SRI RAAJA RAAJAN

COLLEGE OF ENGINEERING AND TECHNOLOGY

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(Approved by AICTE – New Delhi & Affiliated to Anna University, Chennai.)

(Certified ISO 9001-2015 and recognized under section 2(f) of UGC act 1956)

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INSTITUTIONAL DEVELOPMENT PLAN

PREFACE

An Institution's success hinges on its Institutional development planning, which acts as a roadmap to achieving its vision and mission. This ongoing process is crucial in today's competitive environment, ensuring the institution aligns with its surroundings. These surroundings encompass internal and external factors that can influence the institution's activities, both positively and negatively. Institutional development planning (IDP) and Implementation is a tool derived from analyzing current obstacles and potential future opportunities. It charts a course for the institution to navigate towards its established goals and objectives.

The initial IDP stage sets the institution's vision, mission, core values, and long- term/short-term goals through a SWOC analysis and stakeholder feedback.

The Institutional development planning (IDP) and Implementation serves as a central guiding force, ensuring all institutional processes and efforts work in unison. By 2030, this strategic roadmap has the potential to position the institution as a leader among higher education institutions in the country.

SWOC Analysis

STRENGTHS (S):

- ✓ Industry-Aligned Programs: SRRCET offers B.E./B.Tech. programs designed with industry input, ensuring graduates possess the skills employers seek.
- ✓ Expert Faculty: The college boasts a team of industry-trained faculty members who bring real-world experience to the classroom.
- ✓ Proven Placement Success: The college has a history of achieving excellent placement records for its graduates.
- ✓ Supporting Rural Students: SRRCET actively promotes inclusivity and supports students from rural communities.
- ✓ Advanced Learning Environment: Smart classrooms and cutting-edge sports infrastructure enhance the learning and overall student experience.
- ✓ Dedicated Mentorship: SRRCET provides excellent proctorial guidance to support students throughout their academic journey.
- ✓ Entrepreneurship Ecosystem: The college's incubation center fosters student innovation and provides support for aspiring entrepreneurs.

WEAKNESSES (W):

- ➢ Limited Diversity in Student Body: While SRRCET welcomes students from rural backgrounds, attracting a broader student population could enrich campus life and perspectives.
- ➢ Securing Research Funding: The college might benefit from strategies to strengthen research grant proposals and attract more research funding opportunities.
- ➢ Enhancing Research Output: Increasing the number of publications in top academic journals can elevate ESEC's research profile and faculty recognition.
- ➢ Strengthening Industry Ties: Building stronger networks with local industries for internship placements, guest lectures, and research collaborations could be beneficial.

OPPORTUNITIES (O):

- Leveraging Online Learning: SRRCET can utilize online resources to enhance teaching and learning, offering flexibility and reaching a wider audience.
- Industry-Academia Collaboration: Building stronger bridges with industry partners can provide guest lectures, research collaborations, internship placements, and real-world project opportunities for students.
- Alumni Network Advantage: Engaging alumni for placements, industry consultancy, and collaborative student projects can leverage their experience and strengthen the SRRCET community.
- Collaborative Research & Development: Signing Memoranda of Understanding (MoUs) with industry and universities can facilitate collaborative research and development projects, leading to advancements and knowledge sharing.
- Industry-Aligned Value-Added Courses: Developing value-added courses tailored to industry requirements can equip students with in-demand skills for a competitive job market.

CHALLENGES (C):

- Enhancing PG Program Appeal: Strategies to attract more qualified students to PG departments might include innovative program offerings, scholarships, and industry collaboration.
- Bridging the Skill Gap: SRRCET can work towards ensuring graduates possess the industry-ready skills companies seek through internships, industry projects, and skill-development workshops.
- Pursuing National Recognition: Building research output, strengthening industry partnerships, and improving student learning outcomes can contribute to achieving a coveted NIRF (National Institutional Ranking Framework) ranking.
- Enhancing Graduate Employability: Negotiation skills workshops or career guidance programs can help graduates secure better salary packages with core companies.

Key areas of focus within SRRCET IDP:

- Green Campus Initiatives:

  The college is actively engaged in green initiatives, including planting over 10,000 saplings and implementing the Miyawaki method of afforestation, they also propose water conservation measures like rooftop collection and storage ponds.

- Inclusivity and Social Responsibility:

  The institution celebrates National Unity Day and organizes awareness programs to promote tolerance, harmony, and awareness of social justice and constitutional rights.

- Value-added Programs and Research:

  SRRCET offers value-added courses, online courses, and certification programs, and encourages research projects, consultancy, and the commercialization of research outcomes.

- Innovation and Entrepreneurship:

  The college fosters innovation and entrepreneurship through initiatives like starting student-led start-ups, establishing innovation and incubation centers, and partnering with industries through MoUs.

- Infrastructure and Resources:

  SRRCET emphasizes the use of renewable energy sources and power-saving appliances, and actively seeks to achieve autonomous status.

- Faculty and Student Development:

  SRRCET supports faculty development through online courses, industry interactions, and faculty development programs. They also encourage students to participate in value-added courses, industrial training, and skill development programs conducted through Bharathidasan University.

1. Vision & Mission

Vision

To function as a center of excellence with world-class instructional and infrastructural facilities to realize the vision of producing highly disciplined, talented students to serve humanity in unparalleled style.

Mission

To produce exceptionally competent professionals through personalized teaching and graduates who are ethically upright and educationally bright to render service of global standards.

Alignment with National Frameworks:

- Integrate NEP 2020 principles by promoting holistic and multidisciplinary education.
- Adopt the National Credit Framework (NCrF) and Academic Bank of Credits (ABC) for flexible learning pathways.
- Contribute to Sustainable Development Goals (SDGs) by emphasizing quality education, gender equality, and industry innovation.

Strategic Objectives for Academic Year 2026 - 2030

✓ University Aspiration:

Achieve university status within the next decade.

✓ NAAC A++ Accreditation:

Secure NAAC A++ grade during the 2nd Cycle Accreditation process.

✓ Strengthen Industry Collaboration:

Foster strong partnerships with top multinational companies (MNCs) for mutually beneficial collaboration.

- ✓ Centres of Excellence:

  Establish Centres of Excellence in emerging engineering fields like advanced materials and manufacturing, artificial intelligence, energy, and the Internet of Things (IoT).

- ✓ Faculty & Staff Well-being:

  Create an invigorating work environment that fosters excellence and well-being for faculty and staff.

- ✓ Active Alumni Network:

  Increase alumni involvement in various aspects of institutional development, including placements, guest lectures, student mentoring, startup incubation, research & development, and consultancy.

- ✓ Industry R&D and Consultancy:

  Collaborate with various industries in research & development and consultancy projects.

LONG TERM GOAL (2026 - 2030)

LTG 1. To Create Centres of Excellence.

- ➢ Creation of Centres of Excellence (COE) by utilizing the resources and expertise in each cluster.

LTG 2. To Provide Modern Infrastructure Facility.

- ➢ Develop infrastructure for carrying out R&D activities.
- ➢ Academic infrastructure to be strengthened further
- ➢ Strengthen campus wide networking.
- ➢ Modernization of all laboratories.
- ➢ Upgradation of Central Library.

LTG 3. To have 70% of Faculty with PhD qualification.

- ➢ Encourage all faculty to register for Ph.D.

- Support faculty who have already registered to complete their Ph.D.
- Recruitment of faculty with Ph.D. from premier Institutions in specialized area/industry expertise.

LTG 4. To make use of technologies for providing skill sets and additional self-learning.

- Adopt digital learning, e-learning solutions, and interactive sessions.
- Encourage self-learning techniques.
- Adopt blended learning to maximize student learning.

LTG 5. To collaborate with Foreign/National institutions of higher learning and research organizations.

- Collaborate with reputed Foreign universities/Institution.
- Faculty exchange programs.
- Partnership programs.
- Collaborate with universities/Institution of repute for research activities.
- Best practices from reputed academia & industry to bring holistic learning experiences.

LTG 6. To establish collaborative laboratories with the support of industry.

- Set up laboratories to pursue research with son of the reputed companies.
- Create experiential learning opportunities by providing live industry projects.

SHORT TERM GOAL (2026 - 2030)

STG 1. NAAC Accreditation & NBA Accreditation for all eligible programs.

- ✓ It is required to get all the eligible UG & PG programs accredited by NBA from time to time.
- ✓ To have accreditation status by NAAC from time to time.

STG 2. Strengthen the campus Facilities and Support systems.

- ✓ Augmenting the laboratories to stay relevant.
- ✓ Online access to material on website, to further augment library resources to meet the growing needs in academia and research.
- ✓ To upgrade the internet bandwidth to support the continuous utilization of the increased usage to cater to the entire campus including hostel requirements.

STG 3. Enhance the Output in Research and Consultancy.

- ✓ To enhance the quality of research publications by motivating faculty to publish in SCI journals.
- ✓ Focus on increasing the external funded research projects Research with international collaborations.
- ✓ Fostering Industry sponsored R&D projects.
- ✓ Enhanced Consultancy projects.

STG 4. Introduce New UG and PG Programs.

- ✓ Explore the possibilities of adding new Programs by assessing the requirements in the emerging areas.
- ✓ The institute can plan to offer interdisciplinary programs.

STG 5. Introduce Multidisciplinary courses /Projects

- ✓ Introduce multidisciplinary courses (cluster approach: Institutional electives).
- ✓ Encourage multidisciplinary projects.

STG 6. Foster Creativity and Innovation.

- ✓ Establishing Centres of Excellence.
- ✓ Establish Incubation Centres.
- ✓ Apply for more patents to protect IP.

- ✓ Explore possibility of patent commercialization.

STG 7. Improve teaching learning Process.

- ✓ Implement pedagogical innovations: OBE, active learning, open ended experiments. Extended classrooms (virtual class rooms).
- ✓ Blended learning: E-learning, virtual labs, MOOCs, Social learning.
- ✓ Comprehensive course implementation.

STG 8. Organizing Technical Events.

- ✓ Conduct events in cutting edge technologies and recent trends & developments across various domains.
- ✓ Conduct Seminars & Expert Lectures through professional bodies.
- ✓ Increase industrial visits and make it more accountable.
- ✓ Conduct international conferences/symposia and pre conference workshops.

STG 9. Enhance Industry Institute Collaborations.

- ✓ Enhancing the number of MOUs with Industry and revisiting the existing MOUs based on its merits.
- ✓ Adjunct Faculty: Industry experts delivering part of the courses.
- ✓ Collaboration with Industries for research and innovative projects.
- ✓ Increasing the connect with the Industry through guest and expert lectures.

STG 10. Infrastructure requirement for e-Governance

- ✓ Creation of database for online submission of documents for approval to regulatory bodies.
- ✓ Automate academic administrative process and develop metrics to assess the performance from time to time.
- ✓ Create a database to maintain the student records online.
- ✓ Create process for examination and evaluation activities with secured database.

Operationalization Plan

Component	Current Status	2025–26 Foundation	2026–27 Expansion	2027–28 Institutionalization	2028–29 Consolidation	2029–30 Global Expansion
Curriculum Integration	Internships optional in some programs	Mandatory in all UG/PG programs	Credit-based summer internships in all programs	AI, IoT based	International benchmarking begins	Full curriculum review + global model
Industry Collaboration	MoUs with few industries; informal training tie-ups	Initiate 10+ MoUs; Joint curriculum design	20+ partners; co-branded certification launched	Industry advisory boards established	International internships via MoUs	Apply for model institution recognition
Skill Development Centres	JaiRam Skill Development Centre established	2 pilot centres (NSDC + PMKVY aligned)	Add 3 centres; include mobile labs	5+ Centres with National standard compliance	Hackathons + innovation labs initiated	Upgrade to Centres of Excellence
Program Models	Limited field visits or minor projects	Pilot community + rural internships	Launch industry-linked apprenticeships	Interdisciplinary apprenticeships introduced	Virtual/ hybrid internships introduced	International & MOOC-based internship options
Assessment	Internal marks + optional project evaluation	Develop logbooks, mentor evaluations	Digital tracking + project-based evaluation	e-Portfolios used in assessment	Peer + mentor evaluations included	National-level credit model + impact reports

1. GOVERNANCE PLAN FOR AUTONOMY

S. No	Governance Component	Initiatives	Expected Outcomes
1	**Governing Body (BoG)**	- Form a fully functional BoG with industry experts, alumni, academic leaders. Define roles/responsibilities with clear accountability.	- Transparent, accountable governance. Strategic decisions aligned with autonomy framework.
2	**Quality Assurance**	- Strengthen IQAC functions with outcome-based benchmarks. Implement academic audits and quality review mechanisms.	- Improved academic performance and stakeholder confidence. Accreditation readiness (e.g., NBA/NAAC).
3	**Financial Autonomy**	- Diversify funding via research grants, consultancy, alumni donations. Create endowment funds and industry	- Enhanced financial sustainability. Independence in decision-making and resource deployment.
4	**Leadership**	Training for Faculties and staff.	- Cohesive leadership vision. - Strong foundation for long-term autonomous planning.
5	**Vision, Mission & Roadmap**	- Finalize vision/mission in line with NEP 2020 and SDGs. - Create and circulate departmental strategic roadmaps. - Periodic review and updates.	- Unified institutional direction. - Clear path to autonomy with defined milestones.
6	**MIS-Based Monitoring**	- Deploy campus-wide ERP/MIS for exams.	- Real-time performance monitoring.
7	**Audit**	- Conduct annual audits for academic and infrastructure.	- Improved Student and Staff Satisfaction - Increased Institutional Efficiency
8	**External Advisory Board**	- Constitute board with industry veterans, alumni, academic leaders. - Conduct biannual meetings tied with student showcases.	- Regular expert feedback and institutional benchmarking. - Strengthened industry-academia linkage.

2. FINANCIAL AND RESOURCE GENERATION PLAN

S. No.	Initiative	Details / Description	Expected Outcomes
1	Formulation of Action Plan and Budgeting	Develop yearly budgets. Separate Capital and Recurring Budgets by department. Include income sources and planned expenditures.	Structured and trackable financial planning for autonomy implementation.
2	Enhancing Revenue through Academic Fees	Moderate fee restructuring and increase in value-added and certificate courses.	Increased internal revenue and better student engagement.
3	Research and Consultancy	Encourage faculty to take up funded projects. Showcase department/lab capabilities.	Increased Institutional Revenue Generation (IRG) and academic reputation.
4	Industry Tie-ups	-Foster innovation, research, and development -Collaborative projects and technology transfer	- increased campus placements and salary packages -Higher student satisfaction and engagement
5	Financial & Investment Committee	Committee to guide investments, evaluate financial strategies, and oversee fund allocation.	Strategic investment of institutional surplus and endowments.

3. ACADEMIC PLAN

S. No.	Initiative	Description	Expected Outcomes
1	Introduction of Multidisciplinary Programs	Offer flexible UG/PG programs combining engineering, management, and humanities.	Holistic development and broader career opportunities for students.
2	Curriculum Upgradation with Industry Input	Form curriculum advisory boards with industry members; integrate internships/apprenticeships.	Industry-ready graduates with higher employability.
3	Faculty Development Initiatives	Launch FDPs on pedagogy, research, and technology; promote industry internships for faculty.	Up-to-date faculty with better teaching and research skills.

4	Outcome-Based Education and Teaching Plans	Prepare detailed session-wise teaching plans with learning outcomes and assessments.	Standardized academic delivery and better learning evaluation.
5	Launch of Value-Added Courses and Certification Programs	Collaborate with industries to offer domain- specific certifications (e.g., CAD, Python, Project Management).	Skill enhancement beyond curriculum;industry recognition.
6	Academic Flexibility and Multidisciplinary Electives	Allow cross-department electives, research- based projects, and MOOC credits (SWAYAM, Coursera, etc.).	Freedom of learning and academic autonomy for students.

4. RESEARCH AND DEVELOPMENT PLAN

S. No.	**Initiative**	**Description**	**Expected Outcomes**
1	Establishment of Research Labs and Quality Research Programs	Set up funded labs; focus on both basic and applied research; promote a research-centric academic culture.	Increased research output and institutional visibility.
2	API-Based Faculty Incentive System	Implement Academic Performance Indicators (API) linked to promotions, recognitions, and monetary incentives.	Enhanced faculty engagement in research and patenting.
3	Increase in Ph.D. and Post-Doctoral Research	Recruit research scholars and create a post-doctoral ecosystem with expert supervisors.	Strong research base and sustainable research culture.
4	Strategic Collaborative and Targeted Research	Focused research in select emerging domains; establish MoUs with industry and R&D institutions.	Higher number of quality publications, patents, and possible tech transfers.
5	Faculty Empowerment and Research Orientation	Increase Ph.D. qualified faculty; train and mentor junior faculty in research and innovation practices.	Research-driven faculty capable of mentoring scholars.
6	Support for Publications, Books, and Patents	Provide seed funding, IPR filing support, and incentives for book and journal publications.	Increased number of IPRs and academic publications.
7	Conducting Conferences and Seminars (Min. 2 per year)	Organize national/international conferences and workshops regularly.	Improved academic networking and knowledge dissemination.

8	Student Participation in Research and Patenting	Include UG and PG students in projects; encourage project-to-patent conversion.	Early research exposure; UG/PG student patents.

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