UGC's 10-point Quality Mandate

The following initiatives have been undertaken in compliance to UGC's 10-point Quality Mandate:

1. Induction programme for students

When the fresher's arrive, on the first day itself an orientation is given to all the students. Based on the programs, Induction Program is organized by the respective Schools. The students thereby get to understand the Institution, the geographical location, their peers and things to expect during their duration of study. All the students gets benefitted through this Induction Program

2. Learning outcome-based curriculum framework - revision of curriculum in regular intervals.

Vels Institute of Science, Technology and Advanced Studies (VISTAS) has adopted Choice Based Credit System and Outcome Based Teaching Learning Curriculum. The curriculum is designed and implemented taking care of the educational policies of the State and Central Governments, and the global, national, regional and local developmental needs. The syllabus takes care of the rapid developments in various fields of study, scientific and technological advancements to meet the demands of academia, industry and society. The Curriculum design is also aligned with the guidelines of the UGC and the goals and objectives of the Institution.

The Curriculum is designed fully adhering to the guidelines of the UGC, AICTE, PCI, DGS, NCTE, BCI and other Statutory Regulatory Authorities. Periodic changes are made based on societal needs that provide a thrust to national development. Current trends in the job market are also considered while formulating and revising the syllabus. The Curriculum design and development is done through a well defined process. Feedback from the faculty, academic peers, experts from industry, current students, parents, alumnus and other stake holders are used in the initiation, review, and redesign of curricula. The Peers' feedback from Central and State Governments as well as research organizations in India and overseas also help us to design and modify the curriculum. For example, as per UGC directive, appropriate NPTEL courses are selected and made part of the curriculum. In phase with Digital Initiatives of MHRD,

"Fundamentals of Computing" is introduced as a compulsory course during the first semester in Engineering. The Institution also integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum.

Academic audit is conducted every year. Based on the suggestions received from External Academic Auditors, feedback from the faculty teaching the subject concerned and students, the Curriculum and Syllabi are improved during the subsequent meeting of the Board of Studies (BoS). The activities are put under strict compliance of time and quality.

The Courses are so designed to inculcate leadership qualities, entrepreneurship, organizational capabilities and team spirit among students. Courses on Personality Development and Soft Skills are part of the curriculum, thus enhancing Critical Thinking, Effective Communication, Social interaction and Ethics. For the holistic Personality Development, a course on Basic Life Skill is introduced as a two credit course. Besides Core Courses, Discipline Specific Electives and Ability Enhancement Electives, students should also select Generic Electives. Since VISTAS is a multidisciplinary deemed- to- be- university, students are blessed with a wide choice of attractive generic electives.

Certification programmes which are application oriented are also conducted. Practical training for skill acquisition and sound theoretical knowledge serves to equip students to face real-time situations and work at any part of the world.

3. Use ICT based learning tools for effective teaching-learning process.

VISTAS enriches active learning in students by facilitating various student centric teaching learning strategies. The student-centric learning is focused on LMS and KMS. All the MOOC open courses, MHRD's Swayam, NPTEL, UGC-INFONET Digital Library Consortium and NDL, etc., are available under Vels Knowledge Resource Centre for Student Centric Teaching-Learning Process. By adopting blended and flipped learning, the students' involvement in the process of learning is ensured. VISTAS is equipped with Library, Digital Library, Video Conferencing Facility, Smart Class Rooms, ICT Enabled Class Rooms, Language Laboratory, Business Analytics Lab, Cloud Computing Lab, CADD Lab, 24 x 7 access to Vels Knowledge

Resource Centre and an Open Source Software Lab for Student-Centric Learning.Virtual Learning is enabled by the IITM and IITK under Moodle programme. Apart from this, VISTAS has a local chapter of MHRD-NME-ICT's Virtual Lab channeled through AmirtaVishwaVidyapeedam. The Faculties of School of Pharmacy, School of HCM have developed online contents through MOOC. Such developed ICT course materials are made to be available in e-platforms. The institution is a member of FOSS Club through which the open source community is interlinked. The process of teaching extended to the social networking sites where teachers and students interact over the instructions taught in the class rooms. The Wifi enabled campus facilitates to avail all the e- resources of the central library from the class room itself.

4. Soft skills for students.

Personality Development and Soft Skills courses are part of the curriculum, thus enhancing Critical Thinking, Effective Communication, Social interaction and Ethics. The Courses are designed to inculcate leadership qualities, entrepreneurship, organizational capabilities and team spirit among students. For the holistic Personality Development, a course on Basic Life Skill is introduced as a two credit course. Dedicated Language and Soft Skills Laboratories are available to cater to the needs of students. Professional trainers train the students on soft skills too.

5. Social and Industry connect for every institution:
Social Connect

The University organizes various Social awareness camps on Energy, Environment Protection, Drinking Water Quality, Usage of Medicine and Hygiene, Sanitation, Public Health, Self Help groups, Noise awareness, Breast cancer etc.,. The University has an NSS unit since 2009 which has successfully organized 80 plus camps since its beginning. NSS volunteers clean the campus, the adopted village streets, temples and beach.

The University sensitizes its faculty and students on its Institutional Social Responsibilities. Most of faculty and student volunteers do social service to the socially and economically backward people near the campus. They are encouraged to take part in these

activities in collaboration with GOs, NGOs, SHGS, local bodies etc. in carrying out these societal outreach programmes. The Institution appreciates the faculty and students who take part in these activities. Undergraduate and postgraduate students of Pharmacy and Physiotherapy are taken for field social work in the community as a part of their training and are posted to the patient counseling areas.

The prominent contributions of the Institution include: Servicing the public through various awareness camps, Involvement in Government organized health care programmes, flood relief, disease outbreaks and disaster management, Environmental awareness camp, etc.,. The University encourages its faculty to participate in government sponsored television and radio programmes for the general public to clarify their doubts. The University also organizes the Student-centric celebration of "Diabetes Day", Women's Day", "Environment Day", "Vels Health Day" etc., and their activities and involvement are tracked by the staff members. These activities help the student to improve their Practical training, improving communication skills, adaptability to socio-environmental conditions, Organizational skills and Leadership qualities.

Private road around the campus is provided to the local people at the cost of VISTAS, A tar road connecting the 100 feet road and Malliga Nagar was laid at a cost of Rs.12,16,666/- and another road has been laid within Malliga Nagar (adjacent to VISTAS) at cost of Rs.7,17,400/- which has improved the environment of the area. Two private Bus Stops have been constructed and maintained for the benefit of the public. These works have been done on the approval and sharing of investment with the Pallavaram Municipality.

PRADHAN MANTRI BHARTIYA JANAUSHADHI KENDRA is an initiative of Department of Pharmaceuticals, Ministry of chemicals & fertilizers Government of India in order to ensure the availability of quality medicines at affordable prices to all, based on the vision of the Prime Minister of India. The Pradhan MantriJanaushadhi Kendra (Generic Medical Store) was initiated in the VISTAS, Pallavaram, Chennai was inaugurated by Dr. S Manivanan, Deputy Drugs Controller, Central Drugs Standard Control Organization (CDSCO), New Delhi on 19th March 2018.This generic medical store provides quality medicines at affordable cost to the public.

Several awards and appreciation have been received by the Insitution's faculty such as, National Children Science Congress, South India Culinary Association (SICA) award, Taekwondo Championship, TamilNadu State Volley Ball Association award etc. The School of Pharmaceutical Sciences was awarded with the Outstanding Service Award 2013 by Indian Association of Blind, Madurai on March 2013 for recognition of voluntary contribution for the empowerment of persons with visual challenges. Lotus Chess Academy and Little Raju Academy presented an appreciation award for conducting Chess Tournament 2015, in a Grand manner. VISTAS has received the Best Contributor award towards building "India Skills Report 2016" at CII National Skills Summit at The Taj Palace, New Delhi on 26th of November,2015. VISTAS has received Academic Achievement Award from Revature India at Rani Seethaiyammal Hall, Chennai on 15th August, 2016. VISTAS received the Best Multi-disciplinary Deemed University Award and Best Library award from Pearl Foundation, Madurai on 10.12.2016. VISTAS received the "Academic Partner Excellence Award" for the year 2017 by ICT Academy, Govt. of Tamil Nadu, on 28.02.2017.

Industry – Academia Interactions

"Most of the college graduates are unemployable" is a common quote heard in the context of Indian graduates. One of the major reasons for it is, the students are not Industry ready. To bridge the gap, the IQAC encourages the departments to have Industrial Experts in their Board of Studies (BoS). This ensures that the courses are relevant to the Industry. The latest technologies are made available for students to be well versed with contemporary requirements. Periodic review of the curriculum enables them to get upgraded with the market needs. FDP is regularly conducted to train the faculty to empower them to teach new courses. Departments are encouraged to send their students for internship / field visit and the same is monitored. Likewise, the Departments are encouraged to bring Industrial Experts to address on the latest trends in their area and there have been cases where students get placed by the same industry itself.

6. Examination Reforms - test the concept, and application; exit examinations.

Every academic programme of the university has a well structured evaluation process. The Academic calendar, Annual prospectus and the Website provide information about the evaluation

process to students. Students are duly informed about the structure of the examinations, components of continuous internal assessment, tutorials, dates of end semester examinations, continuous assessment examinations and practical examinations and these are included in the Academic calendar of the university. All these information are given by the Controller of examination to the UG and PG Students during the induction programmes itself.

To facilitate Student mobility across Institutions within and across the countries, Choice Based Credit System has been implemented since 2016. Core Courses, Discipline Specific Electives (DSE), Ability Enhancement Compulsory Courses (AECC), (English, Environmental Science), Skill Enhancement Courses (SEC), Generic Electives (GE) form part of CBCS. 130-150 Credits are assigned for UG program comprising 50% core course in Arts/Science, 25% DSE and GE courses and 25% AECC and SEC. BE / B.Techprogrammes (as per AICTE Guidelines) carry 180-200 Credits and include foundation courses 25%, core courses 30-40%, DSE 10-15% and GE 5-10% of total courses. Science, Engineering and Management streams do include internship and project works.

M.E / M.Tech / M.Sc. Programmes carry 80 credits and MCA Programme (as per AICTE Guidelines) is assigned 130 Credits. Evaluation is done following the grading system adopting a 10 point scale. Calculation of SGPA and CGPA are done as per UGC Guidelines. 1 Credit for 1 theory hour or 1 tutorial hour or 2 practical hours per week for the credit allocation is being followed. Regulations, syllabus and examinations pattern are distributed to all Deans, Directors and HODs of all departments after the approval of Board of studies and the Academic council.

The performances of students are evaluated by both formative assessment 40% and summative assessment 60%. A well structured criterion is followed for the award of formative assessment. Continuous internal assessment tests, Field visits / Internships for (PG Courses), class seminars / Assignments, marks in the model examinations, attendance, aptitude of the students and faculty assessment form part of formative assessment. Grievance redressing mechanism is also in practice for internal assessment marks. The continuous internal assessment system has motivated the students due to which their attendance and performance have increased considerably.

The examination process viz. right from generating application form is fully automated with Enterprise Resource Planning(ERP) and Enterprise Application Software(EAS). Hall plan is the basis for hall wise allotment of question papers. Question papers are scrutinized by external experts for their conformity with the syllabus. In each hall, a minimum of 2 different subject codes are accommodated to prevent copying.

The hall ticket is unique and student friendly providing information regarding the subject code, date of examination with session, block, hall number and respective seat number which facilitate the student to reach the examination hall easily without wasting time and stress. Flying squads visit to the examination halls regularly. Mobile Phones are prohibited inside the examination halls to curtail malpractices.

Bar coded and Optical Mark Recognition (OMR) enabled answer papers are used to conceal the identity of students to examiners. OMR based answer sheets are used to avoid human error besides hastening the process. Answer sheets with OMR based cover page has helped in transferring data to computers besides eliminating manual data entry operation. All work related to the examination are computerized and hence, works are smooth, easy and timely. The introduction of OMR has resulted in 0% error in carrying over marks. Only external valuation is adopted in case of UG degrees and both Internal and External valuation incase of PG degrees.

Further, at the post graduate level, third evaluation is arranged if the difference of evaluation is more than 10% between the two examiners. With the recommendations of the passing board and with the approval of the Vice Chancellor, examination results are published in the VISTAS website within 21 days of the last day of examination. A student can apply for revaluation / re-totaling within 10 days from the publication of results. Photocopy of answer Scripts are provided on payment of the prescribed fees if demanded. As per the existing rules, in case of any grievance regarding evaluation, the student may apply for re-totaling/revaluation. All work related to examination in the office of Controller of Examination is completely computerized and under the EAS System , the whole work stands automated.

A manual for examinations has been adopted by the BoM. Scheme of examination is proposed by BOS , recommended by the Academic council and approved by the BoM. A committee has been constituted by the Vice Chancellor to look into the cases of malpractices, if any. After enquiry, appropriate action is taken in each case as per the University Bye-laws. Answer books of all examinations are assessed only at the central assessment centre. Incidence of malpractices are enquired into and suitable action taken.

Supplementary Examinations in the even semester is conducted for the outgoing students who have one or two arrears only. This facilitates the students either to go in for higher studies or for employment immediately without waiting for one more academic year.

GPA, CGPA and Credits earned are the contents of the Grade sheet. Consolidated Grade sheet and provisional Certificates are generated for those who have successfully completed all the prescribed courses. Transcripts are issued on demand within a day. All the certificates have many security features making it difficult to duplicate

For Ph.D., and M.Phil., a comprehensive entrance test is conducted and course work has been introduced for Ph.D. The entrance examination for admission to Ph.D., and M.Phil.,programmes ensures admission of motivated scholars with ability and aptitude. The evaluation process is completely transparent. Ph.D., thesis is evaluated by three examiners, namely the Supervisor, an Examiner outside Tamil Nadu and a Foreign Examiner. Apart from these, there is a fourth examiner to conduct Viva-Voce along with the supervisor.

ONLINE Certificate verification is done by the Office of the Controller of examinations for the passed out students.

7. Tracking of the student progress after completion of course.

VELS ALUMNI ASSOCIATION, a registered association under the TamilNadu Societies Registration Rules, 1978, with registration number 77 / 2005, commenced functioning on 24th day of February 2005. The registered office of the association is at Velan Nagar, P.V.

Vaithiyalingam road, Pallavaram, Chennai 600117. The main objective of the association is to promote the cause of education, to maintain and develop network among the past and present students, to encourage the activities of VELS research association and to add values to the VELS group of institutions. The Annual General body Meeting of the association is being conducted during the month of March every year. At present the association is having 3172 registered members. Most of the alumni functions are conducted at the school level of the VELS like the School of Pharmacy, School of Management, School of Engineering etc. Sometimes with the request from alumni members (from particular batch) the events are conducted at department level also. During the month of November, the school of Pharmacy, used to conduct the Alumni meet in a grand manner with the name 'PHARM ALUMS'. We have received a good response from each alumnus who had attended the alumni interaction session. The school of management, used to conduct alumni meets with name 'Echoes' on 26th day of January every year. The distinguished alumni are invited, and they share their experience to our budding entrepreneurs of VELS. With the help of NSS unit and Youth Red Cross of VELS, the VELS ALUMNI ASSOCIATION is organizing the Blood donation Camp every year. The association also encourages the first three ranks in each department by awarding them with Gold, Silver and Bronze medal respectively. The alumni members of School of Basic Sciences and Life Sciences used to conduct medical camp during the month of February every year. The passed out students of pharmacy department met on 6th September, 2017 and they have also conducted tree plantations.

It is proud to express that the alumni members of our institution have actively participated in the flood relief during the severe flood in December 2015 at Chennai. They have sponsored more than 200 kilo grams of raw rice, water packets, huge quantum of clothes, note books, school bags, candles and food items like bread, biscuit and rusk etc. Even after the vardah cyclone, the association has conducted the tree plantation camp in different areas of Chennai. The other departments are also using the intellectual assets of the alumni members by means of providing guest lecture, discussion about the curriculum to augment the gap between academic and industrial requirements, arranging for the industrial visit, and inductive learning through interaction of past and present students. The school of engineering invites their alumni members to impart the practical knowledge to students and they have been consulted in framing the course structure. Every year one or two distinguished alumni members are identified and they are

invited as the chief guest for the cultural programs of our University. Any passed out student of VELS, can become an alumni member, by registering online or by directly approaching the alumni coordinator of respective department.

Student Progression

- 65 % of the registered get campus placement
- 10 % of the students pursue higher studies
- 80 % of the students get through the programmes in minimum period of time
- 25 % of the appeared students qualify in competitive examinations
- Nearly 15 professional associations, 8 student chapters, technical clubs and international collaborations

Alumni Engagement

- 10,000 registered alumni Rs. 25 – 30 lakhs generated from alumni
- Nearly 6 alumni meets are conducted every year Provides Jobs, internships, books, computers, and delivers guest lectures.
- Students yearly participation through alumni in Mega events like South Indian Film Fest ChennaiyelThiruvaiaru IPL - Chennai Super Kings Blood Donation Camps South Indian NadikarSangam International Taekwondo Competitions Dr. MGR Peravai National level Culinary Competitions All Time Engagement with Tamil Nadu Government

8. Induction training for all new teachers, and annual refresher training for all teachers - role of the NRCs; and mandatory leadership/management training for all educational administrators.

The structure of Governance in VISTAS facilitates Autonomy, Transparency and Accountability through participation of various stakeholders. It provides the differentiation and integration of various activities in VISTAS. The Organizational structure has been designed as per UGC Regulation. The Regulatory bodies of VISTAS include Board of Management, Academic Council, Planning and Monitoring Board, Board of Studies and Finance committee. They have been functioning as per guidelines of UGC and Memorandum of Association and they meet periodically. The various key stakeholders of VISTAS, which includes faculty, students, parents, industry experts, academic peers and alumni, are involved in decision making at every level. For smooth functioning of VISTAS several sub-committees comprising the faculty and

student representatives have been constituted. In order to decentralize administrative / academic machinery, authority has been delegated by setting up of Deans for various Schools, Admissions, Academics, Research, Student Affairs, Faculty, IQAC, etc., For transparent functioning, the Admission, Academics, Administration, Accounts and Examination processes are automated by using ERP. Some means by which Faculties are empowered Financial support is provided to organize / attend Faculty Development Programs, Orientation programs, Refresher courses, Workshops and Conferences. All the faculty members gets themselves updated by attending refresher training programs conducted in the Institution as well as outside. The leadership team also gets themselves updated by attending programs for administrators.

9. Promoting quality research by faculty and creation of new knowledge.

      VISTAS has an Incubation centre Viz. CARD-Incubation Centre. The aim of the centre is to focus on innovation, incubation, entrepreneurship, Start-Ups and commercial success. The centre is facilitated with unlimited internet connectivity, product development consultancy, IP rights & licensing methodology. Our major thrust areas are Automation and Power Conservation, IoT and ICT. Start-up companies, M/S Arcomm Tech solutions Pvt Ltd, M/S ArannCybertek, M/S India Biz for Sale and M/S Eezeelyf Devices Pvt Ltd are positioned at 2400 sqft area. An exclusive startup Student lounge at 540 sqft and Skill development centre at 1400 sqft are also available.

      The first company is a faculty-entrepreneur company which has commercialized its product, "ATM Auto controller" which has been installed in 200 plus SBI ATMs and 4 ATMS of the Indian Bank. This device has been extended to save energy in the VELS's University's two blocks –VIBA & Engineering Block. Huge orders are in pipeline. The success story of this device in saving the power has been appreciated by these Banks. The SAP has come forward to fund the second company's "cyber security" product and commercialization has started. This company has planned to start a Training Academy for Python, PhP, Cyber security. The third company is developing a web product for business sale and the fourth company is developing products for IoT in health care, IoT for Road safety and IoT for Agriculture.

This Incubation centre has been promoting the students to become entrepreneurs. Thus Abinesan, an ECE final year student and his team developed an IoT solution for water accessing technology which won the top prize in the SRM University venture meet. The Venture capitalists have come forward to fund this project. Currently several students are involved in IoT projects on their own, which resulted in several Application developments and these are being incubated in the Centre. These products include an app for IoT solution for measuring the pollution level of Urban areas. This centre has imparted outdoor training to ~1000 high school students in Basic Electronics as an ISR activity and more than 140 students from several engineering colleges and schools are provided with hands on training in Automation, IoT and Cyber security.

The success story of the Incubation centre is as follows: Guided companies for product development, deployment and commercial success, two companies are already on the verge of maturity, the first ever Student start up lounge has been established in Tamil Nadu-Students have thus succeeded as entrepreneurs. It has also undertaken Social welfare activity in the surroundings.

We have a strong IPR Cell and it has organized several seminars and workshops for the faculty and students to sensitize them to go for patenting of their innovations. The procedures for patenting have been explained to the participants by the experts and IPR attorneys. This has resulted in the filing of 28 patents of which one has been granted. Dr. ArunRaaza, who is the faculty – entrepreneur, has won several awards such as Young Scientist, Vikram Sarabhai, Social Ambassador / IDF, Dr Abdul Kalam awards, etc., and our students have participated in several Innovation competitions and have won awards.

10. Mentoring of non-accredited institutions, so that every institution can get accreditation by 2022.

VISTAS already assists Institutions in accreditation process and it will continue to do so.