Estd : 1984

Strategic Plan
2015 – 2020

Transform Yourself

KONGU ENGINEERING COLLEGE
(Autonomous)

KONGU
Assuring the Best

Contents

Executive Summary

From a humble beginning three decades ago, KEC has made phenomenal strides qualitatively and quantitatively in all spheres – student and faculty strength, programmes offered, infrastructural facilities, teaching – learning process, R&D, industry interaction, outreach and community engagement, student amenities – to name a few.

One cannot rest on one's laurels. For, the world is becoming highly competitive day by day in all spheres of activity. Educational sector is no exception. The institutions are to be alive to the changing global scenario and tune themselves to meet the expectations of the stakeholders.

It is therefore imperative to take stock of the situation and reflect on:

- Where are we now?
- Where do we want to reach and when?
- How do we want to reach?
- How are we sure we have reached?

The above thoughts lead to framing of strategic plan which is an organization process of defining strategy or direction and making decisions on allocating its resources to pursue this strategy.

A series of brainstorming sessions with the stakeholders of KEC were conducted to chalk out a strategic plan for 2015-2020 for the institute. Taking into account the path travelled (History of the institution, Growth Pattern, Present Status), a detailed SWOT Analysis was done. Based on the analysis and deliberations, a strategic plan has been developed with respect to the following aspects:

- Teaching – Learning Process
- Research and Development
- Human Resource Planning and Development
- Industry Interaction
- Community Engagement
- Internationalization

A system of monitoring and mid-course correction is also envisaged.

1.0 The Path Travelled

1.1Preamble

Kongu Engineering College, an institution of national repute today, was established in 1984 by The Kongu Vellalar Institute of Technology Trust formed by 41 philanthropists of Kongu region in the western TamilNadu with the prime objective of providing affordable and value based quality technical education mainly to the needy students of this region. From a humble beginning of a total of 180 students in 3 UG branches, the institution has grown phenomenally in three decadesto the present strength of over 8250 students in 13 UG programmes, 19 PG programmes and 16 research programmes in the serene, picturesque and green campus of 170 acres.

What has made this transformation possible is the selfless dedication and support of management combined with the efforts of the heads of the institution,faculty and disciplined students.

KEC is one of the first self-financing engineering colleges to be established in TamilNadu. The terrain in which it is situated is rocky with undulations. It is a testimony to the vision, passion and determination of the builders of this institution that a barren terrain once it was is now brimming with greeneries, flowers, plants and fountains.

The institution was affiliated to Bharathiar University, Coimbatore from 1984 to 2001 and is affiliated to Anna University since 2001. It has been conferred Autonomous status by UGC since 2007.

1.2 Academic Milestones (Commencement of various programmes)

1984 : KEC was established with 3 UG programmes (Civil, Mechanical and ECE)

1988 : BE (Computer Science and Engineering)

1993 : MCA

1994 : BTech (Chemical Engineering), BE (EEE) and MBA

1996 : BSc(Computer Technology)andME (Engineering Design)

1997 : MSc (Computer Technology)

1998 : BE (Electronics and Instrumentation Engineering) and BTech (Information Technology)

1999 : BE (Mechatronics) and ME(CSE)

2000 : BSc (Information Technology)

2001 : MSc (IT), PhD programmes in Mechanical Engineering and Computer Science and Engineering

2002 : ME (Applied Electronics)

2003 : ME (Construction Engineering), ME (CAD/CAM), ME (VLSI Design) and MTech(Chemical Engineering)

2004 : ME (Mechatronics)

2005 : PhD programmes in Civil Engineering and Chemical Engineering

2006 : BTech (Food Technology) and PhD programmes in EEE and Mathematics

2007 : Autonomous Status conferred and PhD programmes in Physics and Chemistry, BSc(Software Engineering)

2008 : PhD programmes in ECE, Mechatronics and English

2010 : ME (Control and Instrumentation Engineering), ME (Computer and Communication Engineering) and PhD Programmes in Electronics and Instrumentation Engineering and Information Technology

2011 : ME (Communication Systems), ME (Power Electronics and Drives)andPhD programmes in FT, Computer Applications and Management Studies

2012 : ME (Structural Engineering) and ME (Embedded Systems)

2013 : MTech (Information Technology) and MTech (Food Technology)

2015 : BE(Automobile Engineering)

1.3 Highlights

- Eco-friendly green and clean campus of 167 acres with built up area of 18,50,809sq.ft.
- 14 UG programmes, 19 PG programmes and 16 PhD/MS(by Research) programmes.

- 8173 students, 278 Research Scholars, 528 faculty (130 with PhD Qualifications), 506 staff members.
- Well defined curriculum – avenues to learn beyond syllabus.
- Rs. 15.38crore of research grants received from various Government bodies like AICTE,UGC,DST,CSIR,DIT,MNRE etc.
- 5 UG programmes accredited by National Board of Accreditation(NBA) under Washington Accord.
- Recipient of Best Engineering College Award (2001) from ISTE, New Delhi.
- Recipient of Best Engineering College Principal Award- 2 times (2000 & 2013) from ISTE, New Delhi.
- Received National Award for Technology Business Incubator @ Kongu Engineering College (TBI@KEC) from DST presented by the President of India, May 2013.
- Received AICTE – CII Award for Best Industry Linked Institution in India for Department of Electrical and Electronics Engineering based on AICTE-CII 2013 survey.
- CII-Yi KEC Students Net received "BEST NET" award at the National level for the year 2013-2014 from CII-Yi, New Delhi.
- Ranked 2nd Position in Tamilnadu and 27th Position in India among Engineering Institutes in India (including IITs and NITs) by Competition Success Review(CSR) Magazine.

- Ranked 2nd Position in Tamilnadu and 39th Position at all India level by "Outlook" magazine (including IITs and NITs).
- Ranked 2nd Position in Tamilnadu and 32nd Position among private Engineering colleges in India by "The Week" magazine.
- Industry-Institute Partnership Cell (IIPC) with approved Energy Auditors.

- Community FM radio, second of its kind in Tamilnadu; bagged “Best Community Campus Radio 2008” award from Radio Duniya, New Delhi.
- State-of-the-art laboratories.
- Campus-wide Networking with Wi-Fi connectivity, 160 Mbps Internet
- A/C Library, Online Journals and Self Learning facility
- A/C Seminar Halls – 13, A/C Auditorium - 1, Meditation Hall – 2 and A/C Convention centre with a seating capacity of 4500.
- Guest House, Dispensary with Ambulance, Bank with 24 hrs ATM facility and Post Office.
- Un-interrupted water supply and power supply with captive generators of 3250 kVA.
- Top 5% of students in each class are given scholarship.
- Offers full scholarship to students who excel in sports.
- Excellent placement record.

2.0 National and Global Scenario

2.1 Indian Scenario in Engineering education

India has one of the world's largest enrolments in higher education. The IT boom in the first decade of the 21st century led to a surge in demand for engineering graduates. This in turn fuelled the rapid growth of engineering colleges in India. According to AICTE, the number of engineering colleges has more than doubled in the 4 year period from 2006-07 to 2010-11.

Growth of Technical Institutions in the Country (UNDER GRADUATE)

Year	Engineering	Phar	Arch	HMCT	Total	Added in Year
2006-07	1511	665	82	64	2322	171
2007-08	1668	854	82	73	2677	355
2008-09	2388	985	82	81	3536	859
2009-10	2972	1029	82	81	4164	628
2010-11	3222	1041	84	83	4430	266
2011-12	3286	1053	84	83	4506	76
2012-13	3369	1036	100	80	4585	79
2013-14	3384	1029	105	81	4599	14

When the US economy faced a financial melt-down in 2010, the demand for IT services also suffered a setback. This led to a slowing down of recruitment of fresh graduates by IT companies. As a consequence the mad rush for engineering seats came to a screeching halt. This can be evidenced by the dramatic drop in the new colleges being set up from the year 2011-12.

The great IT education rush led to conversion of engineering education into a business to make quick money. The proliferation of engineering colleges led to two predictable consequences:

- The quality of student intake suffered as colleges vied with each other to fill the seats
- The quality of teaching suffered as there were not enough qualified and experienced faculty to cater to the rapid increase in the number of students

The result of all this was the 'production' of lakhs of graduates who were not fit for employment. A survey conducted by NASSCOM reveals that only 25% of the engineering graduates were readily employable.

Unemployment of engineering graduates led to a dramatic crash in enrolment in engineering colleges. In TamilNadu alone, more than a lakh of seats remained unfilled at the end of the Counseling program of Anna University in July 2014.It was also reported that 2 engineering colleges could not fill even one seat and eight colleges could not fill even 10% of the seats. It is obvious that the competition to attract students has become intense and in this market scenario, only the fittest will survive.

It is imperative therefore to improve the quality of teaching and impart conceptual knowledge to the students and also improve their communication skills to improve their chances of placement. If institutions do not respond to this crisis proactively, they will have to face dire consequences.

In the context of widening gap between the availability of jobs and the number students passing out of engineering colleges, it is also necessary to educate the students about alternative avenues such as entrepreneurship and higher education.

2.2 Global Scenario

Indian economy today is closely integrated with the global economy. Multinational corporations (MNCs) see India both as an attractive market and as a country where production and services could be profitably out-sourced. In fact, the boom in the outsourcing of IT services by US firms can be said to be the root cause of the growth in engineering education in India.

While many western countries have rapidly ageing populations, India and China have a large population of young people who would seek education in higher educational institutions including engineering colleges. This means that the reputed universities abroad face a difficult task in enrolling enough local students to ensure their viability. Therefore, foreign universities are actively promoting their services to Indian students. International co-operation in higher education has now become an economic necessity.

University Grants commission has recently notified regulations which provide a regulatory framework for academic collaborations with foreign universities. This provides both an opportunity and a threat to Indian higher educational institutions. It opens up avenues for research collaboration, student and faculty exchange programs and an opportunity to improve the standard of education provided to our students.

Those institutions which use this framework to collaborate with foreign universities can improve the quality of the teaching- learning process and hope to attract better students. Others who fail to use this opportunity to improve the quality of the education that they offer would inevitably suffer from reduced patronage and face a difficult future.

India has recently been accorded permanent signatory membership of the Washington accord. This would mean that programmes that are accredited by National Board of Accreditation will have international validity. This is a significant step to improve the quality of our engineering education to international standards. Students from accredited programs will find it easier to get admission in foreign universities if they wish to pursue higher education abroad. This also provides an incentive for our engineering colleges to upgrade their facilities, improve the quality of their faculty and be recognized internationally.

It may not be an exaggeration to say that engineering education in India today is at the crossroads. There are attractive opportunities but there are also grave threats. Those colleges which take proactive steps to seize these opportunities and improve their quality will flourish. For the others, it is a wake-up call which they cannot afford to ignore.

3.0 SWOT Analysis

STRENGTHS

Rewards and recognition

- A strong public image on quality, reputation, discipline and infrastructural facilities at the college
- Recognized consistently as one of the top institutions at the national level
- Best Engineering college / Best Principal Awards
- Active TBI which has won National Award for BEST TBI in India
- AICTE – CII Award for best Industry linkage at National Level
- ISO certified & IE(I) Accredited
- Five UG programmes NBA Accredited under Washington Accord. Balance in pipeline

Management and Administration

- A highly supportive and motivating management
- Autonomy in Administration with empowerment at different levels
- Transparent and systematic functioning
- Disciplined organizational culture
- Financial strength and stability
- Financial Assistance to needy / deserving students

Academics

- Autonomous status giving freedom and flexibility in academic and related matters
- Broad range of programmes in the UG and PG level

Faculty and students

- 130 faculty members with PhD and 196 pursuing PhD representing 25% and 37% respectively of faculty strength
- Structured programmes and motivation for faculty development
- Faculty with very rich industry experience
- Highly skilled supporting staff
- Homogeneous and disciplined students
- Fairly good input (students)
- Motivation and support to students in co-curricular and extra-curricular activities
- Good Placement in reputed organizations

Infrastructure and Environment

- A conducive learning environment in the serene, clean and green campus
- Continuous upgradation of academic, research and welfare facilities
- Excellent facilities for co-curricular and extra-curricular activities

Research and Development

- Funded projects from various Govt. /Academic bodies
- 9 patents obtained; more in pipeline
- Nurturing Innovation through Annual Open House Exhibition on Science and Technology

Industry Focus

- Dynamic value added courses to meet the changing requirements of the industry
- Good tie-up with industry

Community Linkage

- Good community Linkage through Kongu CRS, NSS etc
- Scholarship for school toppers
- Forums for the benefit of less privileged in the community

AREAS OF IMPROVEMENT (WEAKNESSES)

- Heterogeneity in student population
- Input material not on par with premier institutions(IITs)
- Utilization of resources to be enhanced
- Communication skills of students and faculty
- Initiative on the part of the faculty to exploit their full potential
- Research output in terms of publication in reputed journals
- Sponsored research from industries
- Interaction with society to be enhanced
- Internship and industry projects to be enhanced
- Tie-up with premier Institutions in India and abroad
- Locational disadvantage

OPPORTUNITIES

- Acquiring Deemed University status
- Tapping research funding
- Leveraging technology for societal cause
- Conversion of Projects into products for better utilization of our resources to meet industry/societal needs
- Applied research with the involvement of TBI and IIPC
- Tie up with noted institutions in India and abroad
- Enhancing industry institute tie-up by showcasing our success stories and potential

- Enhancing tie-up with local bodies, government agencies and NGOs
- Leveraging the membership of professional and industry bodies
- Entrepreneur development through student / faculty entrepreneur development schemes
- Application of technology for enhancing teaching learning process
- IPR and patenting project/research outcomes
- Leveraging the accreditation with NBA under Washington Accord
- Utilizing the potential of TBI to the fullest extent
- Internships and Industry projects
- Leveraging Alumni Strength

THREATS

- Fluctuating market conditions for employment of our graduates
- Mushrooming of engineering institutions
- Entry of Foreign universities
- Supply far in excess of demand for engineering graduates
- Fast changing requirements and expectations of industries
- Possibility of decline in admissions due to external factors
- Declining charm of engineering education
- Luring of prospective students by competitors
- Negative campaign by vested interests


4.0 Vision, Mission and Quality Policy

Vision

To be a centre of excellence for development and dissemination of knowledge in Applied Sciences, Technology, Engineering and Management for the Nation and beyond.

Mission

We are committed to value based Education, Research and Consultancy in Engineering and Management and to bring out technically competent, ethically strong and quality professionals to keep our Nation ahead in the competitive knowledge intensive world.

Quality Policy

We are committed to:

- Provide value based quality based education for developing the student as a competent and responsible citizen.
- Contribute to the Nation and beyond through the state of-the-art technology.
- Continuously improve our services.

5.0 Strategic Plan for 2015-20 and Action Plan/Goals for 2015-16

5.1 Teaching Learning Process

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
1.	Bridge Course (Physical Sciences and Mathematics)	A few programs are organized.	To achieve basic level of comprehension of fundamentals of Science and Engineering.	Introduction of structured programmes to cover all needy students in the first year & also second year lateral entry students.	Faculty hours to meet the load	To implement a structured programme for Maths in 2015-16 Syllabi to be framed by Mathematics department with the involvement of MTS and E&I departments	HoDs – Mathematics, EIE and MTS
2.	Common Electives	One common elective for UG. No common electives for PG. Regulation 2014 has more provision for common electives (3 nos.) for UG programmes	30% to be elective, out of which 10% to be global elective for both UG and PG.	Suitable Modifications in the curriculum Credits through self-learning courses.	Induct suitably qualified faculty / train existing faculty. Make use of visiting faculty.	To plan the curriculum accordingly for the next regulation.	Deans, Chairmen BoS, Dean (CDSA)
3.	E-Learning methodology	Conventional classroom teaching. Wi-Fi enabled campus.	Online learning supplementing classroom teaching learning process.	Online access to courses to be provided. Accessibility of online courses like NPTEL. Introduce BYOD system.	Smart classrooms / studios to be created. e-contents to be created	i) Each department to create e-content for one course per semester ii) CSE department to create the BYOD facility	HoDs HoD/CSE

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
				FDP for e-content creation.	Financial Support	iii) One full fledged studio with recording, streaming, archiving, and video conferencing facility to be created for the college (2016-17).	Librarian, FM coordinator and the top management
4.	Interdisciplinary projects	Not in practice.	15% of UG and PG projects to be of interdisciplinary nature.	Motivation to faculty for interdisciplinary research. Creating a common platform throughout the institution (project students and supervisors from different disciplines).	Appropriate changes in regulation.	To start with 5% of the projects to be of inter-disciplinary nature.	HoDs
5.	Projects into products and patents	Very few	One project to be developed into product by each department every year. 5 patents to be filed at institute level every year.	Faculty representation from each department coordinated by the TBI to identify and nurture viable projects. Monitoring mechanism to ensure progress.	Financial support. Technical manpower beyond working hours.	One project per school to be converted to product. One patent to be filed.	HoDs in coordination with TBI, IIPC, and CDSA
6.	Student projects at R&D labs / leading institutions / Industries	Very few	25% of final year student projects to be done in R&D labs/leading institutions/industries	Projects addressing problems of industry. Faculty to have continuous interaction with leading research labs.		10% projects per department	HoDs in coordination with IIPC

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
				Joint collaboration with leading institutions. "Professors of practice" from industries for specific lectures. MoUs Engaging PG students in Funded projects.			
7.	Internship	About 2%	20% of final year students to take up internship.	Effective use of MoUs, membership of industry bodies, Placement Cell , TBI and alumni linkage.		Minimum 5% of final year students in each department	HoDs in coordination with P&T Cell, TBI and IIPC
8.	Assessment and Evaluation process	Satisfactory	Total Shift from output to outcome based education. Innovative methods to assess conceptual knowledge and skills.	Modifying teaching learning methodology with emphasis on conceptual learning and skill development. Assessment and evaluation to be based on Bloom's taxonomy. Training the faculty members Tuning the students to the paradigm shift. Adopting intelligent/smart		Concept based course material with appropriate assessment methodologies to be developed for one course per semester by each department.	CoE in coordination with the HoDs

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
				books published by reputed publishers.			
9.	Faculty Competence	Satisfactory	All faculty members to reach accepted level of competence	Identify the strengths and weaknesses of the faculty and provide suitable training / mentor-protégé / experience sharing / refresher courses	Financial Support.	Competence of identified the faculty in each department to be enhanced through suitable mentoring / training/ counseling.	HoDs and HR Cell
10.	Academic administration through online	Inspro-plus (Existing system is time consuming).	Entry-to-Exit online process to handle student progress.	Secure high performance online system to be developed / procured.	Financial Support. (Cost may be recovered from students)	Available software in the market to be evaluated	CoE and Registrar
11.	Introduce new relevant programmes	Latest UG and PG programmes started in the year 2015 and 2013 respectively.	3 new programmes based on industry needs.	Potential demand needs to be identified area such as Energy, Biomedical, Environmental, Safety Engg., etc.	Faculty with related specialization is required. New research laboratories to be established.	Need survey may be done by related departments.	Energy: HoDs of MECH and EEE Environment: HoDs of CIVIL and CHEM Bio-Med: HoDs of EIE Safety Engg.: HoDs of MECH, CHEM & EEE
12.	Setting up of new laboratories / upgrading of existing laboratories with industrial	Very few	At least 5 research laboratories in collaboration with lead industry and R&D labs.	MoUs with industries. Leveraging alumni linkage. Showcasing our strengths to Industries.	Infrastructure and financial support from Management.	Identify potential industries and initiate dialog for setting up of one laboratory per department	HoDs and top Management

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
	collaboration						
13.	Participation of professional bodies	Guest Lectures, Symposiums, Conferences and Workshops.	One international event per year in association with professional bodies.	Showcasing our strengths to professional bodies.	To organize international conferences.	Two international conference	SBMS and Management Studies Dept.

5.5.2 Research and Development

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
1	Total value of R&D Grants received every year	Total grant value Rs. 100.53 Lakh (79.19 + 21.34) (For the year 2014-15)	2 Crore funding every year.	Instead of focusing on advanced research areas for funding, faculty to focus on issues that address the local needs. Proposals for funding to be based on prior work in the relevant area supported by publications in refereed journal. Multi-disciplinary research to be encouraged. To try different sources of funding in addition to government organizations.		Minimum 10% improvement over 2014-15	Dean (R&D) and HoDs

				Financial incentives for the faculty who obtains grant in addition to a greater visibility through the Institute's website, special reports and media. Faculty who have grants from funding agency to be assigned more UG/PG project students instead of lab classes.		Scheme to be worked out and start implementation	Dean (R&D)
2	Impact factor, h-index& citation index.	A few publications are in refereed journals and majority of them are in low ranked journals	Publication of research work in good refereed journals with Science Citation Index (SCI). One paper per PhD holder every year.	To select research problems related to Industry/society/application. To establish a centralized research lab with basic measuring, testing, calibration and fabrication facility. In addition to Elsevier, publications from Wiley, Taylor & Francis, ACS to be made accessible. Awareness to be created to the authors for selecting reviewers from renowned institutes. Expertise to be developed	Separate R&D budget may be allocated.	Minimum two papers in SCI journals per department To initiate proposal for a centralized research lab	HoDs Top management and Dean(R&D)

				in specific areas by suitable motivation. To provide encouragement and support for interdisciplinary research. Encouraging faculty to have collaborative research with other institutes/ industries. More number of full time research scholars to be attracted through institute funding. Recognize faculty with good publications with greater visibility through the Institute's website, special reports and media projection.			
3	Collaborative/ Joint research initiatives	Being contemplated	5 collaborative / joint research projects with lead institutions / R&D laboratories / industries.	PhD research works to be tuned to meet the industrial/ societal needs. Signing MoUs with foreign universities, lead R&D institutions and industries in India. Fulltime scholar Enrollment to be	Suitable funding to be allocated.	One such collaboration to be initiated at college level.	Top management and Dean(R&D)

				enhanced. And scholarships for them to be tried with industries and other government organizations. Conducting more number of international conferences which will lead to international collaborations. Encouraging faculty to do Post Doctoral Fellowship abroad or in lead R&D institutions.			
4	Centres of Excellence	Under consideration	Three centres of excellence to be established	Based on the core strength and expertise available, each School to plan to establish one centre of excellence. Industrial sponsorship to be attempted. Encouraging faculty to do R&D collaboration with reputed organizations like DRDO, CSIR, IITs, IISc, foreign universities. Institute to sponsor a few faculty to do Post-Doctoral research in	10-15 faculty members drawn from multiple disciplines. Rs. 20-25 lakh investment from the management per year.	Initiating action for one Centre of Excellence at college level	Dean (R&D) and HoDs of SBMS

				reputed universities.			
5	Patent	Number of patents obtained so far: 9	5 patents to be filed at institute level per year.	Converting selected Open House Exhibition on Science and Technology projects / student projects / faculty research into products / patents. Top 5 projects to be incubated by TBI with funding support from KEC/TBI.	Financial Support	Atleast one patent to be filed Atleast one to be incubated in TBI	IIPC TBI and HoDs
6	Technical Journal	Under Consideration	1 Journal	Motivate the faculty for developing in-house publication. Editorial board to be formed with representation from researches of various departments. Panel of reviewers to be formed.	Financial support	Completion of preliminary work for the launch of Journal	Dean (R&D) with domain experts from various departments
7	No. of Ph.D. from KEC research centres	Number of Ph.D. from KEC research centres during 2014-15: 20	30 Ph.Ds. in 2015 gradually increasing to 50 Ph.Ds. in 2020	More PhD holders to obtain recognition as supervisors. Enhancing enrollment of full time research scholars.	--	30 PhDs	Faculty concerned and their supervisors

5.3 Human Resource Planning and Development

Human Resource Development – Faculty

S.No	Aspects/Metric	Present level	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
1	Student: Faculty Ratio	15: 1	13:1 To facilitate research and industry	Hiring suitable faculty.	Financial support	--	--
2	Faculty with PhD (as percentage of total)	25%	60%	Motivating the faculty to register for/pursue PhD	--	3% more (on the total strength of faculty) to complete PhD	Individual faculty
3	Faculty with Industrial experience(as percentage of total)	2%	5%	Hiring people with industrial experience.	--	To hire one person with industry experience for each department	Top management
4	Average years of experience	9.6 years	15 years	Retaining faculty. Hiring experienced faculty against vacancies.	--	--	--
5	Faculty training in industry	7% of faculty (average one week per year)	25% of faculty (average one week) per year per department.	Motivation for faculty. Leveraging membership of industry associations.	Financial support	10% of faculty to be trained in industry for one week	HoDs and IIPC

6	Participation in Faculty development programs	15% of faculty	30%faculty to attend 5 days of training in a year in reputed institution.	Tie-up with leading institution. To be included as one of the assessment criteria for faculty	Financial support	20% of faculty to be deputed to FDPs	HoDs
7	Participation in Faculty exchange programs	Under consideration	1 faculty per school per year.	Exploring tie-ups with reputed institutions in India and abroad	Financial support.	To initiate dialogues with prospective reputed institutions	Top management, Principal and deans
8	Faculty Induction and guidance	2 days	1 week general induction. 2 weeks of mentorship under senior faculty of the department.	Assigning a senior faculty as a mentor for each new faculty.		A scheme of mentorship of newly joined by senior faculty to be formulated Five days programmes to be planned during winter vacation	HR Cell.
9	Refresher course/ Workshop for existing faculty	Very few	One per year for each faculty	Needs to be identified based on experience Framing suitable	Suitable resource persons	Minimum one programme covering about 10% of	HoDs

				contents and methodology for the programme Implement and measure the effectiveness		the faculty to be organized	
10	Publication of research papers	About 0.5 per faculty/ year	At least 1 paper per PhD holder in refereed journals with impact factor.	Financial rewards based on the quality of journal. Recognition in the form of visibility through the Institute's website, special reports and media	Financial support	Atleast One paper per PhD holder in refereed journals Schemes for rewarding publication in refereed journals to be introduced	Dean (R&D)

Human Resource Development – Students

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
1	Student diversity	About 10%	20% of annual intake from regions other than the Kongu region.	Enhance visibility of the institution among schools throughout the state. Provide financial support for outstanding students.	Financial support	Plans for enhancing visibility to be formulated	Top management
2	Student enrolment for competitive examinations	About 30%	50% of students in the final year.	Provide encouragement through on-campus coaching. Encouragement and support for groups like GATE forum/ Civil services forum.	Financial support	Classes for civil services, Bank exams, and other Professional exams to be started Target: 35%	HoDs and HECE Cell

3	Communication skills	Needs improvement	Adequate skills to meet industry requirements.	Introduce different/ innovative methods to enhance these skills. Modify the curriculum to emphasize communication.	Financial support	Faculty training to be initiated Active learning methodologies to be employed BEC Courses to be introduced	HR Cell HoDs P&T Cell and HoD/English
4	Student Exchange programs	Being contemplated	1% of student intake.	Dialogue with premier institutions for facilitating such student exchanges.		Introduce enabling provisions in the regulations International study tour to be planned 2016-2017	Top management, Deans and CDSA HoDs
5	Student internship in industry	About 2%	20% of students in the final year.	Effective use of MoUs, membership of industry bodies, Placement Cell , TBI and alumni linkage.		Minimum 5% of final year students in each department	HoDs in coordination with P&T Cell, TBI and IIPC

6	Entrepreneurship Awareness	30%	About 60% of student intake.	Awareness programmes. Identify students with entrepreneurial aptitude and provide suitable training. Appoint student ambassadors for promoting entrepreneurship		4 awareness programmes to be conducted Student ambassador scheme to be formulated	EMDC and TBI
7	Additional Academic support for weaker/ disadvantaged students	A few programmes	100% of such students to be assisted and monitored.	Institutionalize the system for providing support. Efforts of the faculty to be recognized	Faculty hours to meet the load	Structured process for additional academic support to be drafted and start implementing	HoDs

8	Placement	About 70% of eligible candidates	90% of eligible candidates	Through improving communication skills and conceptual understanding. Increase the number of core companies Keep updating training / Skill modules as per industry trend / new technology To review representation requirement on west/ north India		Faculty training to be initiated Active learning methodology to be employed Initiate communicatio n with 100 new companies BEC to be made mandatory Faculty coordinators along with a team to develop contacts of new companies	P&T Cell and HoDs

9	Practical orientation	About 35%	100%	Better use of TBI facilities. Training in concepts. Industry internship. Classroom teaching to be oriented towards practical concepts . To induct faculty with industrial experience. Industry orientation for existing faculty. CII Webinar may be made use of.		TBI facilities to be popularized. Use of multimedia to bring industry practices to the class room. To hire one person with industry experience in each department. In-plant training period to be enhanced to one week.	HoDs HoDs Top Management IIPC

10	Understanding of concepts	Needs improvement	All students to have a good understanding of fundamental concepts.	Define the fundamental concepts for each discipline. Use systematic methods for disseminating the concepts.		Concept based course material to be compiled for one course per year per department Adoption of intelligent/ smart book for one course per department. Identify the subjects; McGraw Hill will give training to selected faculty members. HoDs to suggest faculty.	HoDs and individual faculty

Human Resource Development – Staff

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
1	Computer literacy	About 70%	100%	Organise training programmes.		Training programme to cover 10% of staff (not yet covered)	CT-UG and CT-PG
2	Develop technical skills	Training efforts are made at infrequent intervals	25% of technical assistants each year	Refresher training. Arrange for industry training. Training and retraining by vendors		At least one staff in each department to be deputed to industry/ other premier institutions for training for a week	HoDs
3	Enhancement of qualification	10%	25%	Motivation to staff	Organizational support	One staff per school	Individual Staff

5.4 Industry Interaction

S.No	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Requirements	For 2015-16	
						Action Plan/Goals	Responsibility
1	Revenue through IIPC activities	About Rs. 45 Lakh	Rs. 75 Lakh per year	A vigorous pursuit of opportunities Reaching out to sectors not explored earlier Using alumni linkages	At least one faculty/ department with industry experience of minimum 5 years	Rs.55 lakh Industry visit by faculty: Minimum 1/ per month/ department to identify problems	HoDs in coordination with IIPC
2	Faculty trained in industries	About 7% (average 1 week per year)	25% of faculty (average 1 week) per year	Leveraging membership of industry associations Using alumni linkage	Financial Support	Minimum 10% of faculty to be trained in industry (Avg. 1 week /year)	HoDs in coordination with IIPC

3	Student internship in industry	About 2%	20% of students in the final year.	Make use of MoUs Leverage the membership of Industry associations like CII.		Each department to have at least 5% internships	HoDs and IIPC
4	Training programs for industries	Very few	10	Make use of MoUs More effective utilization of TBI resource		One per school	HoDs in coordination with IIPC
5	Projects done for/in industry by students	158 projects (500 students)	350 projects covering 1000 students	Reaching out to more companies Showcasing the institution's strength to industries		200 projects covering 600 students	HoDs in coordination with IIPC
6	Establishment of Labs/ Centres with Industry support	A few	Five centres/ labs with industry support to be established	Make use of MoUs Utilise alumni linkages Showcasing our strengths to industry	Financial support	One centre to be established	Top management, Principal, Deans and HoDs
7	Faculty Projects / Consultancy undertaken to meet specific industry requirements (with a revenue of minimum Rs.10,000/- per project / consultancy)	48	120	Identify the requirements of industries Develop groups of people in the domain expertise More vigorous pursuit of opportunities		Minimum 2 project per department Total: 60	HoDs in coordination with IIPC

8	Visiting faculty from industry	Through Webinar	One course /department/year	Leveraging membership of Industry bodies. MoUs to be signed	Financial support	Identify course & faculty for the year 2016-17	HoDs in coordination with IIPC
9	Guest lectures given in industry/ Industry associations by faculty	Very few	2 lectures per year per department	By giving wider publicity to the expertise of our faculty		One per department	HoDs in coordination with IIPC
10	Guest Lectures by Industry personnel	About 7 per department	About 10 per department	Leveraging membership of Industry bodies.		7 per department	HoDs

5.5 Community Engagement

S.No.	Aspects/Metric	Present Status	Goal (to reach in 5 years)	Strategy	Resource Required	For 2015-16	
						Action Plan/Goals	Responsibility
1	Technology based projects for societal issues	A few projects have been done.	1 project per department	Identification of societal issues to be solved by technology. Effective utilization of resources of TBI and departments	Financial support	One project per school	HoDs in coordination with TBI
2	Educating the public	Kongu CRS conducts programmes on various topics Open House Exhibition on Science and Technology About 5 programmes or events conducted every year	About 10 programmes or events/year. The events may include: Rallies, fund raising programmes, programmes over the community radio	More programmes useful for the community like healthcare, agriculture, technology issues, etc. to be conducted. To associate with NGOs and self Help Groups		Minimum 5 programmes or events to be conducted.	Coordinator Kongu CRS
3	Short-term Courses/Workshops/Skill based programmes for Women, senior citizens, unemployed youth, etc.	A few courses have been offered	6 programmes/ year	Connect with Governmental agencies and NGOs Leverage professional bodies and funding agencies.		3 programmes to be chalked out.	HoDs, Coordinator Kongu CRS, Yi, Rotaract, and other relevant clubs

4	Programmes for less privileged children/orphans	In vogue Thoorigai, NenjeEzhu, Rotaract club, etc.	8 events/ programmes/ contributions.	Motivation of faculty and students for good cause. May be included in the association plan of all departments Connect with governmental agencies and NGOs		8 nos. of events/programmes/ contributions to be completed	HoDs in coordination with Rotaract, NSS and other clubs
5	Social Service (Blood donation, etc.)	NSS conducts blood donation camps Tree plantation drives Awareness on plastic-free society	Eradication of parasitic trees (*SeemaiKaruvelan and VeliKaruvelan*) in and around Erode.	Awareness creation among students, staff and faculty		Periodic and emergency blood donation camps Make the campus green and plastic-free	NSS and other clubs

6	Village Adoption and infrastructure development	NSS conducts special camps for cleaning and renovation of facilities in villages and schools	2 villages	Identify agencies supporting the village adoption scheme. Utilization of funds under CSR of corporate		NSS to identify agencies and initiate adoption of 1 village	NSS

5.6 Internationalization

S.No.	Metrics	Present Status	Goal (to reach in 5 years)	Strategy	Resource Required	For 2015-16	
						Action Plan/Goals	Responsibility
1	Student/Faculty Exchange Programmes	Under consideration	To implement with at least 2 universities abroad	MoUs with foreign universities Leverage UGC programmes		Identify one or two universities abroad and initiate dialog for exchange programmes.	Top management and Principal
2	Fellowships for PhD/PDF/Professional Excellence	1 (BOYSCAST)	5 (PhD/PDF) 2 (Professional Excellence)	Identify and motivate prospective faculty MoUs with foreign universities Leverage fellowships like BOYSCAST, Nehru-Fulbright, etc/		Awareness among faculty to be enhanced and atleast 1 faculty member to be identified	Dean (R&D)
3	Higher Education abroad	A few students opt for higher studies abroad.	5% of outgoing students to opt for Higher Education abroad	Motivate students to opt for higher education abroad Leverage Alumni linkage Conduct classes for GRE/GMAT/TOEFL in campus		2% of outgoing students to opt for Higher Studies abroad.	Higher Education & Competitive Examination Cell
4	Provide admission to Foreign Students	Under consideration	1% of admitted students to be from abroad	Tap potential countries like Malaysia, Gulf, Sri Lanka, etc.	An International Relations Cell to be established	To initiate dialogues with embassies/Agencies of suitable countries	Principal and Top Management

6.0 Looking Ahead

The strategic planning document developed will serve as a monitoring tool for self-appraisal at various levels and also be a guiding document from management to staff level. Periodical reviews to assess the achievement level vis-à-vis the plan and taking necessary corrective action is called for. It is hoped that with sustained efforts, involvement, monitoring and support, it is possible to reach the goals set in the document.