreams of. Strategic planning is a continuous process with a specific focus on accomplishing short, mid and long term goals in this highly competitive world. Strategic Development Plan (SDP) analyses current environment expected future scenarios and envisages the direction towards which the institution should move to achieve its set goals and objectives.

The first part of SDP addresses vision, mission and working on bringing out a good quality policy along with core values. These are achieved through many deliberations with all the stake holders (management, leadership, HODs, faculty, staff, industry, students and parents). Scientific scanning of internal and external environment is done through SWOC analysis. After scanning the environment, institutional goals were set up and strategies to achieve them are arrived at for the institution.

Based on Institutional Vision & Mission, the goals are drawn by holding brainstorming sessions with Deans, HODs and Professors. Institutional strategic goals and strategies are formed with action plans. The process of implementation is worked out and circulated to all the departments. Financial constraints and fund availability is one of important parameters of SDP. Internal Revenue Generation has been given due importance. SDP evaluation and committees to monitor the effectiveness has been clearly spelt out. The final out comes are discussed and approved by the Governors Body (GB).

As a good practice, inputs are drawn from stake holders through active participation and collective inputs. The SDP will stream line the processes and progress of the institution, it will also ensure that RVCE becomes a torch bearer among technical education institutions at National and Asia-pacific level by 2021.

Strategic Development Process

The Chairman, Secretary and the members of the Governing Body have felt the need of preparing a strategic development plan for the institution in a formal written document format. The mandate was given to the Principal to develop strategic plan 2016-2021 for the institution. The institution leadership team was facilitated with a two days workshop on 'strategic development leadership for excellence'. The management & top leadership team met and brain stormed on SWOC and stake holders expectations. The Leadership team met a number of times, deliberated in detail and arrived at vision, mission, quality policy and core values for RVCE. Environment scanning was done keeping vision in mind. The team also discussed about Institutes strategic High Level Goals (USG/HLG) to be achieved by 2020.

Institution strategic goals formed the main theme for arriving at strategies, sub strategies and road to accomplish them. Each Strategy was deliberated and sub-strategies were arrived towards implementation plan. Implementation plan worked out all details such as budget, resources needed and leaders responsible to implement with time lines. This implementation is separately maintained by the head of the institution.

Departments play a pivotal for the institution; hence each department worked out on their vision, mission and short, mid & long term goals. The implementation plan for the departments also reflected all details such as budget, resources needed as well as leader responsible with time lines. HODs form the core team for implementing departmental goals under the guidance of Deans/ Principal.

Strategic Development Plan emphasises on evaluation measures, monitoring team along with deviation steps if any over a period of time. The evaluative components for each stake holder are clearly spelt out along with periodicity of performance evaluation reviews.

The final draft document was discussed with BOG and after its detailed review, the suggestions were incorporated towards its effective implementation. This comprehensive plan forms the guiding plan for the years 2016-2021.

Vision of the Institution

The new millennium is witnessing unprecedented challenges and opportunities in higher education, arising from the effect of changing economic policy of liberalization and globalization. Knowledge is increasingly recognized as the main force behind economic growth and development in the context of global economy, coupled with information and communication revolution, the emergence of world-wide labour market leading to significant change in the global socio-political environment across the world. Technical Education plays a vital role in human resource development of the country by creating skilled manpower, enhancing industrial productivity and improving the quality of life of its people. Technical Education covers wide gamut of programs and specializations.

The GOI's vision is "To develop and nurture a technical education system in the country which would produce skilled manpower of the highest quality, comparable to the very best in the World and in adequate numbers to meet the complex technological needs of the economy; providing the nation a comparative advantage in the creation and propagation of innovative technological solutions and in the development of a technological capacity of the highest order, both for its application in the economic development of the country and for becoming a major supplier of technology and technological services in the World."

In tune with the GOIs Vision and other strategic information scanned from other stakeholders in the society, RVCE has set its vision as: "**Leadership in Quality Technical Education, Interdisciplinary Research & Innovation, with a Focus on Sustainable and Inclusive Technology**". The process of defining and assuring the quality of technical education and training must include consideration for the context in which technical education and training occur. It is also critical to remember that education has many clients.

Leadership in quality technical education to-day has many characteristics that are needed which perhaps were not necessary ten, or fifteen years ago. Technology's impact on how students learn and how teachers teach has had educational leadership think about more innovative ways in which to prepare, deliver, and assess curriculum. It is necessary now to empower our teachers and to lead in a way that reflects unconditional positive regard through relationships and displaying that they are in the fore-front of change and are key agents of change. It is equally as imperative stay abreast of current and future trends in business and

industry and to encourage technical educators to stay current in their professional and trade areas as well as in pedagogy and research.

Interdisciplinary research is a type of study or research that draws from two or more disciplines in order to gain a more well developed perspective, or discover something new. In academic discourse, interdisciplinary typically applies to four realms: knowledge, research, education, and theory. Interdisciplinary knowledge involves familiarity with components of two or more disciplines. Interdisciplinary research combines components of two or more disciplines in the search or creation of new knowledge, operations, or artistic expressions. Interdisciplinary education merges components of two or more disciplines in a single program of instruction. Interdisciplinary theory takes interdisciplinary knowledge, research, or education as its main objects of study. Creativity often requires interdisciplinary knowledge. Many intellectual, social, and practical problems require interdisciplinary approaches, Interdisciplinaryians may help breach communication gaps in the modern academy, thereby helping to mobilize its enormous intellectual resources in the cause of greater social rationality and justice, by bridging fragmented disciplines. Interdisciplinaryians might play a role in the defence of academic freedom. Innovation is recognized as a driver of economic growth and poverty eradication. In this context, innovation can be understood in broad terms, including "technical and nontechnical aspects, business model innovation, eco-innovation, demand and user-driven innovation, innovation in services and design, and public-sector innovation."

Innovations in science and technology are an integral component of sustainable development. Sustainable Development is balancing the fulfilment of human needs with the protection of the natural environment so that these needs can be met not only in the present, but in the indefinite future. Inclusive growth means more and more schemes and support to attain the desired rate of economic and human development to foster economic growth, wealth distribution, social justice, adopting suitable technologies and industrial development.

Sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs of Sustainable development". It is important to realize that sustainable development combines three pillars of development: social, economic, and environmental. Inclusive growth is a strategy where the growth will be achieved through certain instrumentalities so that the benefits reach the

largest section of the society and that the maximum number of people are able to derive benefits from the developmental projects. Generation of employment and livelihood opportunities, poverty reduction, and removal of regional and social disparities, agricultural and industrial growth and environmental sustainability are key elements of inclusive growth.

Mission

- To deliver outcome based quality education, emphasizing on experiential learning with state of the art infrastructure.
- To create a conducive environment for interdisciplinary research and innovation.
- To develop professionals through holistic education focusing on individual growth, discipline, integrity, ethics and social sensitivity
- To nurture industry-institution collaboration leading to competency enhancement and entrepreneurship.
- To focus on technologies that are sustainable and inclusive, benefiting all sections of the society.

Quality Policy

Achieving Excellence in Technical Education, Research and Consulting through an Outcome Based Curriculum focusing on Continuous Improvement and Innovation by Benchmarking against the Global Best Practices.

Core Values

Professionalism, Commitment, Integrity, Team Work, Innovation

Profile of R V College of Engineering

R.V. College of Engineering (RVCE) is the Flagship Institute of the Trust. RVCE was started on the 17th of October, 1963 with just two Engineering Programs in Mechanical and Electrical Engineering and was housed in the ground floor of R.V. Teacher's College Building at Jayanagar, Bengaluru. There were about 120 students and the programs were affiliated to Mysore University. Eventually, RVCE shifted to the present sprawling 52 acres campus on "Vijaya Dasham" day in 1967. The first batch of students graduated in the year 1968. With changing times and the needs of the nations, newer programs were added and ten years back even PG programs were added to bring in a focus on research. Not all the path over the last 50 years have been rosy. Due to the dedication and perseverance of the Trustees, today the college has truly blossomed into a full-fledged academic institute, involved in all aspects of knowledge creation, comprehension and dissemination or advocacy. RVCE celebrated its Silver Jubilee in 1988-89 and the then Vice President of India – Sri Shankar Dayal Sharma graced the occasion to mark the beginning of Silver Jubilee Celebrations. On that occasion, a New Library Block and a new hostel – Chamundi Hostel was also inaugurated. Recently, RVCE celebrated its Golden Jubilee on 6th of Jan. 2015. Sri Mohammad Hamid Ansari, Hon'ble Vice President of India, graced the occasion to mark the beginning of Golden Jubilee Celebrations.

Today the 52 acre campus which was nearly part of the jungle, and on the elephant corridor linking Bannerghatta to the Eastern Ghats, has grown into an imposing yet serene, state-of-art campus, immersed in facilitating the transformation of India, with a renewed vision, in line with the times "***Leadership in Quality Technical Education, Interdisciplinary Research & Innovation, with a focus on Sustainable and Inclusive Technology***". RVCE now offers 12 Undergraduate Programs, 21 Post-Graduate Programs (M.Tech & MCA). All the 16 departments are recognized Research Centres offering provision for Doctoral programs. With a vision to deliver quality education, even when colleges of same age or even half its age have more intake, RVCE has limited intake of just about 1060 in Undergraduate, about 575 Postgraduate and about 250 registered Research Scholars, a total student strength of about 5800. RVCE with currently 410 faculty, is the only college in the country with more faculty than the prescribed norms of AICTE. The existing Programs are as below:

Bachelor Programs in Engineering (B.E.)

- 1) Aerospace Engineering
- 2) Biotechnology
- 3) Chemical Engineering
- 4) Civil Engineering
- 5) Computer Science and Engineering
- 6) Electrical and Electronics Engineering
- 7) Electronics and Communication Engineering
- 8) Electronics and Instrumentation Engineering
- 9) Industrial Engineering and Management
- 10) Information Science and Engineering
- 11) Mechanical Engineering
- 12) Telecommunication Engineering

Post-Graduate Programs (M.Tech / MCA)

- 1) M. Tech in Biotechnology
- 2) M.Tech in Bioinformatics
- 3) M.Tech in Chemical Engineering
- 4) M.Tech in Structural Engineering
- 5) M. Tech in Highway Technology
- 6) M.Tech in Computer Science & Engineering
- 7) M.Tech in Computer Network Engineering
- 8) M.Tech in Power Electronics
- 9) M.Tech in VLSI Design & Embedded Systems
- 10) M.Tech in Communication Systems
- 11) M.Tech in Bio-medical Signal Processing & Instrumentation
- 12) M. Tech in Master of Engineering Management
- 13) M.Tech in Software Engineering
- 14) M.Tech in Information Technology
- 15) M.Tech in Product Design & Manufacturing
- 16) M.Tech in Computer Integrated Manufacturing
- 17) M.Tech in Tool Engineering
- 18) M.Tech in Machine Design
- 19) M.Tech in Digital Communication
- 20) M.Tech. in RF & Microwave Engineering
- 21) Master of Computer Applications

Stake Holders' Expectations

Management	<ul style="list-style-type: none">• Global Brand• Sustainability• Good Governance• University Status• Social Responsibility
Leadership Team	<ul style="list-style-type: none">• RVCE ranking with in top 100 in Asia• Competent Faculty• Internal Revenue growth for sustainability• Industry oriented /continuing education programmes• Bench marking through Accreditation of programs and institution• Creation of Centres of excellence
Faculty & Staff	<ul style="list-style-type: none">• Good academic & working ambience• Career growth ,Research facilities & incentives• Academic independence with accountability• Transparency and uniform processes
Students	<ul style="list-style-type: none">• Good academic & research ambience• Support for co-curricular & Extracurricular activities• State of the art infrastructure• Experiential learning & Opportunity for talent exposure• International learning at affordable cost• Quality Placement, career guidance and entrepreneurial opportunities
Parents	<ul style="list-style-type: none">• Branding• Quality teaching- learning• Disciplined students• Good placements
Industry	<ul style="list-style-type: none">• Industry ready professionals with proper attitude• Strong fundamentals• Strong Industry-Institution interaction• Collaborative research, consultancy• Brand and accreditations of the institute
Society & Others	<ul style="list-style-type: none">• Graduates with Moral, Ethical and Responsible Citizenship• Social service activities by the institution• Skill development for needy• Resource centre for other institutions• Consultancy and Continuing education Programs

Environmental Scanning and Analysis

Economic Factors are analysed, GDP is at 4.7 % for 13-14, with new government in place, GDP is likely to grow to more than 7%. Huge opportunities may come up in terms of placement, Higher Education, research and innovation. This will have positive impact for the institutes providing quality education and research.

Social Factors were analysed and the parent community and society are encouraging their wards and looking for placements but not on real education which will enhance knowledge. This trend may pose grave dangers in the years to come. Placement should be one of the goals in students mind but not the only goal, this trend will bring down the curtains on innovation and entrepreneurship.

Technological Factors were discussed and the extensive use of technology in teaching-learning need to be a key enabler in higher education. Emerging technologies and need for training faculty to face these challenges. E-learning /online learning/online examination may replace traditional class room teaching-learning practice. The faculty need to change their pedagogical skills to match these challenges.

Political Factors at the state & centre are not favouring faculty in research facilitation for those working in private institutions. Also there is no clarity on admission policy and fee structure from government which could be a challenge. Higher education is getting a big priority from political decision making. National Skill Development is the need of the hour and funding with a specific focus on building skill inventory needs to be strategically planned.

Regulatory Factors are of concern as RVCE though being autonomous is plagued by several unscheduled inspections, the slow pace of Accreditation is also a worrying factor though RVCE is the most preferred institute to pursue technical education.

Entering of Foreign Universities may pose a great challenge in the years to come in the form of competition. No immediate challenges seen for RVCE. However, faculty retention and need to look into curriculum reforms to keep pace with flexible system of foreign universities needs an immediate looking in.

Market /Competition Factors are posing some challenges as many Deemed /Private state universities- Industry lead universities are getting started in many states. Infrastructure and funding may not be a differentiator any more. Quality teaching, research, ambience and placements could be critical factors. There needs to be a serious thought on incentives for performers for this a consensus has to be arrived at. An internal IQAC will take care with external experts.

SWOC Analysis

<p><u>Strengths</u></p> <ul style="list-style-type: none">• Committed Management• 50 years of standing• Brand Name and most preferred institution• Talented students• Excellent Infrastructure• Quality & Competent Faculty• Retention of employees• Research Centers & Publications• Excellent internships & placements• Disciplined campus	<p><u>Weaknesses</u></p> <ul style="list-style-type: none">• Existing policy limits attracting top quality faculty• Lack of dissemination and understanding of HR policies, incentives, Grievance redressal mechanism & transparency• Lack of clarity of Role-responsibility and accountability.• Skilled Staff shortage• Poor Alumni engagements
<p><u>Opportunities</u></p> <ul style="list-style-type: none">• Eligibility for University status• Starting Integrated programmes• Strengthening collaboration with industry in research, consultancy, training & internships.• Global initiatives through foreign university tie-ups.• Achieving University Status• Enhanced community engagement	<p><u>Challenges</u></p> <ul style="list-style-type: none">• Entry of Foreign Universities• Multiple compliance requirements and time lines affecting Teaching & research• Inconsistency in policies and regulatory guidelines.• Possible financial crunch• Retention and recruitment of Quality faculty

SWOC

Strategic Goals

RVCE Leadership Team after brain storming the vision, mission, quality policy, core values, environmental factors and SWOC analysis arrived at the step to establish high level goals (HLG) which are also called Institution Strategic Goals (ISG)

1. Good Governance
2. University Status
3. Leadership Development
4. Financial Management
5. Physical infrastructure
6. Teaching – Learning infrastructure
7. Library & information centre
8. Attraction, Development, Retention
9. Teaching, Learning and Evaluation
10. Industry- Institute relationships
11. Research, Development & Innovation
12. Quality assurance systems
13. Entrepreneurship
14. Placement, Internships & Career
15. Extra-curricular and co-curricular
16. Alumni engagement and interaction
17. Community Service and Extension
18. Global Initiatives

1. Good Governance

Governing Body	<ul style="list-style-type: none"> ▪ Merit based GB appointment ▪ Performance management of GB members through specific responsibilities ▪ Evaluation of institutions performance and bench marking ▪ Guiding and approving policy matters
Vision, Mission and Institution Goals	<ul style="list-style-type: none"> ▪ Vision, Mission development & their articulation ▪ Setting short term and long term goals ▪ Institutional Strategic development plan ▪ Institutional strategic goals setting
Transparency & Leadership	<ul style="list-style-type: none"> ▪ Transparency in Leadership & appointment of Key positions ▪ Service conduct rules and polices formulation, approval & implementation ▪ Grievance Redressal mechanism ▪ Leadership Development through decentralization ▪ Establishing E-Governance- MIS- Data analysis
Internal Quality Assurance Cell & Accreditation	<ul style="list-style-type: none"> ▪ Setting up of IQAC with internal & external members to audit processes ▪ Establishing internal audit committee for regulatory compliance ▪ Systems, checks and balances- Remedial measures.
Students Participation	<ul style="list-style-type: none"> ▪ Students nomination to Governing Body ▪ Their suggestions in various academic and student affairs

2. University Status

Vision & Budget allocation	<ul style="list-style-type: none"> • Discussion in Governing Body and approval for University status • Resource planning & budget approval
Preparation of UDP & pre-assessment	<ul style="list-style-type: none"> • Constitution and appointment of committee to prepare University Development Plan (UDP) • Formation of Academic Council, BoS and Liaison officer...etc) • Preparation for pre-assessment & assessment
Accreditation & Certifications	<ul style="list-style-type: none"> • Accreditation & Assessment cell • Inspections preparation & Approvals
Statutory Inspections	<ul style="list-style-type: none"> • Statutory inspections planning and preparation • Inspections facilitation & remedial measures • Provisional university approval status

3. Leadership Development

Developing Ownership	<ul style="list-style-type: none"> ▪ Motivating through interactions ▪ Partnership incentive plans
Assessment & Identification	<ul style="list-style-type: none"> ▪ Expert committee to assess all existing leaders potential ▪ Find gaps and structure changing ▪ Identify positions for external
Decentralization	<ul style="list-style-type: none"> ▪ Decentralize the academic, administration and student related ▪ Prescribe duties , responsibilities and accountability ▪ Rotation of key posts to build leadership
Development & Job Rotation	<ul style="list-style-type: none"> ▪ Develop Leadership competencies ▪ Plan for Job rotation /enlargement /enrichment assignments ▪ Plan for new /crisis assignments
Retention Measures	<ul style="list-style-type: none"> ▪ Growth retention plans through Career advancement. ▪ Golden handcuffs through (monetary /welfare)

4. Financial Management

Budgeting	<ul style="list-style-type: none"> ▪ Department wise Budget planning of all heads of accounts ▪ Forecast & estimation of revenue (Both IRG and ERG) ▪ Forecast & estimation of expenditure ▪ Emergency plans ▪ Budget formulation & approval through Finance committee
Financial Governance (HoDs)	<ul style="list-style-type: none"> ▪ Planned expenditure management ▪ Procurement and Financial policies implementation ▪ Monthly Audit (internal /External) checks- balances ▪ Support through research, consultancy and training
Outflow Management & Growth plans	<ul style="list-style-type: none"> ▪ Monitoring expenses as per budget planning ▪ Predicting internal revenue generation ▪ Treasury (surplus funds) management ▪ Growth- Expansion plans

5. Physical infrastructure

Green Campus (Keeping with the Vision & Mission)	<ul style="list-style-type: none"> ▪ Plantation, Rain water harvesting and green cover ▪ Energy harvesting & management ▪ Hygiene, solid waste management (zero plastic usage) ▪ Reuse of waste ▪ Efficient usage of recycled waste water from STIP
Academic infrastructure	<ul style="list-style-type: none"> ▪ Aesthetic Class rooms, Tutorials, Seminar halls ▪ State of the art Laboratory & equipment
Library	<ul style="list-style-type: none"> ▪ Library infrastructure up gradation ▪ Functional Furniture and fittings for e-learning
Residential Township	<ul style="list-style-type: none"> ▪ Staff quarters and township facilities ▪ Safety, Security management ▪ Water facility and health centre
Sports, Hostel & Canteen	<ul style="list-style-type: none"> ▪ Developing sports (indoor/outdoor) facilities ▪ Hobby clubs, Canteen & community centre ▪ Additional Hostels facility for boys & Girls within the campus ▪ International Hostel

6. Teaching- Learning Infrastructure

Smart Class rooms	<ul style="list-style-type: none"> ▪ Smart boards ▪ Multi-room instructional facility ▪ Multi media and support equipment ▪ E-Learning facilities
Laboratory- R&D Equipment	<ul style="list-style-type: none"> ▪ R&D Laboratory and its maintenance ▪ Simulators ▪ Industry equipment (centres of competence) for consultancy
KE & ICT	<ul style="list-style-type: none"> ▪ Licensed softwares- Higher BW ▪ Hardware (Servers, Computers...etc) ▪ Pedagogy tools ▪ Online learning tools ▪ Evaluation & assessment tools ▪ Learning Management System ▪ ICT for 360 deg. Feedback.
Books & E-Learning	<ul style="list-style-type: none"> ▪ Books, Journals, Periodicals, Magazines ▪ Online access to E-media ▪ Departmental library books

7. Library & Information Centre

Infrastructure enhancement	<ul style="list-style-type: none">▪ Budget allocation▪ Infrastructure (Buildings & Furniture)▪ CCTV and Lockers facility
Removal of obsolescence in Books & Resources	<ul style="list-style-type: none">▪ Books, journals procurement, storage and retrieval▪ Resources automation & Access (24X 7)
Digital & E-Library	<ul style="list-style-type: none">▪ Digitization of Library resources▪ Establishing cloud based e-library & online access

8. Attraction, strengthening and retention of Faculty

Talent Hiring & Retention policy	<ul style="list-style-type: none">▪ Merit based hiring policy formulation & implementation▪ Career advancement Schemes▪ Scientific induction/ orientation of new talent▪ Critical talent identification & retention measures
UGC /AICTE Scales, Rewards & Recognitions	<ul style="list-style-type: none">▪ UGC /AICTE scales implementation for all cadres / designations▪ Additional cadres to be created for deserving staff▪ Rewards – recognitions & incentives▪ Welfare policy formulation & implementation
Conducive working environment	<ul style="list-style-type: none">▪ Best work facilities and infrastructure▪ Role & responsibilities clarity and empowerment▪ Online access to Library- journals 24X7 hours▪ Township /quarters facility
Career growth & Development	<ul style="list-style-type: none">▪ Sponsorship/ Deputation, sabbaticals for higher education & Exchange programmes▪ Sponsorship to participate in national /international conferences▪ Deputation to premier national /international universities/industry

9. Teaching-Learning and Evaluation Process

Bench mark with Premier institutes	<ul style="list-style-type: none"> ▪ Constitute academic teams and visit premier institutions ▪ Customise & Implement best practices
Curriculum Design & Lesson plan	<ul style="list-style-type: none"> ▪ Design curriculum as per all graduate attributes and expectations of stake holders ▪ Develop lesson plan as per OBE & academic calendar ▪ Develop e-learning content ▪ Benchmark with industry requirements ▪ Use of LMS to support students
TNA and upgrading faculty & staff competence	<ul style="list-style-type: none"> ▪ Conduct training need analysis every two years ▪ Conduct / depute faculty and staff for competence development ▪ Support paper publications and presentations ▪ Provide opportunities for networking ▪ Train faculty to use LMS effectively
Knowledge Delivery & Outcome based education	<ul style="list-style-type: none"> ▪ Define outcomes of each teaching learning initiative ▪ Continuous Assessment and evaluation to measure outcomes ▪ Establish Research Culture ▪ Access to online learning ▪ Mentor on academic, career & higher educational opportunities
Evaluation & Assessment	<ul style="list-style-type: none"> ▪ Create proper feedback system ▪ Continuous progress assessment ▪ Question bank development & Term end examinations ▪ Credit transfers and performance development

10. Industry- Institute Relationships

Industry Data base & Intelligence	<ul style="list-style-type: none"> ▪ Strengthen placement, training and industry institute interaction cell ▪ Identify branch wise preferred industries & companies ▪ Identification of potential areas of research ▪ MoUs & NDA with potential industries/companies ▪ Professional bodies membership
Leverage Industry Resources	<ul style="list-style-type: none"> ▪ Invite industry experts for guest lecturers /talks/seminars ▪ Partner with industry for syllabus reviews/advisory roles ▪ Deputation of faculty to Industry on sabbatical ▪ Leverage for internships, research projects, consultancy & placements ▪ Scholarships
Leverage Institutional Resources for Industry	<ul style="list-style-type: none"> ▪ Training and talks by faculty ▪ Consultancy and testing to industry ▪ Starting of postgraduate programs for industry personal ▪ Enrolling industry personnel for Ph.D.
Setting up Centres of Excellence	<ul style="list-style-type: none"> ▪ Identify potential industries who can establish centres of excellence department wise ▪ Establish and operationalize centres of excellence ▪ Setting up of chairs in specific domains by industry

11. Research, Development and Innovation

R&D Infrastructure & Teams	<ul style="list-style-type: none"> ▪ Enhancing R&D laboratories in all departments ▪ Modernisation and removal of obsolescence of laboratories ▪ Dedicated R&D facilitation & documentation centre ▪ Competent technical staff for R&D labs ▪ Start new Journals with scopus indexing.
Establishing Centres of competence	<ul style="list-style-type: none"> ▪ Fund raising through Project proposals ▪ Apply for TEQIP/Government/ other funding ▪ Establishing centres of excellences ▪ Establishing Consultancy cell
MOU with premier institutes/ R&D labs	<ul style="list-style-type: none"> ▪ MoUs with higher learning institutions in India & abroad. ▪ Collaborations with IISC, IITs, TIFR, ISRO, DRDO, NAL, HAL, BEL...etc ▪ Multi & inter disciplinary research and product development
Incubation Centre /Product Development	<ul style="list-style-type: none"> ▪ Encourage “idea to product” pre-incubation activities ▪ Establishing incubation centres ▪ Focus on Product development ▪ Startup of maker Space (Fab Lab) – Product and development
Setting up of Patent cell	<ul style="list-style-type: none"> ▪ Patent filing, Scaling up & commercialisation ▪ Starting of patent cell ▪ Appointment of search and Patent Attorney

12. Quality Assurance Systems

Establishing Quality Systems	<ul style="list-style-type: none"> ▪ Setting up bench marks & system flow ▪ Quality Policy steering committee ▪ Publishing Quality system design & culture ▪ Educating & Training of all employees
Internal Quality Assurance & Assessment cell	<ul style="list-style-type: none"> ▪ Setting up of IQAC team ▪ Periodic checks and guidance
Accreditation & Certifications	<ul style="list-style-type: none"> ▪ Internalise the process based on ▪ Choose accreditation/certification agency ▪ Audit and certifications
Audit Internal Controls	<ul style="list-style-type: none"> ▪ Establish audit process & audit teams ▪ Train internal auditor teams ▪ Audit and remedial measures
Continual improvement, Rewards & Recognitions	<ul style="list-style-type: none"> ▪ Setting up of Quality assurance cell ▪ Identifying achievements & best practices ▪ Quality circle competitions & rewards ▪ Annual competitions

13. Entrepreneurship

EDP Cell	<ul style="list-style-type: none"> ▪ Establishment of dedicated EDP cell ▪ Budget /seed funding for funding initial projects ▪ Identification of emerging areas of entrepreneurship
Identification of students, mentors & Training	<ul style="list-style-type: none"> ▪ Identify interested students for entrepreneurship ▪ Identify mentors from successful entrepreneurs from Alumni/others ▪ Formal training on entrepreneurship
Leverage Promotion agencies	<ul style="list-style-type: none"> ▪ EDP agencies and networking ▪ Competitions participation ▪ Leverage for funding & support
Incubation & Pilot projects	<ul style="list-style-type: none"> ▪ Establish incubation centre for prototypes ▪ Provide incubation support for students ▪ Incubation support for outside SMEs

14. Placements, Internships & Career Guidance

Placement & Career guidance Department	<ul style="list-style-type: none"> ▪ Dedicated team ▪ Modernisation of infrastructure (Video conferencing, interview & conference rooms) ▪ Video recording of mock up interviews of students and feedback
Industry MOUs- Intelligence	<ul style="list-style-type: none"> ▪ Data base of various potential industries/companies ▪ MOU s and relationship management ▪ Industry experts as resource persons
Training & Development	<ul style="list-style-type: none"> ▪ Awareness programmes ▪ Value added programmes (soft skills & domain expertise) ▪ Competency enhancement centre
Internships, Placement process & Success stories	<ul style="list-style-type: none"> ▪ Internships planning and execution ▪ Placement process coordination ▪ Success stories celebration- Brand building

Extra-Curricular and Co-curricular activities

State of the art infrastructure	<ul style="list-style-type: none"> ▪ Budget allocation ▪ Establish state of the art infrastructure (indoor/outdoor) ▪ Formation of hobby clubs
Coaching, training & competitions	<ul style="list-style-type: none"> ▪ Dedicated coaches /trainers recruitment ▪ Regular training /coaching classes ▪ Participation in tournaments/competitions ▪ Hosting competitions/ tournaments
Credit transfer, Rewards & Recognition	<ul style="list-style-type: none"> ▪ Admission priority for state/national achievers ▪ Academic credits transfer ▪ Attendance compensation ▪ Reward & Recognise achievers

15. Alumni Interaction

Alumni Association	<ul style="list-style-type: none"> ▪ Strengthen Alumni association and engagement ▪ Establish alumni association office on campus, engage students ▪ Data base updation and interactive alumni website ▪ Establish global chapters and networking
Relationships & Leveraging	<ul style="list-style-type: none"> ▪ Regular interactions /invitations ▪ Recognise successful alumni ▪ Leverage for guest lecturers/internships/placements ▪ Academic advisors/ Board of governors
Endowments	<ul style="list-style-type: none"> ▪ Explore Contributions / endowment partnering ▪ Brand ambassadors ▪ Sponsorships/scholarships

16. Community Service and Extension activities

Budget and Resources	<ul style="list-style-type: none"> ▪ Budget from institution resources ▪ Budget from Faculty/students/Govt/other donors
Village adoption & Rural Projects	<ul style="list-style-type: none"> ▪ Identify nearby villages for adoption ▪ Study rural projects and challenges ▪ Explore & provide support to the execution of projects
Vocational training	<ul style="list-style-type: none"> ▪ Identify the job oriented courses as per local needs ▪ Provide vocational training at the institute ▪ Educational tuitions/ support to village students
Health and hygiene support	<ul style="list-style-type: none"> ▪ Conducting health awareness camps ▪ Providing free medicines to the needy ▪ Psychological and psychiatric support

17.Global Initiatives

New Campuses / Programs	<ul style="list-style-type: none">▪ Explore establishing new campuses in developing countries▪ MoUs with the governments of developing countries▪ Twinning programmes with leading universities of developed countries
Foreign Students	<ul style="list-style-type: none">▪ Attracting foreign students▪ Twinning programmes with foreign students
MoUs with Foreign Governments/ Institutions	<ul style="list-style-type: none">▪ Identify foreign higher level learning institutions▪ MOUs with potential partner institutions▪ MOUs with governments for education & projects

Strategy Implementation and Monitoring

Strategic development plan once approved by Governing Body 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 is made use of while arriving at implementation plans. All the measures of success are clearly spelt out in the implementation document and Head of the institution along with leadership team is the custodian for implementation and its success.

Implementation Plan at Institution Level

Good Governance & Administration	GB, Chairman, Members of GB
Finance Management	Finance Committee, Hon. Treasurer, Principal
Institution Statutory Compliance	Principal and Coordinators
Branding /Expansion	GB members, Leadership team & Public relations team
University Status	GB / Special Committee
Talent Management	GB, Chairman and Principal
TEQIP	GB, TEQIP coordinator and Principal
Infrastructure (physical)	GB, Chairman, Dean (Infrastructure) & team
Infrastructure-Academics	Principal, HODs, Deans (Academics), Dean (Infrastructure)
Teaching- Learning	Principal, Dean (academics), HODs, Faculty and Staff
Research	Dean (Research) & Deans PG studies
Student affairs	Dean (Student affairs)
Student admissions	Dean (Admissions), Principal
Departmental activities	HODs and Faculty
Placement & Training	Dean (Placement & Training) and HoDS

Measurable during Implementation

Good Governance	GB selection, appointment, functioning, good governance initiatives, Management commitment, Vision-Mission reviews, Number of meetings conducted, decisions made, Committees appointment, performance , Polices implementation, grievance procedures, Educational ERP implementation....etc.
Talent Management	Recruitment, Selection of faculty, staff, salary, attrition rate, benefits as per UGC/AICTE norms, Track Faculty and staff performance.
Student Intake Quality	CET ranking, Students profile, PUC marks score

Student Academic Performance	Pass percentage, number of distinctions & first classes, Graduate attribute attainment levels and alumni feedback.
Placement	Number of offers made through placement department, average salaries offered, Companies visiting the campus, Number of graduates pursuing higher education, number of students becoming eligible for higher education through GRE/GATE/CAT/GMAT...etc, Public sector and other Government jobs, percentage of graduates becoming Entrepreneurs.
Curriculum	Curriculum review & design, Industry partnerships, Faculty training on new areas, Introduction of new courses, new courses/ electives offered in emerging areas.
Alumni	Alumni data base, number of interactions, support for internships, placements, projects, scholarships, consultancy and contribution towards infrastructure development.
Research and Consultancy	Publications in national/international journals and conference proceedings, Patents filed, conferences & workshops organised, New MOUs signed with academic and industrial organizations, Centres of competence established.
Physical Infrastructure	Number of buildings, class rooms added, removal of obsolescence, equipment added, annual budget allocated & utilized.
Social Responsibility	Number of villages adopted, vocational trainings provided, social projects undertaken and skill development programs for marginal section of the society.
Extra Curricular Activities	Number of student participants, number of tournaments won, number of sports and Techno-cultural events organized, Regional, National & International recognitions received, competitions participated.
Sources of Funding	Students – Tuition Fees, Government reimbursements, Government grants, Industry Sponsorships, Funding raised through sponsored Projects, Consultancy /Testing Services, International grants, Alumni Contribution, Philanthropy- Donors, Trust Fund income

The committee will be formed for review from time to time. The following leadership team will monitor the time to time implementation scheme against the measurables and do prepare detailed MIS for BOG review.

- **Chairman, GB**
- **Principal, Deans/HODs**
- **Professors, Faculty & Staff**
- **Student representatives**
- **Industry representatives**
- **Parent nominees**
- **Accreditation /Inspection bodies**

Conclusion

RVCE was started with humble beginnings in 1963 and completed its Golden jubilee celebrations in 2014. The institute has progressively grown and achieved many mile stones. The institute has done very well in placements in spite of the economic recession for the last 05 years. The institute has autonomous status and is always revising syllabus as per current industry requirements. TEQIP Phase-II emphasis led to the development of Strategic Development Plan (SDP) for the institute 2014-2020.

The SDP is an outcome of management commitment, institute leadership commitment, steering committee's detailed deliberations with all the stake holders. This collective wisdom ensures participation, ownership of the plan among all the stake holders. The institutional strategic goals have strategies; Strategies have sub strategies with detailed implementation plan to ensure success and sustainability over a period of time. The execution and operational implementation is monitored by stringent evaluation standards and speaks the quality of the strategy itself. The caveat is Strategy itself can do nothing but its implementation holds the key. The strategy is not static document but dynamic due to continuous changing environment and it is an ongoing process to evolve as per the necessity.


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