

SHRI RAMDEOBABA COLLEGE OF ENGINEERING AND MANAGEMENT NAGPUR



Perspective Plan

(2015-16 to 2021-22)



Shri Ramdeobaba College of Engineering and Management

Ramdeo Tekdi, Katol Road, Nagpur 440013

Maharashtra, India

Phone: 0712-2580011 Fax: 0712-2583237

www.rknec.edu

Prologue

Shri Ramdeobaba College of Engineering and Management (RCOEM), Nagpur was established in 1984 by Shri Ramdeobaba Sarvajanic Samiti, a trust which has been involved in community service for over four decades. More than 30 years of fruitful journey has helped RCOEM grow deep roots and establish a strong foundation in technical education. Journey of a student in this institute has always involved comprehensive knowledge building from practical skills, theoretical knowledge to personality development, which has given them a head-start in their career. RCOEM was granted progressive Academic Autonomy from the

session 2011-12. Various statutory bodies such as Board of Management, Academic Council, Board of Studies and Finance Committee have been constituted and an industry need-based syllabus has been introduced.

Institute offers Programmes in Civil Engineering (UG/PG/PhD), Electrical Engineering (UG/PG/PhD), Electronics Engineering (UG/PG/PhD), Mechanical Engineering (UG/PG/PhD), Computer Science and Engineering (UG/PG/PhD), Industrial Engineering (UG/PG), Information Technology (UG), Electronics and Communication Engineering (UG), Electronics Design Technology (UG), MBA and MBA Integrated (PG) and Master of Computer Applications (PG).

Visionaries

- Former Member of Parliament, Nagpur
- Philanthropist, Social Activist and Educationist



Shri Banwarilal Purohit
Founder and Chairman Emeritus, RCOEM

Chairman



Shri Satyanarayanji Nuwal
Chairman, Solar Industries, India

Vice Chairman



Shri Chandrakantbhai Thakar
Chairman, Trust Mandal of Shri
Nagpur Gujarati Mandal

Vice Chairman



Shri Govindlal Agarwal
Industrialist, with manufacturing
units at Nagpur and Pune

General Secretary



Shri Rajendra Purohit
Managing Director of the
leading English daily 'The'

Vision

Shri Ramdeobaba College of Engineering and Management envisages the institute par excellence, providing world class technical and management education.

Mission

To impart quality education in the field of Engineering and Management and to foster mutually beneficial relationship with industries to create an intellectually stimulating environment for learning, research and for promoting professional and ethical values.

Quality Policy

Shri Ramdeobaba College of Engineering and Management is committed to achieve exemplary standards in Engineering and Management Education.

We aim at continuous improvement of all our processes and will strive to provide an environment conducive to the pursuit of knowledge and overall personality development.

We encourage all to adhere to the highest ethical standards and professional integrity and aim to enhance the satisfaction level of all stakeholders.

From Principal's Desk



Dr. Rajesh S. Pande
Principal

Shri Ramdeobaba College of Engineering and Management, Nagpur founded in 1984 gives an idyllic setting where individuals are honed to be ethical professionals. RCOEM has been recognized for its commitment to excellence to technical education. The reputation that RCOEM has earned comes from the efforts, contributions and achievements of our stakeholders.

Our community of students, professors, staff and alumni shares a commitment to diligence and make sincere efforts towards the advancement of the society through creativity and innovation. RCOEM is the temple of knowledge devoted to innovative learning, creativity and effective application of knowledge and values for sustainable development.

Theme 01

Attract motivated academic achievers to UG and PG programmes and nurture them into skilled technical and managerial workforce with research acumen and social responsibility

1.1 OBJECTIVES

- ❖ Installing and Strengthening a comprehensive advisory system
- ❖ Transforming students into an employable workforce
- ❖ Holistic Development of Students

- ❖ *Establish state-of-the-art research laboratories and Centers of Excellence*
- ❖ *Encouraging inter-disciplinary research*
- ❖ *Offering twinning and student exchange programs*
- ❖ *Instituting scholarships for Economically Backward Category (EBC) students and for students with exemplary consistent academic record*

1.2 ACTIVITIES/STRATEGIES

- ❖ *Addressing stakeholders' expectations in formation of syllabi and other contemporary activities, auditing of academic processes and procedures, strengthening teaching - learning model through BOS interaction.*
- ❖ *Transforming students into an employable workforce through career counseling and aptitude building, involving industry experts in curriculum development and strategy formulation, fostering industry tie-ups for converting internships to job offers.*
- ❖ *Holistic development of students by organizing soft-skill development programs, extending technical and financial support for start-ups, encouraging for participation / organization of extra and co-curricular activities and granting incentives for the same. Inculcating ethical practices through activities like NSS, Roctract club etc.*
- ❖ *Establishing State-of-the-Art research laboratories and Centers of Excellence for strengthening the research setup across departments, identifying areas of expertise and setting up courses / centers to disseminate the expertise.*

- ❖ Encouraging inter-disciplinary research by involving UG and PG students in research activities, identifying faculty with expertise and forming Small Interest Groups and providing incentives for publications/IPRs to students and faculty.
- ❖ Exploring possibilities of tie-ups for twinning programs, student exchange programs, Credit Transfer Scheme through MoUs with leading industries and academic institutions. Involving industry in curriculum through co-teaching, courses designed and taught by industry personnel. Promoting MOOC and SWAYAM courses.
- ❖ Instituting scholarships for students from Economically Backward Category (EBC), students with exemplary consistent academic records and providing financial aid to needy students.

1.3 OUTCOMES

- ❖ Number of new courses introduced
- ❖ Frequency of scheme modification
- ❖ Number of programs for career guidance
- ❖ Involvement of industry experts in curriculum design
- ❖ Number of Internships and job offers
- ❖ Number of students in different activities across the college under Student Representative Council, NSS and various student forums
- ❖ Support extended to student startups
- ❖ Number of Self-Financed courses
- ❖ Number of Laboratories of Excellences
- ❖ Number of Research Programs introduced
- ❖ Number of Interdisciplinary Research Projects undertaken

- ❖ *Number of Research Publication*
- ❖ *Support extended for skill up gradation*
- ❖ *Number of Student / Faculty registered for Student Exchange Programs*
- ❖ *Number of Students / Faculty registered for MOOC*
- ❖ *Number of students registered for “SWAYAM” Courses*
- ❖ *Alumni-sponsored EBC and Merit scholarship schemes*

Theme 02

Provide outstanding and diverse faculty and technological facilities so that students receive quality teaching and advising, enabling them to become problem solvers, leaders and critical thinkers highly sought after by universities, industry, and the government

2.1 OBJECTIVES

- ❖ *Providing outstanding and diverse faculty*
- ❖ *Qualification improvement of the existing faculty*

- ❖ Retention of faculty members
- ❖ Up gradation of Technological and other facilities
- ❖ Engage the services of qualified and competent industry/field experts
- ❖ Encourage the faculty to develop and promote the products/technology

2.2 ACTIVITIES/STRATEGIES

- ❖ Recruiting new faculty with contemporary research and industry exposure and also recruiting adjunct faculty members.
- ❖ Encouraging existing faculty to pursue PhD at NITs and IITs. Encouraging faculty to participate in STTP and conferences and promoting industry assignments to faculty for nurturing the research culture in the institute.
- ❖ Providing incentives for qualification up-gradation / research incentives and implementing CAS scheme.
- ❖ Up gradation of the laboratories, providing access of the laboratories for extended hours, providing smart classrooms for better interaction, use of ERP, updating software and internet facilities in the institute.
- ❖ To utilize expertise of the industry personnel by involving them in the Board of Studies for framing curriculum. Increasing interaction of industry personnel with the students by arranging guest lecturers and conducting industry visits.

- ❖ *To motivate UG and PG students to carry out projects leading to product development.*

2.3 OUTCOMES

- ❖ *Number of Faculty recruited with Research Exposure*
- ❖ *Number of Faculty recruited with Industry Exposure*
- ❖ *Number of Adjunct Faculty recruited*
- ❖ *Number of Faculty pursuing / pursued PhD from IIT's and NIT's*
- ❖ *Number of Faculty participating in STTP's and Conferences*
- ❖ *Number of Faculty undertaking industry assignments*
- ❖ *Faculty Retention Ratio*
- ❖ *Budgetary Provision and Utilization*
- ❖ *Number of Expert Lectures delivered by industry personnel*
- ❖ *Number of Industry Visits*
- ❖ *Number of Industry Experts in BoS*
- ❖ *Number of Projects carried out leading towards product development*

Theme 03

Establish focused, high-impact, nationally recognized research programs and build a prominent faculty that will enhance the College, National and International reputation

3.1 OBJECTIVES

- ❖ *Establish and promote research ethos in the college*
- ❖ *Enhance high impact research through academic and sponsored research*
- ❖ *Augment technical, legal and financial support to IPRs*
- ❖ *Extend support for faculty development*

3.2 ACTIVITIES / STRATEGIES

- ❖ *Cultivating the research culture in the institute by facilitating incentive schemes and motivating faculty members to publish papers in high impact reputed indexed journals. Initiating Research Awards for faculty. Organizing Conferences and Workshops for*

quality improvement. Improving the quality of research work and adopting Anti-plagiarism Policy.

- ❖ Increasing the number of PhD seats for boosting high impact research through academics. Increasing the number of place of research and higher learning in the departments. Offering seed money for research work. Increasing the sponsored research by increasing the research grants and sponsorships from corporate and NGOs.
- ❖ Establishing IPR cell for providing legal help from professional attorney and facilitating incentive scheme for patents.
- ❖ Providing financial support and study leave for pursuing PhD. To motivate faculty for attending conferences and Faculty Development Programmes at India and abroad and provide financial assistance.

3.3 OUTCOMES

- ❖ Incentives paid in rupees
- ❖ Number of papers in SCI Journals
- ❖ Number of papers in Scopus Journals
- ❖ Number of papers in International / National Conferences
- ❖ New Place of Research and Higher Learning developed
- ❖ Increase in number of seats for pursuing PhD
- ❖ Number of scholars pursuing PhD
- ❖ Grants received
- ❖ Number of Patents filed
- ❖ Number of Copyrights received

- ❖ Faculty Development Expenditure
- ❖ Reimbursement of PhD fees of faculty
- ❖ Number of faculty pursuing PhD
- ❖ Number of faculty who availed study leave

Theme 04

Establish lifelong connections with alumni and capitalize on this network, corporate partnerships and related research/scholarship within the college to strengthen the educational experience, research/scholarship quality and financial support of the college

4.1 OBJECTIVES

- ❖ *Building a bridge between alumni and current students*
- ❖ *Creating public perception/ Brand image of the institute in society*
- ❖ *Enrichment of curriculum and fostering Industry relationships*
- ❖ *Enhancing alumni network for professional development*

4.2 ACTIVITIES / STRATEGIES

- ❖ *Enhancing the engagement with alumni through multiple interaction modes such as mentorship workshops conducted by alumni for students, invited lectures by alumni, Student exchange programs facilitated by alumni, placements and internships facilitated by alumni and entrepreneurial assistance programs by alumni.*
- ❖ *Creating public perception / Brand building through alumni by nominating distinguished alumni for institute perception. Organizing admission process awareness program for aspiring students annually. Felicitating and publicizing alumni for outstanding performance in their profession.*
- ❖ *Inviting alumni on various bodies such as Board of Studies, Academic Council, Internal Quality Assurance Cell etc. Encouraging industry projects and making efforts to develop alumni sponsored labs/ infrastructure. Organizing industry visits through alumni.*

- ❖ *Establishing alumni chapters nationally and globally. Conducting alumni meets at respective chapters regularly. Developing official alumni website to keep lifelong involvement of alumni with the institution.*

4.3 OUTCOMES

- ❖ *Scholarship received from alumni in rupees*
- ❖ *Workshops conducted by alumni*
- ❖ *Number of Expert Lectures delivered by alumni*
- ❖ *Number of Internships by alumni*
- ❖ *Number of Placements facilitated by alumni*
- ❖ *Number of Startups facilitated by alumni*
- ❖ *Number of alumni Nominated for Institute perception*
- ❖ *Number of Awareness Programs organized*
- ❖ *Number of alumni felicitated for outstanding performance in their profession*
- ❖ *Number of alumni invited on various boards*
- ❖ *Number of Industries visits organized by alumni*
- ❖ *Number of Industry projects undertaken through alumni*
- ❖ *Donations received from alumni*
- ❖ *Number of alumni Chapters established*
- ❖ *Number of alumni Meets conducted*
- ❖ *Number of alumni registered with official website of college*

Theme 05

Prepare students and faculty for the changing global environment to create a culture of diversity, creativity, innovation and entrepreneurship

5.1 OBJECTIVES

- ❖ *Promote global knowledge exposure*
- ❖ *Promote culture of Creativity, Innovation and Entrepreneurship amongst students*
- ❖ *Promote Post-Doctoral Research for faculty members*

5.2 ACTIVITIES/STRATEGIES

- ❖ *Facilitating collaborations and MOUs with International Universities. Facilitating faculty members to attend international conferences/symposium/ workshops. Organizing conferences in collaboration with International Universities and inviting faculty*

members from International Universities for conducting expert talks, training programs, etc.

- ❖ *Establishing Incubation Centre to promote start up activities and creating Entrepreneurship Development Cell at the institute.*
- ❖ *Providing subsidized financial support and study leave.*

5.3 OUTCOMES

- ❖ *Number of MOUs with International Universities*
- ❖ *Number of students in Student Exchange Programs at Foreign universities*
- ❖ *Number of faculty members participated in International Events*
- ❖ *Number of Conferences organized in association with Foreign Universities*
- ❖ *Number of Experts invited from Foreign Universities*
- ❖ *Number of Training programs organized in association with Foreign Universities*
- ❖ *Number of Entrepreneurs*
- ❖ *Improvement in research quality as a result of financial support from institute and study leaves granted*
- ❖ *Number of sponsored projects received*

Theme 06

Actively engage with the local/regional community and use institutional strengths and capabilities for providing the solutions for socio-economic growth of the local/regional community, irrespective of their status in the society

6.1 OBJECTIVES

- ❖ *Providing technological and managerial solutions to local industries*
- ❖ *Identifying of socio- economic problems and providing the assistance through Institutional Support*

6.2 ACTIVITIES/STRATEGIES

- ❖ *Providing Technological and Managerial Solutions to Local Industries through RGSTC-TIFAC internship scheme and industry based project at Under Graduate and Post Graduate level.*
- ❖ *Identifying socio-economic problems and providing institutional assistance through various activities such as*
 - *National Service Scheme (NSS)*
 - *Organ and Blood Donation Camp*
 - *Cleanliness Drive - Swachh Bharat Abhiyaan*
 - *Health Check-up Camps*

- *Visit and Support to Orphanage and Old Age Homes*
- *Awareness Programs on Traffic, Water Conservation*
- *Identification and Adoption of Villages*
- *Environmental Conservation Awareness Program*

6.3 OUTCOMES

- ❖ *Number of Projects offered under RGSTC – TIFAC scheme and Industry based Projects*
- ❖ *Number of activities through various forums of the institute*



Temple of Shri Ramdeobaba. Baba Ramdeoji is an incarnation of Lord Vishnu at Runicha near Pokhran (Rajasthan) in Vikram Samvat 1409