



# ANNA UNIVERSITY

## AU TVS



### Center for Quality Management



Lucas - TVS



Sundaram-Clayton



Sundaram-Fasteners



**1995-2015**      Quality is not mandatory  
If survival is not compulsory      **Chennai  
India**



Quality became the order of the day in our developing country way back in 1980's, while it was the normal case, a few decades back itself, in the developed countries. The brand value of any organization was and is no more dependent on quantity, but the quality. Quality being an integral part of any efficient management system is not an attribute that cannot be inculcated overnight. The significance of practicing quality in every aspect of life must be understood through the fine analysis of real life happenings.

Realizing this salient truth, Anna University has taken multifold steps to enhance quality in multifarious aspects. As a strategic step, AU TVS Centre for Quality Management was established in 1995. The centre takes care to stimulate the responsibility to instigate quality in all dimensions of life, among the study and community, who will become the future policy makers of the nation. Only then, quality can be inculcated in our nation from the grass root level. It also serves the working community on the latest trends.

Our nation is in a dire need of quality management system to solve the manifold problems, which are currently being faced. Who better than the next generation policy makers can arise to the occasion? The centre has walked on the right path, and has significantly contributed in the development process of our country, which has become a developed nation now. As told by Dr.A.P.J.Abdul Kalam, Quality in life is more important than Quality in Products. Keeping in mind that India continues to attract the world, especially with the knowledge of young India, Students Quality Council and Students Creativity & Innovation Laboratory, promoted by AU TVS CQM, is getting rightly shaped as effective building blocks of future India.

So, quality must not be regarded as something which is needed to boost the productivity, but as a tool mandatory for productivity. i.e., Quality is not compulsory if survival is not mandatory. With this goal in mind, let us work forward to enhance the quality levels in the various aspects we come across hereafter.

**Prof. Dr.M. RAJARAM,**  
Vice Chancellor, Anna University



The need for orientation of Quality Culture is being increasingly felt in the context of changing business environment which is truly becoming global. Anticipating this, TVS group companies set up a Centre for Quality Management in collaboration with Anna University as early as 1995. The well equipped Centre over the last 20 years, is propagating Quality and reaching industries, MSMEs as well as students.

I am happy to note that you are finalizing to launch a new website for AUTVS CQM. I am sure this will help budding engineers in updating their knowledge and using the same in building this great country.

**Shri. T.K. BALAJI,**  
Chairman & Managing Director,  
Lucas-TVS



I am very glad to note that the Anna University - TVS Centre for Quality Management, started in a small way in 1995, is completing 20 years of productive service this year.

It is gratifying to note that the Centre has, over the last twenty years, seen considerable growth and progress in the achievement of its goals, which is to raise the standard of students by equipping them with quality consciousness, and training the industry personnel to periodically upgrade their skills and competency levels.

I take this opportunity to congratulate the Chairman, Advisor and Director of AU-TVS CQM for guiding the Center in the right path and wish the Centre a very purposeful and glorious future.

**Shri. SURESH KRISHNA**  
Chairman & Managing Director  
Sundaram Fasteners



*“Skilling India” and moving up the value chain with higher order skills and superior work culture, is an essential prerequisite to realize our Prime Minister’s vision of “Make in India”. Total Quality Management (TQM) is a complete and well-developed management science that can play a pivotal role in this nation building effort.”*

I am happy to note that Anna University TVS Centre of Quality has made very impressive progress over the last two decades through quality-driven academic courses, training programmes, research and consultancy in TQM and has emerged as a role model for other universities. This will undoubtedly help India and Tamil Nadu in particular to become a preferred location for manufacturing high quality and innovative products for world markets.

Successive governments in India have pursued economic reforms in order to provide both employment opportunities and a robust environment that allows for the growth and sustainability of enterprise and entrepreneurship. Today, Indian companies are competing with global players, who have high levels of technological prowess, expertise and experience in international operations. Many of our companies in the manufacturing sector have embraced powerful practices like Total Quality Management, Total Productive Maintenance and Lean Manufacturing in their journey towards excellence. This journey ushered in a culture of customer focus, high quality and continuous improvement, with the involvement of all employees.

It is of paramount importance that new employees joining such organizations are trained and oriented in a manner that they acquire the highest levels of the competence required to succeed in the highly competitive domestic and global markets. The current education systems need to be realigned and revamped to meet this very important challenge. This can only be facilitated by a close industry-academia partnership to create a conducive environment for developing a culture of quality and continuous improvement.

Anna University with a large number of engineering colleges under its umbrella is ideally poised to disseminate the TQM methods to develop excellence in engineering education with appropriate innovations in curricula, teaching methodologies, learning systems and evaluation processes. I compliment the Anna University TVS Centre for Quality Management for rededicating itself to this noble task of nation building. My best wishes for your continued success.

**Shri. VENU SRINIVASAN**  
**Chairman and Managing Director**  
**TVS Sundaram-Clayton Limited**



Over the years, Quality has become the "Winning Mantra" for survival and sustained success in any business. For TVS companies, right from inception, it has been our strong conviction and experience that only Quality Products delight the customers.

In order to create all round awareness on Quality, we decided to extend our arm to other entrepreneurs and industries with specific focus on students. With this objective, TVS group of companies and Anna University jointly initiative as early as 1995 and set up a Center to propagate the importance of Quality.

I am sure your present steps to create a new website for AUTVS CQM will foster your effort for creation of Quality awareness. I convey my best wishes for success in your journey. I wish to add that AUTVS can count on our support and guidance in all such endeavors

**Shri. Dr.N. RAVICHANDRAN,**  
**Executive Director, Lucas TVS Ltd.,**



It was during the Independence day (2014) address to the Nation, our Prime Minister proposed 'Zero Defect, Zero Effect', as a social reformation agenda, along with his call for 'Make in India'. Any product or service offered by a company or institution, with Quality built in shall benefit the 'people' on its application with 'zero defect' and with 'zero effect' on the planet environment

Anna University's approach to propagate these concepts, abbreviated as '3 Ps' - People (Health, Safety and Social Accountability), Planet (Environment) and Profit (Generating benefit) is being carried forward through **AU-TVSCentre for Quality Management**.

I wish the pragmatic approach of this Centre in propagating Quality Management concepts, stressing on these Triple Bottom Line of 3Ps, among students, entrepreneurs, institutions by imparting Training, Research, Guidance and Consultancy will yield results as envisaged by the National leaders of our country towards continual improvement of products and services on par with global standard

**Prof. Dr. S. GANESAN,**  
**Registrar, Anna University**



**Quality is not an act, it is a habit.**



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**Even though quality cannot be defined,  
you know what quality is.**



# QUALITY FROM AND WITHIN



*"It is the quality of our work which will please GOD and not the quantity."*

*- Mohandas Karamchand Gandhi*

*A customer is the most important visitor on our premises.*

*He is not dependent on us.*

*He is not an interruption in our work.*

*He is not an outsider in our business.*

*We are not doing him a favour by serving him.*

*We are dependent on him*

*He is the purpose of it.*

*He is a part of it.*

*He is doing us a favour by giving us an opportunity to do so.*



*"Quality in life & in action is important, then it will spread to the products we make."*

*- golden words by Dr. A. P. J. Abdul Kalam to SQC on 10/07/2002*

*Student: "When will \$40 equal Re.1/-?"*

*Dr.A.P.J: "SWEAT"*



**கருவியும் காலமும் செய்கையும் செய்யும்  
அருவினையும் மாண்டது அமைச்சு.- குறள் 631.**

**திருவள்ளூர்**

## Genesis

University – Industry Interaction is a prevailing feature of all programmes in Anna University. The need for orientation of QUALITY CULTURE was increasingly felt in the context of changed economic environment which aimed at globalization of the economy.

AU and TVS group of companies have been working hand in hand on several University – Industry Collaborative Service by synchronizing their objectives towards societal development and transformation.

To meet the need of spreading quality awareness on Quality through formal training “AU – TVS CENTRE FOR QUALITY MANAGEMENT “is successfully promoting advanced training, consultancy and Research in the areas of TOTAL QUALITY MANAGEMENT since July 1995 and rest is history.



**MOU, The bond of AU TVS 11Jan'95  
Padmashree Dr.M.Anandha  
Krishanan & Shri.T.K.Balaji**

## Director's Desk

“With Quality in Education field, we are talking of the innovation, consistency, commitment and excellence for the future. Believing in the above, we are performing towards amazing activities. Building the interest and showing the path for undeterred endeavor towards Quality in all activity, are the main objectives of this centre.“



**Prof.Dr.K. NARASHIMAN,  
Director, AU TVS CQM**

The rapid changing scenario in industry can be met only with a mindset change in all professionals, engaged in Technical Institutions, Industries, Service Institutions or Government, to inculcate in their organizations the “Feel of Excellence” in whatever they do / deliver. Any institution can grow and flourish well, only with the sustained Top Management Commitment. So much so AU TVS CQM is also getting the requisite support in the identical way with Anna University and House of TVS.

The Quality journey of AU TVS CQM will continue to bloom as having crossed several milestones across 20 years. The Centre will continue to dedicate itself in promoting an “Environment for Excellence” in the academia, industry and service sectors.



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



## AU TVS CQM

AU TVS CQM caters to academia and industrial community

- ❑ Students get to know the latest trend, challenges/ best practices in the industry, application experience and mould themselves as holistic engineers equipped with quality.
- ❑ Faculty know the trends in the industry and present their ideas that could be used to solve the problems faced.
- ❑ Industry has an update on concepts and techniques on their implementation and share the experience with their counterparts.



**Prof.,Dr.M.Rajaram, Vice chancellor's visit for Panoply of Achievements, 1995-2013 on 13.9.2013**

## Students Quality Council

AU TVS CQM Promotes Students Quality Council from 1998 with objectives :

- To empower students to significantly improve their personal and professional capabilities through principles of quality management, in order to lead a purposeful and principle-centered life,
- To propagates quality mindset
- To develop quality skills

Today, both are at the forefront amongst colleges and companies with innovative programmes aimed at enhancing quality perspectives. They are being well received by the students , faculty and employees.



**Vice chancellor awarding certificates to Welvaart winners on 17.03.14**

## Students Creativity and Innovation Lab (SCI LAB)

The Students Creativity and Innovation Lab was officially inaugurated on 10<sup>th</sup> February 2015. Things can be done in a conventional way, but that will take a lot of effort and time. The demand of the present is basically, “how creatively a problem can be solved by bringing new innovative ideas”. Here in Students Creativity and Innovation lab, we function in a way which ultimately develops creativity and innovation into students, making them to stand out in a crowd.

### Mission & Vision

To generate, process and implement revolutionary ideas in a sequential, synchronised and efficient manner. To be the pioneer in creativity and innovation



## **Mission**

To create quality consciousness and encourage pursuit of excellence among student community. To serve industries as a resource base for Quality - a body of knowledge.

## **Vision**

To be the centre of excellence in the field of Quality education, training and applied research. To be the premier institution in the country which offers opportunity for students to develop a well rounded personality towards achieving excellence in their endeavors.

## **Values**

Govern individual and institutional relationship with highest standards of conduct and integrity. Contribution to society to build a Quality culture.

## **Objectives**

To evoke an appreciation of the Quality concepts to sustain result oriented improvement. To impart strong conceptual framework and the practical skills on the appropriate tools and techniques of Quality Management at the specific place of work for excellence.

## **Model Industry Institute Interaction Centre**

AU TVS CQM by virtue of rendering varied services, over the last 19 years, is now recognized as a live example for Industry Institute Interaction.

## **Uniqueness**

- ❖ The members of the students Quality club acquire a unique learning and experience of involving and participating in all the endeavors of AU TVS CQM.
- ❖ This industrial exposure and knowledge on particle experience imparts substantial knowledge during their days in the campus.
- ❖ NAAC recommended that AU-TVS CQM programme could be considered as model programmes with scope for expansion.
- ❖ Q-Quest, an annual conference on Total Quality Management, since 1999, being participated by different sections of the society, has attained stupendous recognition with imploration. On demand it is being continued every year successfully.
- ❖ With the awareness created by the center, Total Quality Management was introduced as a core subject for all branches of engineering in all the Engineering colleges in TamilNadu.
- ❖ Student progression is made by promoting Student Quality Council and Student Creativity and Innovation Lab.



**Be a yardstick of quality. Some people aren't used to an environment where excellence is expected.**



## ***Expert Panel of resource Faculty***

AU TVS CQM is privileged to have a very highly specialized expert resource faculty panel with very rich knowledge from Academia and deployment skills from companies. From the Academia side, senior Professors from highly reputed and leading Educational Institutions and Senior Executives from companies practicing TQM concepts successfully involve and contribute.



**Statistical Process Control by  
Mr. P.S. Satyanarayanan ,  
GM - QA, Sundaram Clayton Ltd**



**Quality Management Seminar by  
three resource faculty from German  
Dr. Paul Bagdasarian, Mr. Thomas  
Penon, & Mr.T.M.Nitsche**

## ***International Recognition***

- ❖ The center was recognized in 1997, by the senate of Bremen, Germany, for training in Germany on Bremen Quality Management Model.
- ❖ The success of installing Bremen Quality Management Model in 28 companies in Chennai was presented in the International conference, Advanced Production Management Conference in Germany during 6 – 10 Sep 1999.
- ❖ AOTS Japan awarded Scholarship for training program in Japan on “Practical solution for quality related problems” during the period 1-14 Sep 2010.
- ❖ Total Quality management Programme was promoted in Wisdom Institute, Dubai



**Lucas - TVS**

- ✓ JIT
- ✓ TQM
- ✓ TPM
- ✓ LEAN
- ✓ 6 SIGMA

Established in 1961 as a joint venture between Lucas UK and TVS, is the leader in auto electrical in India with 50 years experience in design and manufacturing. 4 out of 5 vehicles rolled out daily are fitted with Lucas-TVS products.



Mr. T.K. Balaji  
Chairman & MD



Dr. N Ravichandran  
Executive Director



**Sundaram-Clayton**

- ✓ TQM
- ✓ TPM
- ✓ LEAN

Sundaram Clayton Limited is a part of the \$5 billion TVS group, one of the largest auto components manufacturing and distribution group in India. SCL is a leading supplier of aluminium die castings to automotive and non-automotive



Mr. Venu Srinivasan  
Chairman & MD



C. N. Prasad  
CEO



**Sundaram-Fasteners**

- ✓ TPM
- ✓ LEAN

Sundaram Fasteners is the first Indian company to get ISO 9000 Certification. Sundaram Fasteners Limited is also the first Indian component manufacturing company to have won the prestigious TPM excellence and consistency award from the JIPM.



Mr. Suresh Krishna  
Chairman & MD



Mr. N Balakrishnan  
President

## EIGHT VICE CHANCELLORS SINCE INCEPTION



**Registrar**



**No total quality management is without top management commitment**



## Academic Subjects

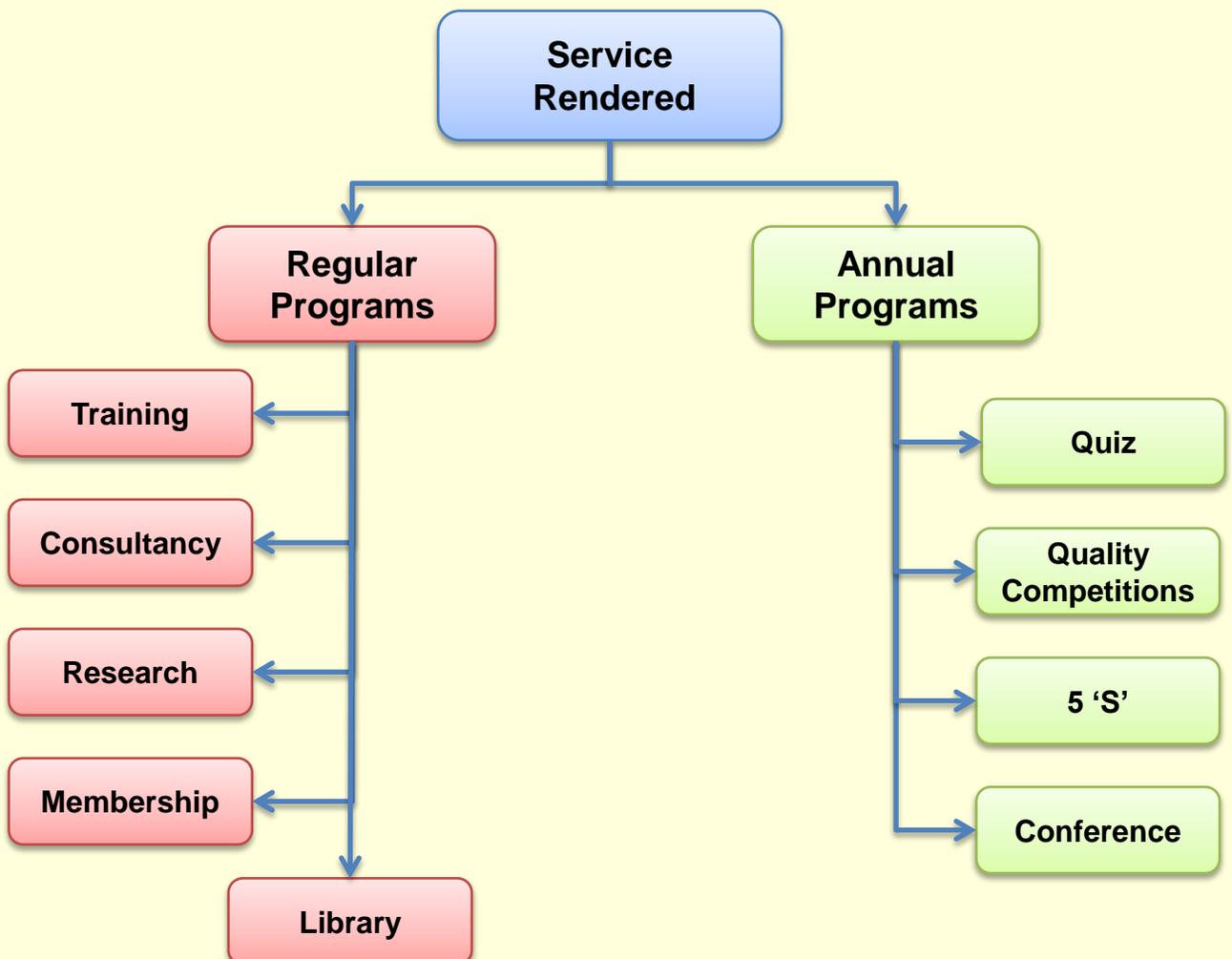
The Centre offers academic subjects on various topics related to Total Quality Management (TQM) for Under Graduate (UG) ,Post Graduate (PG) and Doctoral(PhD) programmes.

PhD programmes are offered under two streams:

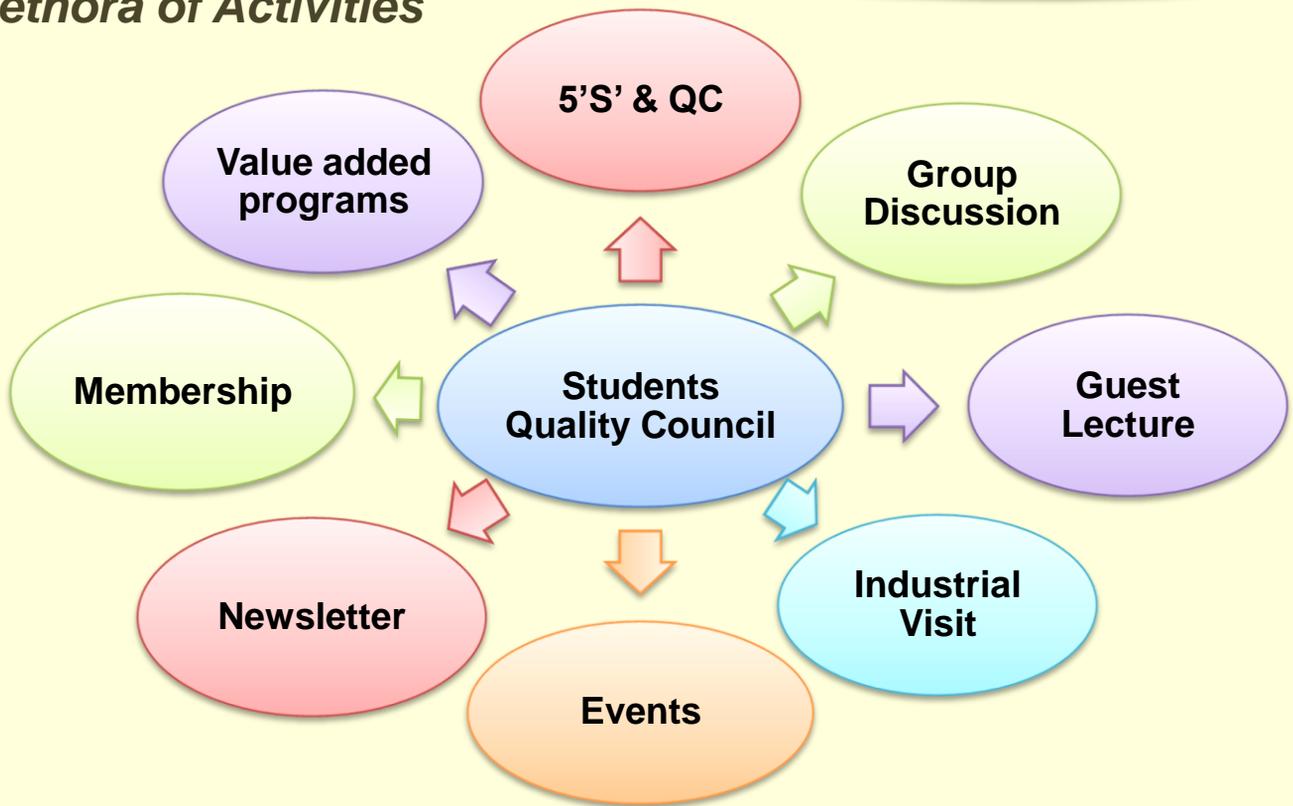
- Full time Regular Programmes
- Part Time External Registration Programme

## Research Areas

Total Quality Management in SMEs,Failure Mode and Effect Analysis, Supply Chain Management, Training in Manufacturing, Service Quality, Quality in Health Care, Lean Six Sigma, Emotional Intelligence, Quality in Learning Styles, Quality in Data Mining, Corporate Social Responsibility, Quality in New Product Launch



## Plethora of Activities



### ANNUAL NATIONAL CONVENTION ON QUALITY MANAGEMENT

Q Quest is the concourse for quality based management events. The uniqueness of this quality festival is to provide the platform for the confluence of the various minds from schools, their experience, via their own wit and wisdom. Its objective is to spread the importance of quality and preach the means of achieving it among the contestants, as well as the audience who witness the proceedings. The Annual National level conference on quality placards the quality based management principles and emphasis the current scenario in industries. This quality quest, the first of its kind in engineering colleges is primarily to propagate quality thoughts among the students of schools, colleges and to corporate of various industries.

### SCHOOLS



Prof. Dr. M. Rajaram, Vice Chancellor awarding certificates to Delegates of Q-Quest



### COLLEGES & COMPANIES



His Excellency, Shri. P.S. Ramamohan Rao, the Honorable Governor of Tamil Nadu, 2003



People forget how fast you did a job –  
but they remember how well you did it



## Policy

- ❖ To create an environment in which creativity and innovation is nurtured through a synchronized approach with its members from different spheres of engineering.
- ❖ To realize the potential of its members by giving space for their innovative and creative thoughts, duly mentored by elite minds.
- ❖ To help its members to think pragmatically by bridging the gap between their virtual creative world and reality.

## ***First International Conference on Quality through Innovation-2015 (ICQTI 2015)***

The first international Conference on Quality through Innovation 2015 (ICQTI-2015) was held on 18-20 February 2015 . The conference was successful with the participation of 47 papers across the country. The papers were from different disciplines from various organisations such as IITs, Industries, and other universities across the state. This event also had a pre-conference workshop on 18<sup>th</sup> of February with participation of 200+ people involving students, faculty and corporate people. The conference had separate session for student paper presentation to promote their interests.

The conference had different vast collection of Subjects such as

1. Creative Quality (Interrelations between quality and creativity)
2. Effective Team Management
3. Scope of Quality as a profession
4. Creative thinking and Innovation processes.
5. Managing Change
6. Future of Quality
7. Strategic Risk Management
8. Practical application of QC Tools
9. Tools for Creative thinking.
10. New approach to Quality Management



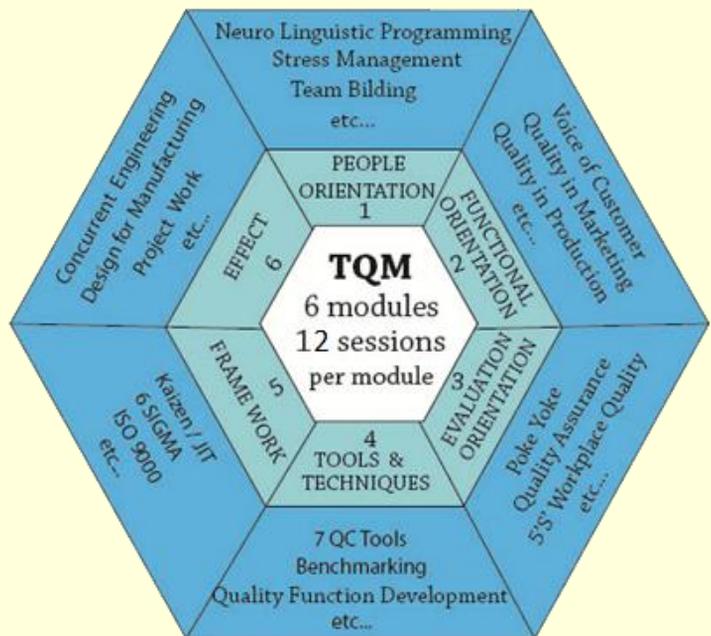
**SCI LAB Inaguration'15**



**ICQTI 2015**

## TQM Course for Students

Student Delegates shall be a wide cross section from different departments of CEG, ACT & MIT studying from 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year



Prof. Dr. M. Rajaram, Vice Chancellor awarding certificates to Delegates of SIX SIGMA program

Six Sigma Program , a six day programme, is being conducted successfully since August 2009. 41<sup>st</sup> Batch is scheduled to commence in August 2014. Four Batch of black Belt program have also been conducted. The Objectives are

- To evoke an appreciation of the Six Sigma concept to sustain a culture of process and result oriented improvement.
- To impart the strong conceptual framework and the practical skills on the appropriate tools and techniques at the specific place of work to take up Black Belt Projects.

Persistence is the twin sister of excellence. One is a matter of quality; the other, a matter of time

Achieving & Sustaining Excellence in Education Delivery, a Community project to build Quality India to sustain World-class standards in education was evolved as a model. This was released as a book - A SEED Implementation module by his Excellency Dr.A.P.J.Abdul Kalam, ex-president of India in April 2008. By periodic assessments, teachers can bring about a worthy change in the caliber of students produced, creating an India akin to VISION 2020.





**Dr.Tasuku Takagaki**

President Bank of Tokyo,Mitsubshi  
Launch of Members Scheme  
1996



**Prof.Wallace S.Read**

President,IEEE @Canadian  
Electrical Association  
1996



**Mr.Michael Thie**

Indo-German Project  
1999



**Dr.Yasutoshi Washio**

Deming Application Prize Winner  
QQuest'04



**Dr.Yoshiaki Kodaki**

Consultant General of Japan in Chennai  
QQuest'07



**Prof.Kazuo Minagawa**

Japanese Ambassador  
2010



**Mr.Yasumi Suzuki & Prof.Norio Suzuki**

AOTS Japan  
Gemba Kaizen Workshop.2011



**Prof.Katsutoshi Ayano**

TQM Crusader  
How to Create TQM Organisation,2012

## Quality - An Endless Journey

Salient Activities





Auditorium



Library



Colloquium



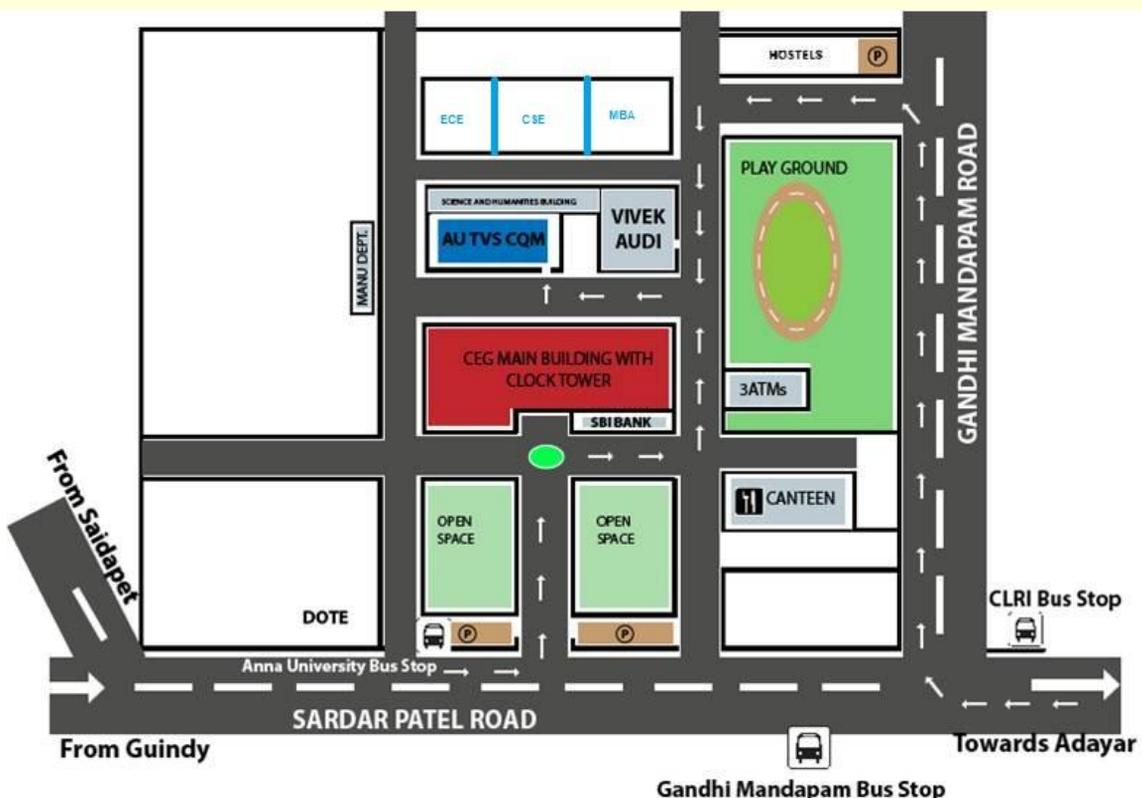
Panoply of Achievements (1995-2013)

## Plan of future Action

With Quality in Education there would be outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.

- Pursuing the need for Quality in Education and making it reach the students.
- Ensuring that the Quality standards are assured and measured respectively in the system.
- With appropriate working methods, proving and reporting of key detectors of Quality for empowering with leadership, trust and confidence of the organization---Plan of future Action.
- To create Quality guardians with professional attitude in the education system.
- Establishing the Deming principle of "removing barriers that rob the students, teachers and management of their right to pride and joy of workmanship; creating easy and simple communications among all people who are related to the institution".
- Borrowing the ideas from other parts of the world and applying in our institution in order to improve the Quality standards in Education.

## AU TVS CQM CENTRE @ ANNA UNIVERSITY



The quality of a leader is reflected in the standards they set for themselves.

# Quality

is an on-going process of **building** and **sustaining relationships** by **assessing**, **anticipating** and **fulfilling** stated and/or implied needs.

THERE ARE NO SHORTCUTS  
TO ANY PLACE WORTH GOING.  
- BEVERLY SILLS

DIRECTOR  
AU TVS CENTER FOR QUALITY MANAGEMENT  
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Quality Never Ends

