

EDUCATE **RESEARCH** TRANSFORM



VELS XQ



VELS INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS) (Deemed to be University Estd. u/s 3 of the UGC Act, 1956)

NAAC ACCREDITED PALLAVARAM - CHENNAI - INDIA

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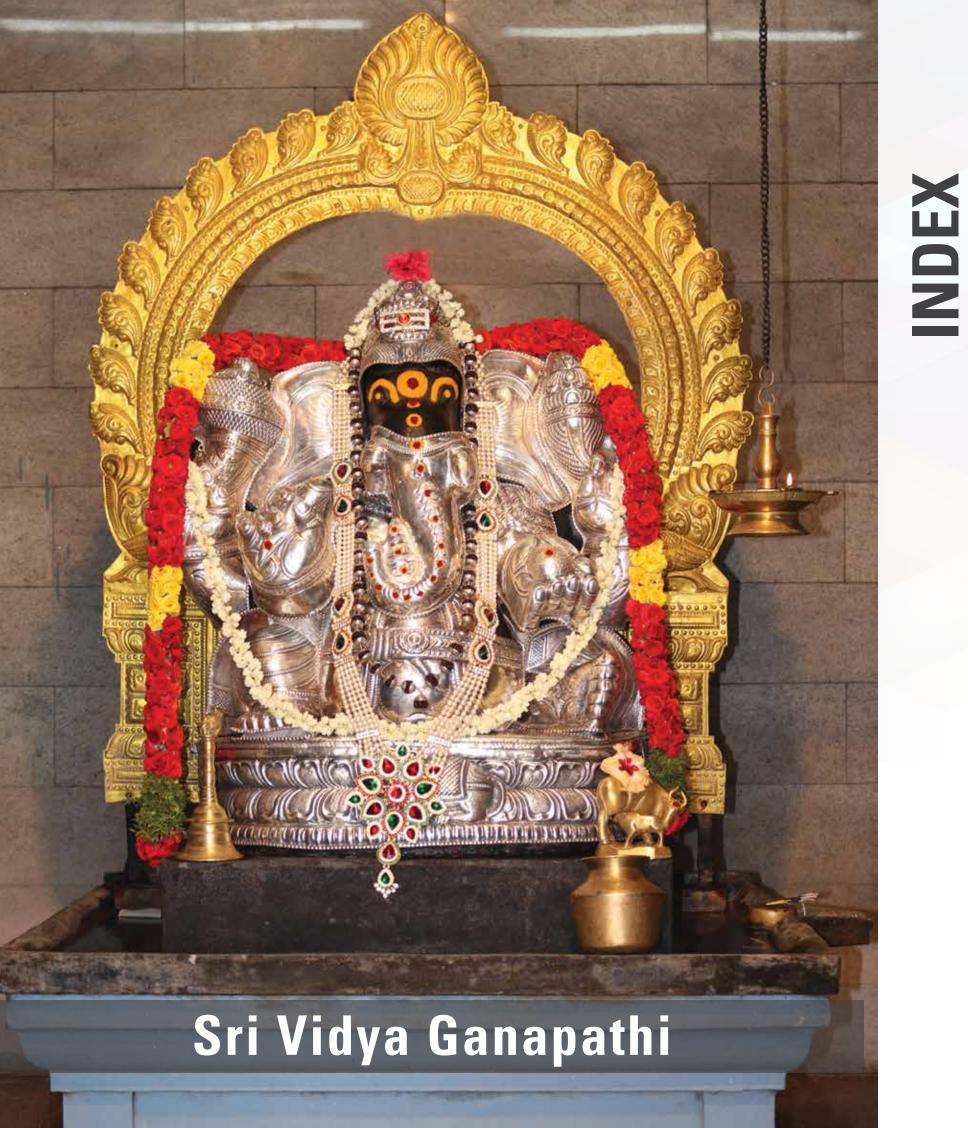
PROSPECTUS



In fond memory of **Our Guiding Force**



Shri ISARI VELAN 1941-1986



Our Vision Down Memory Lane Glimpses of Vels University Moments, Memories and Muc Vice President's Message Vice-Chancellor's Welcome **Pro-Vice Chancellor's Messag Registrar / Controller of Exami** We, the University **Advisor / Special Officer** The Team Administration **Internal Quality Assurance Cel** Let's Tour the Campus **Stack, Flip and Read** New Ideas, Newer Knowledge **Research Advisory Committee Business Incubation Centre Great Innovations Infrastructure and More Joining Hands** Let's Share Knowledge **Extension Activities** Learn, Play and Achieve **Milestones and Accolades** Convocation **Memorable Moments Dancer's Set Guinness Record Meet the Best Get Placed Top Recruiters** How to Get into Vels **Meritorious - The Advantages** Examination Home away from Home (Best Star **Anti-Ragging Committee Sexual Harassment Committee** School Index / Programmes Of

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education and training on par with international standards.

OUR MISSION

- * Effectively imparting knowledge and inculcating innovative thinking.
- Facilitating skill enhancement through add-on courses and hands-on training. *
- ** Encouraging original, socially relevant, and high quality research.
- * Facilitating appropriate co-curricular, extracurricular, and extension activities.
- Instilling the spirit of integrity, equality, professional ethics, and social harmony. *

QUALITY ASSURANCE

Vels University has established a system of quality assurance to enhance and monitor the quality of education. The Quality Advisory Committee and the Internal Quality Assurance Cell work towards achieving this goal.



OUR VISION THEN, NOW, AND FOR THE FUTURE

Vels is guided by the motto *Knowledge is Power*' and believes in providing the best of training by offering quality education and training on par with international standards.

For the past 25 years, Vels has been constantly working towards offering ample scope for students to achieve overall development and help them to excel, not just in their profession, but for the betterment of society.

Down Memory Lane

Vels' success story, largely writ in the arena of world-class education, is an exciting and inspiring journey. It was undoubtedly the road less travelled and our relentless efforts have helped the Group conquer an uphill task that began in 1992.

During the last 25 years, we have persistently expanded our boundaries, pushed limits, and challenged ourselves leaving no stone unturned for an upward surging graph. Even as we bask in our success, we recollect with nostalgia how the Vels Group of Institutions was built brick-by-brick! Vels has several amazing memories that we hold very close to our hearts and will be cherished for many years to come.

It all started with one college; Vels College of Pharmacy, in 1992 with just 36 students. Today, the Group boasts 11 beautiful campuses, equipped with international standard amenities, highly qualified faculty, sophisticated labs and equipment, international exchange programmes, placements in top corporate conglomerates, and the list goes on...

to

2004

2005

to

2008

Stepping Stones

Established Vaels Educational Trust on July 6, 1992. Instituted first educational institution, Vels College of Pharmacy with 36 students, added Vels College of Physiotherapy, Vels College of Science, and Vels Institute of Hotel Management in a span of four years.

For the Younger Generation

Set up Vel's Vidyashram in 1997 with classes from pre-KG to class 10, approved by the Government of Tamil Nadu and Central Board of Secondary Education. Soared to new heights in 1999 with the Vels Academy of Maritime Studies. Later certified as an ISO 9001:2000 institution by Lloyd's Register Quality Assurance Llmited, UK. Vaels Institute of Business Administration was instituted in the same year as well.

Millennium Moments 2000

Vels Higher Secondary School was set up in 2002. Vels Hotel and Catering Industrial School was started in 2003.

The Vels Srinivasa College of Engineering and Technology was established in 2003. In 2004, Vels Billabong High, a primary school was introduced as a fun-filled education model for primary school children.

On the Right Path

The Vels Academy of Maritime Education and Training was established in 2005. Realising the growing demand for paramedical courses, the Vels School of Nursing was established in 2005 followed by Venkateswara Nursing College in 2007. Sri Venkateswara Dental College and Hospital came up in 2007.

2008

2011

(Contd.)

The conferment of 'Deemed to be University' status by the Ministry of Human Resources, Government of India in 2008, it led to the birth of Vels Institute of Science, Technology and Advanced Studies (VISTAS) popularly known as Vels University. All colleges were folded into Vels University with our autonomy status enabling us to offer many more career-oriented, indemand programmes.

When Dr A P J Abdul Kalam Came Calling

The great Indian scientist and visionary, Dr A P J Abdul Kalam, visited Vels University in December 2011 for the second convocation and his lecture was highly inspirational to students. In a one-on-one interaction with the Founder-Chancellor, Dr Ishari K Ganesh, Dr Kalam shared his dreams to witness India grow as a 'Knowledge Power' by 2020. Since then, Dr Kalam's dictum has become the pursuit of all at Vels University.

Beyond Boundaries 2014

to Present

We stepped into Telangana with the Meghna Institute of Dental Sciences in 2014 and established the Mahavir Institute of Medical Sciences in 2016. We joined hands with the Management Development Institute of Singapore in 2015 that offers a wide range of Diplomas to Master's programmes. Vels Kinder Kids was founded to offer creative, fun, and rewarding education for tiny tots.

2017 Vels sets a Guinness Record

largest Bharatanatyam dance recital.

Our Staff, Our Strength

We started with 13 teachers in 1992 and an equal number of non-teaching staff. As we grew bigger and better, the number of teaching and non-teaching staff has grown multi-fold with 640 teaching and 550 non-teaching staff.

Hostels are like a Home away from Home

It might be interesting to note that Vels Group's first hostel was just a temporary shed but today, the Group has seven different hostels accommodating thousands of students. The rooms offer the best of facilities and the student mess serves delicious food.

Sky is the Limit

There is a lot more to tell and we hope to see this success saga continue in the future. From 36 students to over 20,000 students, from one campus to multiple campuses of learning, Vels University looks forward to reaffirming and rededicating its commitment towards offering the best education to the youth of India.

The Success Curve

On April 14, 2017, Vels University in association with Lakshman Sruthi and Ahistabalan,

- organised Bharadham 5000 and found a place in the Guinness World Records for organising the
- Graced by danseuse Padma Subramaniyam, Vels' Founder-Chancellor, Dr Ishari K Ganesh, and many other art lovers, the programme was an absolute visual delight.

The sprawling campus of Vels is located at Pallavaram, a stone's throw from the south of Pallavaram railway station, and 4 kilometres from Chennai airport.

Guided by the motto 'Knowledge is Power', the colleges under the Vaels Educational Trust were built brick-by-brick in the last 25 years. It was conferred with 'Deemed-tobe-University' status by the Ministry of Human Resource Development, Government of India in 2008.

On par with international standards, Vels has always kept a tab on the fast changing trends in the area of international education and has left no stone unturned in offering the best of facilities. Our 555 experienced and wellqualified faculty members are always on the path of offering the best of their knowledge to our students.

Our world-class laboratories boast of the very best of equipment worth more than ₹35 crore. The campuses possess Wi-Fi with a connectivity speed of 1090MBPS, and a membership in the National Knowledge Networking. Postgraduate students and faculty are provided with laptops.

Vels Group of institutions established on July 6, 1992 is run by Vaels Educational Trust, a charitable, nonprofitable organisation.

The University has 15 schools, 42 departments offering 49 undergraduate, 45 postgraduate, and several Diploma and Certificate programmes. All schools offer M.Phil and Ph.D programmes.

The University has as many as 306 well-furnished classrooms and 137 laboratories spread across one lakh square metres of built-up area.

Our huge library has a collection of 1,01,815 books, 1,30,000 e-books, a subscription to 325 research journals (print versions) including IEEE/ IEL, ASME, ASCE, EBSCO (Academic Search complete & Business Source Elite), ProQuest, Bentham Science Pharmacy, Micro Medex's Drugdex system, Inventi Online, J-Gate, Law Finder, Nature **Online, EBRARY Academic** Complete-Proquest, BLOC, Lexis Nexis, NDL-National Digital Library, DigitMat Digital Library and Making. The university has online access to over 13,812 research journals to facilitate quality teaching and research.

It is a matter of pride to note that a number of research articles have been published in 900 SCOPUS and 739 indexed journals, amounting to 1,872 publications. This is besides the 35 patents, 38 inventions, and 7 ToTs accumulated by the institution.

We ensure uninterrupted power supply and RO water for drinking and cooking purposes. A transport facility is also available from various places in the city at a nominal fare.

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Separate hostels have been built for boys and girls accommodating 2,000 students, besides facilities such as a state-of-the-art gymnasium, and a modern, air-conditioned auditorium with a seating capacity of 1,000.

We are also members of the Association of Indian Universities, International Association of Universities, and Association of Commonwealth Universities.

Dr Ishari K Ganesh Founder-Chancellor

Moments, Memories and Much More

Dear all,

As we celebrate 25 years, many fond memories return. On this joyous occasion, I am reminded of the vision shared by my father, the late Shri Isari Velan and our numerous discussions to start a school that would bring quality education to society. The idea of starting colleges was seeded by my beloved father and he encouraged me to focus on establishing educational institutions soon after my studies.

Transforming our dream into reality was never an easy task. June 6, 1992, the day we registered Vaels Educational Trust, is clearly etched in my memories. We started with Vels College of Pharmacy in 1992, and the Colleges of Physiotherapy and Arts & Sciences were instituted the next year. With every passing year, we leaped towards setting up educational institutions offering various disciplines including Business Administration, Maritime Studies, Hotel Management, and Engineering.

Vels has also established several schools including Vels Vidyashram, Vels International Pre-School, Vels Kinder Kids and Vaels International School in multiple campuses in Chennai.

Mahavir Institute of Medical Sciences and Meghna Institute of Dental Sciences are two new inclusions in the state of Telangana. Sri Venkateswara Dental College and Hospital and Venkateswara Nursing College are two premier institutions offering dentistry and nursing courses in Chennai.

Even as we focused on adding several disciplines to our fold, we never lost the vision of attaining autonomy that would enable us to offer innovative, in-demand, career-oriented courses.

Our relentless efforts in this direction fetched the colleges under the Vels Group 'Deemedto-be-University' status in 2008, conferred by the Ministry of Human Resource Development (MHRD),Government of India, that led to the birth of Vels Institute of Science ,Technology and Advanced Studies (VISTAS) popularly known as Vels University. With the autonomy status, came a huge responsibility and we faced several challenges that we successfully overcame.

This year, Vels University is entering its 10th year as a Deemed-to-be-University. It has been an innovative journey so far and we run carefully selected professional courses to create students who are career ready upon graduation. These years are to be acknowledged as an important part of our 25 years of excellence.

Our students also benefit from a fee waiver and as many as 265 economically poor and sports students benefit from our scholarship programme every academic year.

On this occasion, I would like to mention two great personalities who touched every Indian's heart in some manner or the other. Dr M G R, the former Chief Minister of Tamil Nadu, never believed in mincing words and accomplished the greatest of the tasks with ease and élan. So did the Missile Man of India, Dr A P J Abdul Kalam, the man who bolstered the armour of Indian defence.

While I banked on Dr M G R's style of working in reaching my goals successfully over the past 25 years, I am truly inspired to contribute my share in making India a Knowledge Power by 2020, as envisioned by Dr A P J Abdul Kalam.

Commemorating 25 years, it gives me immense pleasure in meeting the alumnus of Vels and learn about their great contributions to the country and internationally. With the ethos inculcated in them at our temples of learning, I don't have an iota of doubt that our future students will continue to march forward with our vision and message across many more milestones to come!

Join me in reaffirming our efforts and commitment to offer the best education facilities for our youth and congratulating each and every person for their contributions during these glorious 25 years.

Best Wishes Always, Dr Ishari K Ganesh

Dr A Jothi Murugan

Vice President, Planning and Development



The 25 years of excellence in education is a manifestation of the hard work **L** and dedication of our stakeholders. Vels University is a fertile ground that has produced talented professionals whose contribution to our society is what we enjoy in this contemporary world.

Vels University is your university.

It has everything that you need to educate yourself, gain experience, and develop enterprise. Join us and succeed with flying colours. Get placed in leading multinational companies and cultivate skill-based talent.

- Dr A Jothi Murugan

Distinguished Professor from IIT Madras. Top-notch technocrat in the field of Transportation Engineering. Principal coordinator in the area of Highwayand Transportation Engineering. Rich international experience through

- visitsto more than 24 countries. Authored four books and 123 research papers.
- Guest Professor at the Institute of Transport Studies in Austria and Ghana.

Friends,

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The development of science and technology, the growth of commerce and industry, the evolution of democratic institutions, the coming together of nations through politics, trade, and sports, has made our world a complex place to live in. To meet the challenges brought on by the complexities of today's advanced civilisation, there is an imperative need for students to be highly educated, and have a good character. Hence, the aim of education in general, and higher education in particular, should be to teach one to acquire the needed knowledge and skill to achieve the ultimate goals of intelligence and character.

Educating the mind enables one to grow knowledgeable and productive, whereas educating the heart helps to acquire exemplary character. Thereby, a true education should target both, the mind and the heart of students.

Realising the responsibility, Vels University, as a unique centre of higher education, strives to provide quality higher education to meet the diversified needs of young men and women through its multi-stream educational system.

At Vels, it is believed that imparting need-based, high-quality knowledge is the need of the hour in order to nurture young minds to successfully meet challenges found in today's complex socioeconomic system, and to make them blossom as leaders to guide society.

The high quality infrastructure, the highly qualified members of the faculty, the well-equipped laboratories and research centre, the modern library and the world-class facilities for sports and games, and co-curricular activities of the university, coupled with the ICT enabled student-centric teaching-learning process facilitates students to choose and achieve what they want.

Currently, as there is an ever increasing movement of human resources across international borders, the content and standard of higher education cannot be confined to the requirements of the native country alone. Hence, there is a need for Indian higher educational institutions to offer programmes of study taking into account global needs. This is all the more important in the Indian context as India has the largest young manpower seeking employment, not only within the country, but also in other countries. In light of this fact, Vels University has walked an extra mile to make its graduates more relevant and more sought after by employers, not only in India, but also in other countries.

As my concluding remark, I would like to quote what Dr Abdul Kalam, former President of India, said at the second convocation of Vels University, "Inventions and discoveries have emanated from creative minds that have been constantly working and imagining. All the forces of the universe work the inspired mind thereby leading to inventions and discoveries."

Yours sincerely, Dr V Thamizh Arasan

Prof Dr V Thamizh Arasan Vice-Chancellor



Dr P Swaminathan

Pro-Vice Chancellor and Dean, School of Engineering & School of Computing Sciences



Dr P Swaminathan graduated with Honours in Electronics and Communication Engineering from Regional Engineering College, Tiruchirapalli, India in 1971.

He was a gold medallist at the University of Madras and later joined Indira Gandhi Centre for Atomic Research in 1972.

He underwent a one year training course in Mainframe Computer Systems from International Honeywell Bull Training Institute, Paris (1981) and holds a Doctorate in Electronics Engineering. Dr P Swaminathan is a Fellow of the Institution of Engineers (India).

He was a former outstanding scientist and group director at the Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, and has guided a dedicated team towards the development of intelligent instrumentation and control systems for the fast breeder reactor.

Dr Swaminathan has made a significant contribution in the usage of computers in nuclear installations in India and has over 50 publications in international journals.

He has also received the prestigious Homi Bhabha award for excellence in research and development in the area of safety instrumentation and control systems for nuclear reactors.



Prof A R Veeramani Registrar



Dr A Joseph Durai Controller of Examinations

D rof A R Veeramani is a dynamic administrator and a man of vision who strives to nurture excellence in higher education. He embarked on his academic career in July 1984 as a lecturer in economics at the University of Madras. His enduring commitment and expertise elevated him to the position of professor and Head of the Department of Economics, and later came additional responsibility as the Registrar and Controller of Examinations i/c, Thiruvalluvar University, Vellore.

Prof Dr A R Veeramani served as first registrar of the Tamil Nadu Teachers Education University, Chennai as per the Tamil Nadu Act of 2008. Twenty scholars have obtained their Doctorate (Ph.D) in economics under his guidance. He has presented more than 65 papers and contributed articles in national and international journals.

He is the recipient of the Annual Case Study Award by the Indian Institute of Public Administration (IIPA), New Delhi for his study on the sugar industry in Tamil Nadu, He received the Best Administrator Award (Registrar) 2016 from PEARL – a foundation for educational excellence based in Madurai He was awarded the Frederic Nicholson's Professional Award by the Institute of Advanced Studies and Research (IASR), Chennai, He was a member of the Working Group of Higher Education, Tamil Development and Culture of State Planning Commission, Government of Tamil Nadu, is a member of the Syndicate, and is on the academic council of Thiruvalluvar University and the University of Madras. He holds a Senior Fellowship/ Fellowship/membership in professional academic institutions such as the Vellore Institute of Development Studies (VIDS), Tamil Nadu Economic Association (TNEA), Indian Economic Association (IEA), Indian Institute of Public Administration (IIPA), Indian Political Science Association (IPSA), Indian Public Administration Association (IPAA), and Indian Society of Victimology (ISV).

n r A Joseph Durai is an academician with significant administrative Dexperience. He acquired his Master's degree in economics from Loyola College, Chennai, and was awarded his doctorate in economics by the University of Madras. An alumnus of the Madras Christian College for his research degrees, he joined the Collegiate Education Service, Government of Tamil Nadu in 1982 and retired as a Grade I principal in 2016, following which, he joined Vels University in July 2016.

During his three decades of academic service, he has been involved in promoting students' talent and personality development through various extracurricular activities such as the NSS programme officer, YRC district organiser, and fine arts in-charge, without compromising his research and teaching activities.

Dr A Joseph Durai has several publications in Indian and international journals to his credit in addition to his research work through projects and guiding research scholars in their M.Phil and Ph.D.

He has authored a teacher's manual in economics for higher secondary syllabus that has been published by Malcolm and Elizabeth Adiseshiah Foundation. He has been a member of the Board of Studies of several autonomous colleges, convener for Autonomous Review Committee in Presidency College, on the NAAC review committee, and is a life member of the Indian Economic Association and Indian Red Cross Society.

Vels Group of Institutions, the multidisciplinary, research-oriented institute under the canopy of the Vels Educational Trust, has been relentlessly working for the last 25 years to achieve higher standards of education.

It all started in 1992, just at the time that India witnessed a great economic revolution. We always believed that a quality education will ensure a great career for our future generations and will help the country prosper. Backed by unwavering commitment and dedication, Vels Group began its journey with one Pharmacy College offering a graduation course to 36 students. It was our first stepping stone and the rest, as they say, is history!

By 2008, the Group grew from strength-to-strength with over 15,000 students pursuing various courses in 15 different institutions including engineering and technology, dentistry, paramedicine, arts and science, hotel management, maritime studies, and management studies.

Vels Group achieved another milestone in 2008. An earnest attempt has been made by the Vels Group to become a 'Deemed University' and we applied to the Ministry of Human Resource Development, Government of India on December 9, 2004. A new trust has been set up for this purpose under the name of VISTAS (Vels Institute of Science, Technology and Advanced Studies).

The 'Deemed-to-be-University' status was conferred upon Vels after completing all formalities on June 4, 2008 by the MHRD, Government of India through its Notification No.F.9-56/2004-U.3 and by the University Grants Commission by its Notification No.F.6-4/2005 (CPP-I) dated July 30, 2008.

Vels University (VISTAS) has been established under Section 3 of the University Grants Commission Act 1956, Government of India, New Delhi.

VISTAS (popularly known as Vels University) originated from a selffinancing group of institutions known as Vels Group of Institutions established in 1992.

Subsequent to this notification, the Founder and Chairman, Dr Ishari K Ganesh, has become the Founder-Chancellor of the Group. He now leads the implementation of strategic planning aimed at shaping the institutes' future growth. He visualises a globally competitive and internationally recognised university.

Vels University is a multidisciplinary university offering varied innovative and job-oriented courses in emerging areas. The university offers 49 undergraduate, 45 postgraduate, and 23 diploma and certificate programmes of contemporary relevance. All major departments offer both Ph.D and M.Phil programmes. The university has developed infrastructure, modernised laboratories, provided adequate hostel accommodation, and improved sports facilities. Since becoming a university, there has been a major revamp in the syllabi of all disciplines. There has been a significant increase in the enrolment of students, more so among women students.

At Vels, we believe that a university can flourish successfully only when research and teaching go hand-in-hand seamlessly since both these aspects complement each other. Thus, we have ensured the development of a collaborative environment conducive to learning, exposure to the best international practices, and promotion of innovation and creativity. We are also conscious of the fact that the rapid pace of development in the country



has raised awareness as well as the expectations of people, and institutions of higher learning are instrumental in providing equal opportunities, which is the essence of participatory democracy.

Vels University is at the forefront of emerging as a potential hub to impart education, training, and entrepreneurship development skills to students belonging to marginalised sections of society. The university is on the path to achieving excellence in higher education by offering the most relevant, up-to-date, multidisciplinary programmes of study required for present and future development, and for nation building. The university pursues a global outlook and international orientation in its programmes and services, and has adopted a holistic approach to higher education.

We have initiated steps to move from the conventional teacher-centred approach to a learner-centred approach. Our efforts are bearing fruit and we hope that the shift will be complete by 2020, whereby credit accumulations will not be confined just to classroom lectures and marks secured in semester-end examinations

We believe in a pan-India presence and our enrolment policy is designed in such a way, that students from all parts of the country are admitted. This is to encourage a love for the nation and also to let students introduce themselves to various cultures found in the country in the truest sense.

Vels has the highest regards for the Indian policy of reservation and all norms are strictly adhered to. Students from underprivileged and sociallybackward sections are enrolled on the basis of prescribed norms. Admission is based on the merit list drawn in accordance with the admission policy of the university.

A significant increase in the strength of research scholars belonging to underprivileged communities is a reflection of the inclusive development and equality policies of the university. Further it aims to provide innovative syllabi and new industry-worthy and research-based courses. Hence, the revision of curricula is a continuous and on-going process. The revision is initiated by the faculty depending on the requirement and is approved by the Board of Studies of the concerned department/school.

Each academic department is under a different School - School of Engineering, School of Ocean Engineering, School of Maritime Studies, School of Management Studies and Commerce, School of Basic Science, School of Hotel and Catering Management, School of Mass Communication, School of Pharmaceutical Science, School of Physiotherapy, School of Law, School of Education, and School of Languages. The courses are under a Choice Based Credit System that enables students to get adequate freedom in choosing subjects. The inclusion of soft skills like spoken English using the modern language laboratory, and personality development in the curriculum of undergraduate and postgraduate courses benefits students and makes them more employable.

Undergraduate students are also offered papers on environment science and value-based education. The students are given an opportunity to select two papers ,or four credits, from other departments under Choice Based Credit Systems.

TEACHING-LEARNING PROCESS

- PowerPoint presentation classroom lectures,
- Guest lectures
- Industry visits,
- Case study assignments,
- Panel discussions.
- Business simulations,
- Field researches/Work research projects,
- Theatre techniques.
- Teamwork,
- Industrial tours,
- Quiz role plays,
- Management games to develop managerial skill,
- Business plan,
- Internship and development programmes,
- Announced and unannounced tests.
- Smart classrooms,

Student projects,

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Vels also provides special methodology workshops for final year students working on projects to improve quality. The learning process is student centric focusing on LMS, KMS, EMS. - Edx, TED, Khan Academy, Coursera, and NPTFI

- Experimental learning
- Problem based learning
- Blended learning
- Collaborative learning
- Participatory learning
- Interactive learning
- Independent learning

In order to make Vels University a Knowledge Resource Centre and the ultimate destination for world class education, the following multidimensional strategies have been identified and adopted.

Research and Development

CARD has been established to promote research. Starter grants to young teachers and research fellowships to full-time research scholars are given. Teachers are awarded on the basis of papers published, projects completed, patents filed, and books written. A total of 1,872 articles have been published.

Teaching and learning

The focus is on LMS, KMS and EMS, and Choice Based Credit System. E-learning platforms through the Vels Knowledge Resource Centre has combined NDL, NPTEL, SWAYAM and other open sources so that knowledge can be imparted beyond classrooms.

Consultancy service

Consultancy services to identify plant costs and effective solutions to corporate problems are provided by various departments.



Entrepreneurial culture

The university prepares students to be job providers. The Entrepreneurs Club, IPR Cell, and the Incubation Centre all work effectively on campus to encourage inventions and innovations.

Social responsibility

Entrepreneurial development programmes, internship programmes, and field visits provide social orientation to students. NSS, Red Ribbon Club, Rotaract, and YRC also create a sense of social responsibility among students. Village melas involving villagers, health and hygiene camps, and Women Empowerment programme camps are organised periodically. Thus the university acts as catalyst for social change.

Stakeholder relationships

By making the inclusion of students/alumni in the Board of Studies statutary, the industry-academia interface is strengthened, making the university a preferred destination for work and study. The university has signed 82 MoUs with various companies.

Good governance

Good governance means striving towards transparency and accountability in the administration of the university.

Global perspective

Admissions are open to international students. The university adopts national and international perspectives in teaching, consultancy, and research.

E-governance

The entire administration of the university is under ERP.





Prof Dr S Sivasubramanian Advisor (Research & Development)

Dr P Govindarajan Special Officer **P**rof Dr S Sivasubramanian, an eminent scientist, a distinguished academician, and an able administrator, is a pioneer in the field of organic chemistry. He began his career at Madurai Kamaraj University in 1971 as a micro-analyst, subsequently becoming a lecturer, reader, professor, senior professor, Head of the Department of Organic Chemistry, and the coordinator of the School of Chemistry.

After his retirement, he served as Emeritus Scientist (CSIR) in the same department, and then as the Vice-Chancellor at Bharthiyar University, Coimbatore (2003 - 2006), and at Noorul Islam University (2009 - 2013). From Jan 2013 to 2015, he worked as an advisor (Research, Projects and Quality Assurance) at Noorul Islam University.

Currently, he is Advisor – Research of Vels University, Pallavaram, Chennai. He has helped to produce 20 Ph.D and 23 M.Phil graduates, and has published 94 research papers in journals of international repute (listed in SCOPUS). He did his post-doctoral work and taught at Drexel University, Philadelphia, USA (1986 - 88).

He has also been invited for lectures in several universities in Germany and Poland and has visited universities in Australia, Singapore, Sri Lanka, and Mauritius.

Prof Sivasubramanian is renowned both at the state and national level for his work that includes the CSIR emeritus scientist award.

Dr P Govindarajan is the Special Officer of Vels University. After completing his education with the University of Madras, he started his career as an assistant professor of economics in the year 1967 and has served in the Department of Collegiate Education for 35 years.

He was promoted as Head of the Department of Economics, Presidency College in 1997 after which he obtained his Ph.D from the University of Madras. He joined as Dean in the Vels Group of Institutions and later worked as the Registrar at Vels University. He was instrumental in obtaining the deemed university status for Vels.

Dr P Govindarajan has guided more the 25 M.Phil and 13 Ph.D candidates, and has attended many national and international conferences, seminars, and workshops.

He is also a resource person in the UGC, Annamalai University, University of Madras, Thiruvalluvar University, and many colleges, and conducts many seminars and workshops. He has completed two major projects and has also served as a project consultant in a UNESCO project. The university has drawn its model of governance in accordance with the guidelines prescribed by the UGC. The prominent bodies that provide governance include the Board of Management, Planning and Monitoring Board, Academic Council, Finance Committee, Board of Research Studies, and Board for each department.

BOARD OF MANAGEMENT (as per UGC Regulations)

Chairman

Dr V Thamizh Arasan Vice-Chancellor, VISTAS, Pallavaram, Chennai -

Dean of Faculties

Dr P Swaminathan,

Dean, School of Engineering and School of Comp VISTAS, Pallavaram, Chennai - 600 117.

Dr M Chandrasekaran

Dean i/c, Academic Courses and Director, Depar Mechanical Engineering School of Engineering, Pallavaram, Chennai - 600 117.

Eminent Academicians Nominated by the Ch

Dr S P Thiyagarajan

Former Vice-Chancellor, University of Madras, Pro-Chancellor (Research), Sri Ramachandra University No.1, Ramachandra Na

Dr K Muthuchelian

Former Vice-Chancellor, Periyar University, Chairperson, School of Energy Sciences, Madurai Kamaraj University, N

Prof C Thangamuthu

Former Vice-Chancellor, Bharathidasan University, No.43, VI Main Road, Lakshminagar Extension, Porur, Chennai - 600 11

UGC Nominee:

Two teachers by rotation based on seniority Dr Dilshad Shaik

Director, School of Law, VISTAS, Pallavaram, Chenn

Dr V Rajendran

HOD, Department of ECE, School of Engineering, Pallavaram, Chennai - 600 117.

The Team

	Nominee of the sponsoring society
	Dr V Vijaya Kumar
	Former Vice-Chancellor,
	Tamil Nadu, Dr Ambedkar
- 600 117.	Law University,
	Professor of Law,
	National Law School of India
	University, Bangalore - 560 072.
nputing Sciences,	
	Member Secretary
	Dr A R Veeramani
	Registrar, VISTAS, Pallavaram, Chennai - 600 117.
artment of	
, VISTAS,	
Chancellor	PLANNING AND MONITORING BOARD
	(as per UGC Regulations)
	Chairman of the Board
ז),	Dr V Thamizh Arasan
Nagar, Porur.	Vice-Chancellor, VISTAS, Pallavaram, Chennai - 600 117.
Nayai, Fului.	
	Internal members
	Dr P Govindarajan
	Special Officer, VISTAS, Pallavaram, Chennai - 600 117.
Madurai.	
	Dr P Swaminathan
	Dean, School of Engineering and School of Computing Sciences
	VISTAS, Pallavaram, Chennai - 600 117.
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116.	
	Dr R A Kalaivani
	Director, School of Basic Sciences, VISTAS, Pallavaram,
	Chennai - 600 117.
y	
	Dr P Shanmugasundaram
nnai - 600 117.	Director, School of Pharmaceutical Sciences , VISTAS,
	Pallavaram, Chennai - 600 117.
g, VISTAS,	
	Dr P Mahalingam
	Director, Department of Tamil, School of Languages

VISTAS, Pallavaram, Chennai - 600 117.

Dr S Prasannna

HOD – M.C.A, School of Computing Sciences, VISTAS, Pallavaram, Chennai - 600 117.

UGC Nominee

Thiru T Pitchandi, IAS (Retd) No. 554, 4th Sector, 14th Street, K K Nagar, Chennai - 600 078.

Dr P Magesh Kumar Managing Director, CALIB SOFT Tech Pvt. Ltd., Neelangarai, Chennai.

Secretary Dr A R Veeramani Registrar, Vels University, VISTAS Pallavaram, Chennai - 600 117.

THE FINANCE COMMITTEE (as per UGC Regulations)

Chairman **Dr V Thamizh Arasan** Vice-Chancellor, VISTAS, Pallavaram, Chennai - 600 117.

A person nominated by the society or trust Mr R Sundararajan 7, Vysarpadi Gangadharam Street, Nungambakkam, Chennai - 600 034.

Two nominees of the Board of Management, one of whom shall be a member of the Board

Former Secretary and Commissioner, HR&CE, Government of Tamil Nadu.

Dr P Swaminathan Dean, School of Engineering and School of Computing Sciences, VISTAS, Pallavaram, Chennai - 600 117.

UGC nominee (Central Government)

Finance Officer - Secretary Mr D Balakrishnan CFO, VISTAS, Pallavaram, Chennai - 600 117. ACADEMIC COUNCIL (as per UGC Regulations)

Vice-Chancellor - Chairperson

Dr V Thamizh Arasan, Vice-Chancellor, VISTAS, Pallavaram, Chennai - 600 117.

Dean(s) of faculties Dr R Dinakaran Michael

Dean, School of Life Sciences, Vels University.

Dr P Swaminathan, Pro-Vice Chancellor and Dean, School of Engineering and School of Computing Sciences, Vels University.

Dr D Kumaran Dean, School of Education

Dr Premeela Gurumurthy Dean, School of Music and Arts

Heads of Department

Department of Mathematics

Department of Biochemistry

Dr Radha Mahendran Department of Bioinformatics

Dr S Prasanna Department of Computer Applications

Dr K Kalaiselvi Department of Computer Science

Dr S Sujatha Department of BCA and IT Dr M Thaiyalnayaki Department of B.B.A

Dr S Preetha Department of M.B.A (General)

Dr G Rajini Department of M.B.A (Integrated)

Dr S Subramanian Department of B.Com (CA)

Mr R Bennet School of Hotel and Catering Management

Mr R Raghuram School of Mass Communication

Dr P Mohan Department of Tamil

Mr V Santhosh Kumar Department of Pharmacology

Mr M Ashok Kumar Department of Pharmacy Practice

Ms K Kalaivani Department of CSE

Dr V Muthuraman Department of Mechanical Engineering

Mr S Sathish Department of Automobile Engineering

Dr R Rathanraj Department of Civil Engineering

Dr P Brindadevi Department of B.Tech Biotechnology

Ms R J Hemalatha Department of Biomedical Engineering

Mr P Senthil Selvam School of Physiotherapy

Dr S Santhana Krishnan School of Education

Dr S Paulraj Department of Physics

Dr A Neel Armstrong

Dr R Sangeetha

Thiru T Pitchandi, IAS (Retd)

Dr M Chandran Department of Commerce

Dr V Rajendran Department of ECE

Dr K Kalaiarasi Department of Economics

Dr R Venkataraman Department of English

Dr M Vijey Aanandhi Department of Pharma. Chemistry

Dr S Satheesh Kumar Department of Pharmaceutics

Dr S Vasantha Department of Management Studies

Dr A K Karthiresan Department of Microbiology

Ten professors other than the Heads of Department (by rotation of seniority)

Dr M Chandrasekaran Professor/Director, Department of Mechanical Engineering

Dr P Mahalingam Director, Department of Tamil, School of Languages

Dr P Shanmugasundaram Director, School of Pharmaceutical Sciences

Dr R A Kalaivani Director, School of Basic Sciences

Dr Dilshad Shaik Director, School of Law

Dr T S Shanmuqaraian Professor, Department of Pharmaceutics

Three associate professors from the Departments other than the Heads of the Departments by rotation of seniority

Dr K Amutha

Associate Professor, Department of Biotechnology

Dr P Shalini

Associate Professor, School of Management Studies

Dr Malarkodi Velraj Associate Professor, Department of Pharmacognosy

Three assistant professors from the **Departments by rotation of seniority**

Mr S Prabhakar Christopher David Assistant Professor, Department of B.B.A

Ms Vennila Shree Assistant Professor, Department of Commerce

Mr Allen John Henry Assistant Professor, Department of Microbiology

Three persons from amongst educators of repute or persons from any other field related to the activities of the institution who are not in the service university, nominated by the Vice-Chancellor.

Dr A Jawahar Professor, SSN College of Engineering

Dr R Sivakumar Presidency College

Dr Antony Raj Principal (Retd), Government Arts College

Three persons who are not members of the teaching staff, co-opted by the Academic Council for their specialised knowledge

Dr U Kamachi Mudali

Director, Materials Chemistry and Metal Fuel Cycle Group Senior Professor, Homi Bhabha National Institute (HBNI) University, DAE, AICTE-INAE. Distinguished visiting Professor, Indira Gandhi Centre for Atomic Research, Kalpakkam - 603 102.

Thiru N Varadarajan

Assistant Vice-President – IT, The Ramco Cements Ltd., 98-A, Dr Radhakrishnan Salai, Mylapore, Chennai - 600 004.

Mr N Ramakrishnan

Managing Director, Precia Molen India Pvt. Ltd. (formerly Nova Weigh India Ltd.) SIDCO Industrial Estate, Thirumazhisai, Chennai.

The Registrar who shall be the secretary of the Academic Council

Dr A R Veeramani Registrar

The Vels University administration is guided and steered by the following authorities:

DESIGNATION	NAME	CONTACT NO.	E-MAIL
Founder-Chancellor	Dr Ishari K Ganesh	044-2266 2500	chancellor@velsuniv.org
Vice-Chancellor	Dr V Tamizh Arasan	99625 06344	vc@velsuniv.ac.in
Registrar	Dr A R Veeramani	99625 06245	registrar@velsuniv.ac.in
Ctrl of Examinations	Dr A Joseph Durai	99625 06247	coe@velsuniv.ac.in
CFO	Mr D Balakrishnan	99625 06237	accounts@velsuniv.ac.in

smooth functioning of the university.

The university is ably supported by:

Vice-President [P&D]	Dr A Jothi Murugan	98415 82244	ajmvels@gmail.com
Vice-President [Admin]	Shri S Kamalakanan	99625 06345	kamalakanan57@yahoo.co.in
Vice President [Academic]	Dr Aarthi Ganesh	044-2266 2500	arthigvels@yahoo.com



Administration

There are Deans each for Student Affairs, Faculties, Research, International Student Affairs, and Admissions for the

Dr Arun Sahayadhas Director i/c, IQAC



INTERNAL QUALITY ASSURANCE CELL

The best quality education has always been a top priority at Vels L University since its inception. We have raised the bar, met greater standards of international expectations, and we perpetually work towards the betterment of faculty and students, one and all.

Quality maintenance

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The IQAC often deliberates quality related issues and forwards the same to the statutory authorities for implementation and monitoring.

- Development and application of quality benchmark parameters for various academic and administrative activities of the university,
- Development and maintenance of the institutional database through MIS for the purpose of maintaining/enhancing the institutional quality,
- Development of Quality Culture in the university,
- Organising staff development programmes/seminars/workshops.

Vels University (VISTAS) has constituted a committee called the Internal Quality Assurance and Academic Audit (IQAAA) to undertake activities relating to quality assessment, assurance, and academic audit. The committee has been constituted as per NAAC guidelines and is known as the Internal Quality Assurance Cell (IQAC), with the approval of university statutory bodies.

Dr Arun Sahayadhas, Associate Professor, Department of Computer Science and Engineering, heads the IQAC. He earned his doctorate from Universiti Malaysia Perlis also known as UniMAP in Perlis, Malaysia. His contribution, in terms of publications in indexed conferences and JCR impact factor journals, reflects his passion for research. He is a reviewer in many impact factor journals and has also served as an editor in a Scopus indexed journal proceeding. He has a research project worth ₹30 lakh, has filed one patent, and has also received the 'Best Teacher Award' from his previous employer.

Currently, he is guiding 7 Ph.D scholars and is the convener of the 'Centre of Research and Development' (CARD) at Vels University. His research areas include transportation safety, driver assistance systems, artificial intelligence, biomedical signal and image processing, cloud computing and big data analytics. He has been a very active member in international affairs and has enabled many MoUs to be signed with foreign universities.

The IQAC engages in the following activities.

- Preparing quality assessment scores for all the teaching and research departments.
- Academic audit of the CBSS (Credit Based Semester ii System) examination and evaluation.
- iii. Analysing student feedback forms.
- Analysing self-appraisal reports of faculty members. iv

Academic audit has been introduced by the IQAC under v which every course faculty has to send the semester-end answer scripts along with question papers to the IQAC.

The IQAC, with the assistance of the Controller of Examinations, invites external experts to audit examinations and the evaluation system of courses, unanimously. The deans scrutinise reports for follow up measures.



Let's Tour the Campus

The sprawling campus of Vels is located at Pallavaram, a stone's throw from the south of Pallavaram railway station, and four kilometres from Chennai airport. Vels Group of Institutions established on July 6, 1992, is run by the Vels Educational Trust, a charitable, non-profitable organisation. Guided by the motto 'Knowledge is Power' the Vels Educational Trust was built brick-by-brick over the last 25 years and was conferred with 'University' status by the Ministry of Human Resource Development, Government of India in 2008. The group has 15 schools, 42 departments offering 49 undergraduate, 45 postgraduate, and several diploma and certificate programmes. All schools offer M.Phil and Ph.D programmes.



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Library

A library is like a lifeline for an educational institute, its faculty, researchers, and students. Over the past 25 years, the authorities at Vels have cherry-picked and sourced the best of collections in various subjects and disciplines.

Though we agree that the pleasure of holding a book is unbeatable, we have also upgraded to the next level. We have introduced e-books, subscribed to national and international periodicals, journals, dissertations, and also pooled several audio-visual resources.

The Vels University library spans an area of over 20,000 square feet with a seating capacity of 400. It follows an open access system powered by state-of-the-art facilities.

The library houses a collection of 1,02,411 books, 1,30,000 e-books, and 10,032 back volumes. It subscribes to more than 329 periodicals (national and international), 13,812 e-journals, 4,106 dissertations, and 4,802 audio-visual resources.

There is a separate library for Maritime Studies and Physiotherapy at Thalambur with a built up area of 3,000 sq.ft and a collection of more than 5,800 books.

Stack Area I

It holds more than 89,911 books on art, science and technology, and paramedical themes, and holds encyclopedias, dictionaries, directories, thesaurus, year books, glossaries, maps and atlases, and other reference volumes.

Stack Area II

It has more 2,000 books for students to prepare for various competitive examinations and student project reports.

Reference Section:

This section stocks over 12,500 books in various disciplines.

Periodical Section

It has over 10,032 back volumes of scientific and technical periodicals. It also contains 329 periodicals from various professional societies.

Digital Library

It facilitates access to electronic information services to ensure necessary information is given to our students and faculty. A separate digital section can also be accessed.

Staff and students can access e-journals and e-books from IEEE/IEL, ASME, ASCE, EBSCO (Academic Search Complete & Business Source Elite), ProQuest, Bentham Science Pharmacy, Micro Medex's Drugdex system, Inventi Online, J-Gate, Law Finder, AIR Infotech Comprehensive, Manupatra, Nature Online, EBRARY Academic Complete-Proquest and BLOC, Lexis Nexis, NDL (National Digital Library), and DigitMat Digital Library.

Audio-Video Conference Hall

It houses LCD and Pentium systems with high speed internet connectivity.

Reprographics Section

Copier facility is provided for the benefit of those who access the library.

Features

All library facilities are managed by qualified and efficient librarians and assistants to ensure the best possible information services to the user from 8:00 am to 8:00 pm on all working days.



A fully-automated library information system with bar-coding keeps track of books, non-book materials, and ID cards, and enables laser scanning of issues and returns.

The library is equipped with LIBGENIE, an integrated library management software package, with all modules of the library housekeeping operations. With the help of the Online Public Access Catalogue (OPAC), users can search the library's online catalogue by author, title, or keywords.

Users can also find the latest editions of periodicals, books, and the status of a document (whether on-shelf or in circulation). The library is an institutional member of:

1. British Council Library

2. MALIBNET (Madras Library Network) 3. DELNET (Developing Library Network) 4. Current Science Association

The library is also an associate member of INFLIBNET - Shodhganga and Shodhsindu.

Services offered at the library include:

Lending services Reference services

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- Current awareness services

Internet-based services



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User orientation
Inter-library loan
Information retrieval and printout
Question bank
Article alert services
OPAC (Online Public Access Catalogue)
Reprographic services
Content alert services
Newspapers clipping services
Referral services
Research guidance

The Central Library provides faculty and students training and orientation through the Learning Management System created by the library. It sheds light on Blended Learning activities and the resources utilised for these training programmes are organised, indexed, and categorised according to the different Schools. This resource can be accessed through the VISTAS Subject gateway portal. A special portal that provides e-resources such as e-journals, e-books, video lectures, institutional repositories, a career portal, soft skill development, and the resources that come under the UGC and MHRD guidelines such as Open courseware (EPGPathsala, SWAYAM, NPTEL, Consortium for Education Communication (CEC) etc.), and the National Digital Library. It also includes EDX, Khan Academy, and other MOOC courses.

New Ideas, Newer Knowledge

Research Initiatives CARD

One of the top priorities of Vels University since its inception is to promote world-class research. In the last 25 years, the faculty and researchers at the university have contributed a significant amount of their knowledge for various groundbreaking inventions and technology. The university has taken several steps to facilitate world-class research and one such major effort is CARD.

The Centre for Advanced Research and Development (CARD) has been established to promote research among faculty members, research scholars, and students. The primary objective is to create a research culture among the stakeholders.

A structured cadre has been established for promoting research along with a strong contingent of 40 experts belonging to various disciplines such as engineering, life sciences, pharmaceutical science, basic science, and management. They have devoted themselves to undertake full-time research and development.

The team is working on a variety of themes including wind and solar energy, environmental engineering, alternative fuel, nanotechnology (nanoparticles), plant tissue culture, animal biotechnology, fish immunology, stem cell research, drug designing and drug testing, etc.

Functions

Generates, applies, and disseminates research findings. Build capacity in the field by training the next generation of researchers.

The centre will be guided by the following principles and values. 1. Research will be applied, innovative, and of high quality. 2. Research will be interdisciplinary and collaborative.

The predominant aim of the university is to promote research and add something substantial to the existing quantum of knowledge. In keeping with this tradition, Vels University promotes research and consultancy apart from conducting classes, lab experiments, and hands-on training in various disciplines. Many steps have been taken to encourage research.

One such step is the establishment of CARD.

The idea is to motivate the students to do research at our university and provide adequate opportunities. The laboratories are wellequipped with sophisticated equipment and other essential infrastructure.

Starter grants are provided by the university for those teachers who can initiate research. All facilities are provided to prepare and submit major projects to funding agencies. Consultancy work is encouraged by offering 50 per cent share to the staff involved in consultancy.

The university has subscribed to 13,812 e-journals to encourage research activities. The effort towards research and consultancy has resulted in the publication of quality research papers. All postgraduate departments offer M.Phil and Ph.D programmes. As many as 116 Ph.Ds have already been awarded and 18 theses have been submitted. The management grants 20 full-time fellowships for research scholars every year.

Research Publications

Faculty members are encouraged to produce research by providing rewards for the publishing of research papers in reputed journals. Over the years, faculty members have been publishing research papers in various national and international journals of repute. As many as 1,872 articles have been published in national and international journals by the faculty with an Average Impact Factor of 1.382 including 900 SCOPUS and 739 indexed journals.

Staff members have also attended 1,493 workshops/seminars/ conferences, and have organised 429 workshops and seminars, and 608 special lectures during the last five years.

Publication of Books

Faculty members are encouraged to publish textbooks based on their expertise in classroom teaching and research. So far, 59 books have been published on various topics. A majority of these books have been prescribed as textbooks for several universities in India.

Patents, Innovations & ToTs

We concentrate more on research and till date, we have filed 35 patents, invented 38 new products, and the Transfer of Technology has been made for 7 products.

Major Research Projects

Faculty members are active in taking up research projects funded by various agencies. The university also provides financial assistance from its funds for undertaking major and minor research projects.

research A few of the experts in the advisory committee are:

Dr William Selvamurthy Former Chief Controller (R&D), DRDO selvamurthv2003 @vahoo.co.in

Dr Baldevraj Former Director, IGCAR daldev.dr@gmail.com

Dr B Suresh President - PCI and Vice Chancellor, JSS University surechbhojraj@hotmail.com

Dr Thambipillai Srikanthan Professor and Chair, School of Computer Engineering, Nayang Technological University, Singapore ASTSRIKAN@ntu.edu.sq

Dr Khin Mi MI Aung ADM, Data Storage Institute, Singapore mi_mi_aung@dsi.a-star.edu.sg

Prof Gerhard Braus George August Universitat, Gottingen, Germany graus@wdg.de

Dr A S Kantharaja School of Natural Science, University of Western Sydney, Australia ak105@aub.edu.lb

Dr Nicole Tandeau De Marsac Research Director, Head Institute Pasteur Unite des cyanobact'eries, Department de Microbiologie, Paris, France ntmarsac@nasteur fr

Dr Roshada Hashim Dean, Institute of Graduate Studies, University Sains Malaysia, Malaysia dean_ips@usm.my,roshada@usm.my

Dr Vijay K Vardhan Professor, University of Arkansas, USA vivesm@uark.edu

Prof Dr Hsiehchih Tsai Professor, Graduate Institute of Applied Science and Technology, National Taiwan University of Science and Technology (NTUST), Taipei 106, Taiwan, ROC

Prof Jiri Komarek Professor, Institute of Botany, Treon, Czech Republic komarek@butbn.cas.cz

Prof Yusuf Chisti Professor, Biochemical Engineering, Massey University, New Zealand y.chist@massey.ac.nz

Research Advisory Committee

The university has constituted a Research Advisory Committee consisting of international and national experts in various fields to promote

Prof P Albertano The Laboratory of Biology of Algae, Department of Biology, University of Rome, Italy lbertano@uniroma2.it

Sir William D P Steward Former Advisor to Prime Minister, UK

Dr A Prasanna Graduate Institute of Applied Science and Technology. National Taiwan University of Science and Technology Taiwan adhiprasanan@gmail.com; ak.prasannan@mail.ntust. edu.tw

Mr Krishnamoorthy Baskaran Data Storage Institute, Singapore k_Baskaran@dsi.a-star.edu.sg; asbaskaran@gmail.com

Prof T Sridhar Dean, Engineering, Monash University, Australia Tam.Sridhar@eng.monash.edu.au

Dr R Charudattan Professor Emeritus, Institute of Food and Agricultural Science, Plant Pathology Dept., University of Florida, USA rcharudattan@bioprodex.com

Prof L J Stal Professor and Head, Centre for Estuarine and Marine Ecology, Department of Marine Microbiology, Netherlands Institute of Ecology, Netherlands Netherlands.l.stal@nioo.knaw.n1

Dr S Nierzwicki Bauer Professor of Biology, Darrin Fresh Water Institute, Troy, New York, USA nierzs@rpi.edu

Board Of Research Studies (BORS)

The Board Of Research Studies consists of Deans, Directors, and Senior Professors from Vels University and external members drawn from various research institutes and companies,

BORS monitors Ph.D and M.Phil programmes and research projects. The regulation of Ph.D and M.Phil programmes offered by the university are in accordance with the latest guidelines of the UGC. Project work has been made compulsory for all postgraduate courses, and B.E and B.Sc Visual Communication, with a view to provide quality research.

Business Incubation Centre

Entrepreneurs with Promotion and Innovations

Vels Business Incubation Centre has embarked on nurturing innovation and entrepreneurship, thus generating employment through the centre. The incubation centre was established at the Vels University campus in a 1,000 sq.ft built-up area with 5 cubicles, each 100 sq.ft in size and fullyfurnished with air-conditioning, telephone, and internet connectivity.

This incubation centre focuses on IP rights and licensing, technology scouting, and engineering consulting. Reprography and cafeteria facilities are also available. The incubator offers space for the incubation of small enterprises and houses two entrepreneurs at present.

Company Entrepreneurs

- M/s Arcomm Tech Solutions Pvt. Ltd. (Automation Devices),
- Mrs Indira,
- M/s Arann Cybertek (Cyber Security), •
- Dr Balasundaram

Arcomm Tech Solutions Pvt. Ltd.

Arcomm Tech Solutions Pvt. Ltd. specialises in home and industrial automation. Products include Smart Home Automation, Auto Controller, and Water Level automation. All are patented and made-in-India. The Auto Controller is deployed at 200 State Bank of India ATM sites and conserves around 30 per cent to 50 per cent of EB bills.

This company has been in the process of developing industrial and agricultural automation products for the past few years. It designs, develops, and produces electronic devices for multiple applications including security systems, home/industry automation using mobile applications, etc. All their products are 100 per cent "Made-in-India" so that service and maintenance becomes easy.

Arann Cybertek

Arann Cybertek is a software consulting and services start-up with a focus on cyber security and analytics. Arann develops products in many sub-domains of cyber security such as information security, identity management, etc. Leveraging open source tools like Modsecurity, Arann provides external third-party cyber security services for websites and business entities such as hospitals, corporations, etc.

Arann is also engaged in providing training for entry-level students and working professionals who are interested in pursuing a career in cyber security. Arann is also currently working on research projects such as visual security using artificial intelligence, and machine learning along with Vels University.





TRANSFER OF TECHNOLOGY (TOTS)

PRODUCT NAME:	EASY VEHICLE MONITORING AND SURVEILLANCE
PATENT NO:	2208/CHE/2010
COMPANY NAME:	M/S WOODWARD GRAND-PARKING SOLUTIONS

EASY VEHICLE MONITORING AND SURVEILLANCE

ABSTRACT:

A novel pitted compact box for accurate under-vehicle surveillance has been proposed. The compact box constitutes three high-definition cameras with night vision capacity, placed over a small tray. The three cameras are placed at a specific angle from the top of the tray and are spaced at a specific distance from each other. Thus the above mentioned projection, when pitted in the ground and connected to the computer, provides accurate and clear under-vehicle surveillance when the vehicle crosses the box. In addition, photographs and video can be taken and recorded.

A portable device for quick and accurate under-vehicle surveillance has been proposed. The portable device constitutes of a Liquid Crystal Display (LCD) screen fitted over an expandable and 180° flexible arrangement, one camera placed at 60° from the top of a push and pull tray, 2 Light Emitting Diode (LED) lights for night vision, and a common charge point to recharge the battery. This device when placed under the car provides very clear and accurate under-vehicle surveillance. The device is quick, user-friendly, low-cost, and can be easily commercialised. In addition, video can be recorded and saved in the memory card provided with the LCD.

A multi-purpose portable vehicle (MPV) is proposed for surveillance applications. A remote controlled car contains a wireless camera integrated to it and also two metal detectors fixed on its top and bottom. The wireless camera can cover a 360° space in front of it either horizontally or vertically depending on the requirements and the positioning of the camera. The metal detector, if switched on, can remotely detect metal pieces and other hazardous substances during its period of operation above and below the MPV. Also remote monitoring, video, photography, etc. can be done through a Personal Digital Access (PDA) that accesses camera information.

Great Innovations



SURVEILLANCE



PRODUCT NAME: DESIGN AND DEVELOPMENT OF MULTICROP THRESHER

PATENT NO:

COMPANY NAME: M/S VALASUMANI FARM MACHINES PVT. LTD.

DESIGN AND DEVELOPMENT OF MULTICROP THRESHER

ABSTRACT:

The modern multicrop thresher is a high capacity tractor-driven multicrop thresher. Tractor-operated multicrop threshers can be run through a tractor rated at 30hp and above. The multicrop thresher can be operated by coupling the PTO to any type of tractor.

Crops that can be threshed using the multicrop thresher: paddy, maize, sunflower, wheat, millet, ragi, soya, horse gram, red gram, jawar, Bengal gram, black gram, coriander, groundnut.

Product features

- Paddy threshing capacity 1 acre per hour
- Paddy is completely removed from the stock
- Wheat threshing capacity 1 acre per hour
- Maize can be threshed without peeling the cob cover
- Maize threshing capacity of 70 to 80 bags per hour
- (1 bag = 100 kg)
- Threshing does not damage the tips of the grain hence grain is suitable for use as seed
- Threshing is completed in one pass



PRODUCT NAME: SMART COST EFFECTIVE TELE-SURGICAL ROBOT FOR SURGERY

PATENT NO 300/CHE/2012 A

COMPANY NAME: M/S UROLOGY CLINIC, COIMBATORI

SMART COST EFFECTIVE TELE-SURGICAL ROBOT FOR SURGERY

ABSTRACT:

This invention relates to the smart telesurgical robotic endotrainer used for robotic surgery training. This surgical robot provides a realtime surgical experience using an endotrainer wherein the operation of the device is controlled by the surgeon through completely programmed controllers. This is used for achieving better training for surgeons prior to robotic surgery in patients. This will provide the best result for Urology surgeries (cancer, transplantations, etc), Cardiology (heart surgeries), general surgeries, etc. The currently available Da Vinci surgical robot is very expensive and complex to operate. To overcome these disadvantages, the STeROBOT has been proposed and developed. The STeROBOT provides a simple and economical telesurgical endotrainer for use in robot surgery training by surgeons. It provides a 3D and 2D view, and is easy to operate. It provides real hands-on robotic surgery training.



PRODUCT NAME : DIAGNOSIS TABLETS AND CAPSULES FOR **IDENTIFICATION OF TUBERCULOSIS BACTERIUM**

2272/CHE/2012
M/S EDICT PHARMACEUTICAL PVT. LTD., CHENNAI

DIAGNOSIS TABLETS AND CAPSULES FOR IDENTIFICATION OF TUBERCULOSIS BACTERIUM

ABSTRACT:

At present, Tuberculosis can be diagnosed by identifying the Mycobacterium tuberculosis in sputum or pus. In some cases, X-ray, the Mantoux test, or Interferon Gamma Release Assay (IGRA) can be used. The predominant problem in the diagnosis is the difficulty in the culturing of the organism that is very slow, taking one month to 3 months. New TB tests like Polymerase chain reaction (PCR) assays and Amplified Mycobacterium Tuberculosis Direct (MTD) tests can also be used. Stain sputum samples by phenol (10%), ammonium sulphate (4%), basic fuchsin (2%) solution, and to de-colourise and counter-stain their smears for detection of AFB (henceforth called pot method) and to compare the smear results of the pot method with the standard Ziehl-Neelsen (ZN) method. Identification of tuberculosis bacterium by solid tablet and capsule may cause ease in handling problem. Formulations contain phenol, mcc, lactose, ammonium sulphate, and basic fuchsin.



PRODUCT NAME: SMART HOME SECURITY SYSTEM

PATENT NO (TO BE PATENTED

COMPANY NAME: M/S K SECURITY'S, HYDERABAD, AP

SMART HOME SECURITY SYSTEM

ABSTRACT:

A novel concept of a circuit board has been developed that can be integrated with home electronic devices. The circuit board constitutes a GPRS/3G slot. A mobile app for Android/iOS smartphones has also been developed that provides direct control access to the electronic board that has been fitted at the home. In addition, the board also has a motion sensor, which sends an alert to the smartphone in case of intrusion. From opening and closing the front gate to every electronic item at home, this novel product can control them remotely. The entire product is cost effective and simple to operate.



PRODUCT NAME: HOME AUTOMATION SYSTEM

PATENT NO (TO BE PATENTED)

COMPANY NAME: M/S RANK TRANS WORLD LLC, DUBAL UAE

HOME AUTOMATION SYSTEM **ABSTRACT:**

A novel home automation system controlled via mobile application has been proposed. The system comprises of a Wi-Fi module, ATMEL microcontroller, multichannel relay, 12V power supply, etc. The system will be integrated with the electrical board in a customer's home/office. The Wi-Fi module will be paired with the Wi-Fi at home/ office. The mobile application has also been developed for all types of smartphones. Thanks to the embedded programme and IP address configuration, the automation system can be controlled from any part of the world. From a house's main gate to any electronic device present in the house, it can be remotely controlled by this system.



PRODUCT NAME: SMART ENERGY METER

PATENT NO (TO BE PATENTED)

COMPANY NAME: M/S ARCOMM TECH SOLUTIONS PVT. LTD.

SMART ENERGY METER ABSTRACT:

A smart energy meter for energy conservation has been proposed. The energy meter is made up of a GSM/Wi-Fi modem with a programmed microcontroller. The device is integrated with an existing EB meter provided by the state government. The device is integrated in a safe manner as per permitted regulation by the Government. The device will provide accurate live EB bill and consumed units in kW/h. Also, consumers can preset the required limit such that they get regular alerts periodically to their mobile phone once they cross their preset limits

Infrastructure and More

The infrastructure and academic ambience is what defines an educational institution. In the last 25 years, the infrastructure **I** and ambience was built brick-by-brick with utmost care and world-class guality. At Vels, we consider upgrading infrastructure on a regular basis an imperative step for overall development.

upgrading the infrastructure facilities.

Total land in possession:	29.17 acres
Total built-up area:	<u>1,04,507 sq.m</u>
Total no. of classrooms:	306
Total no. of laboratories:	137
Total cost of equipment:	₹35 Crores
No. of computers:	1,562
No. of laptops:	525 + 280 Aakash Tablets
No. of printers:	125
Smart classrooms:	30
No. of LCDs:	92 + 35 OHPs
Internet facilities:	205 Mbps connection
	[BSNL-MHRD SCHEME] Wi-Fi facility
Video conferencing facilities:	Rad Vision Scopia 1000 1 + 3
	Multi-point conferences facility.
No. of auditoriums:	6
No. of seminar halls:	6
Ship-in-Campus:	1
Free clinics:	2
No. of buses and vans:	36 and 60, respectively



WWW.VELSUNIV.AC.IN

The management pledges to create an environment of learning that is affordable to all, irrespective of democratic differences, with excellent infrastructure and effective teaching for a progressive and productive society. The management has been constantly

Major equipment at Vels University

The university has ₹35 core worth of lab equipment. Some of the most important equipment is listed below:

Analytical Electronic balance, Cooling centrifuge, ELISA Plate reader & ELISA Water Cooling incubator, CO, Incubator with regulator, Cooling centrifuge, C-24, Centrifuge R24, ELISA reader, Fermentor, Metter balance, PCR REAL time PCR, UV Spectrophotometer, LCD, Hybridization oven, Inverted Microscope, Rotating Vacuum Flask evaporator, Brookefield Viscometer, 10 Station Rotary Tablet Punching Machine, 6 Jar Dissolution Apparatus Physiograph, UV-1700 Spectrophotometer, HPLC, HPTLC System Manager, Gas Liquid Chromatography, UV-Visible Spectrophotometer, CH Instruments Electrochemical Workstation & Cyclic Voltametry, 40 pieces of equipment worth more than ₹1 lakh each in Engineering, DSC Centrifuge, FTIR System with accessories, GEL Documentation System with accessories, Lyophiliser - Freeze Dryer, Deep Freezer, Dissolution 8000, Chemical Vapour Deposition, Battery Tester, veritical Ultra Low Freezer, Biofeedback system with NCV&B Evoked Potential (Computerised), All Steel Shipin-campus and Full Mission Bridge Simulator from Kongsberg, Norway.

Joining Hands

Academic Collaborations

Over the past 25 years, Vels University has tied-up and collaborated with leading national and international institutions. This enables students, faculty, and researchers to exchange ideas, knowledge, and also to work together. The university has so far signed 155 MOUs and the following is the list of few reputed organisations.

Management Development Institute Singapore (MDIS), Singapore

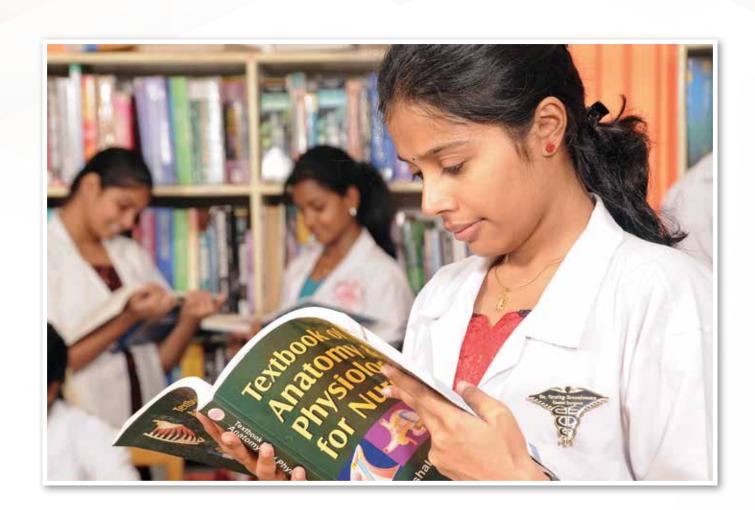
City of Glasgow College, Scotland, UK	Edict Pharmaceuticals Pvt. Ltd., Chennai, India
Asia Pacific University, Malaysia	HCL Infosystems, India
Sheffield Hallam University, UK	ARMATS Biotek Pvt. Ltd., Chennai, India
Universiti Malaysia Perlis, Malaysia	Space Cadd Designers & Constructions, Chennai, India
Universidade de Lisboa (University of Lisbon), Portugal	Chennai ESI Hospital, Chennai, India
Ural Federal University, Russia	Centre for Development of Advanced Computing, Mumbai, India
University of the West of England, Bristol, UK	Ministry of Communications and Information Technology,
Kasem Bundit University (KBU), Bangkok, Thailand	Government of India, New Delhi, India
SIAM University, Thailand	Vethathiri Maharishi Institute for Spiritual and Intuitional
Khazar University, Baku, Azerbaijan	Education (VISION for Wisdom), Aliyar, Coimbatore, India
Tomsk Polytechnic University, Russia	High Energy Batteries (India) Ltd., Chennai, India
Taylor's University, Malaysia	Centre for Social Innovation and Entrepreneurship, IIT, Chennai, India
James Cook University, Australia	Central Council for Research in Siddha (CCRS), Chennai, India
Troy University, USA	Ministry of AYUSH, Government of India, New Delhi, India
Queensland University of Technology (SAP), Australia	Tata Consultancy Services, Mumbai, India
London College of Business Sciences, UK	Chettinad Academy of Research and Education, Kelambakkam,
UBIS University, Switzerland	Tamil Nadu, India
Vetha University, New York, USA	Thermal Energy Systems (TES), Chennai, India
Seneca College, Ontario, Canada	Microsoft IT Academy, USA
Palo Alto Networks, USA	IEEE Computer Society, Washington DC, USA
Mari State University, Russia	NIIT Limited, Gurgaon, India
Confederation of Indian Industry (CII), India	Bharat Sanchar Nigam Ltd., (BSNL), Chennai, India
Super Auto Forge Ltd., Chennai, India	Revature Consultancy Services Pvt. Ltd., Chennai, India
Maples ESM Technologies, Chennai, India	IBM India Pvt. Ltd., Bangalore, India
Pentasoft Tech. Ltd., Chennai, India	Caddam Technologies Pvt. Ltd., Chennai, India
Novel Therapeutics Pvt. Ltd., Chennai, India	Asthagiri Herbal Research Foundation, Chennai, India
Dr. Kamakshi Memorial Hospital, Chennai, India	Sri Ramachandra University, Porur, Chennai, India
Apollo Shine, Chennai, India	Fisheries College and Research Institute, Thoothukudi,
ICT Academy of Tamil Nadu, Coimbatore, India	Tamil Nadu, India
Guru Nanak Institute of Pharmaceutical Science and	Tamil Nadu Fisheries University, Nagapattinam, Tamil Nadu, India
Technology,Kolkata, India	Biozone Research Technologies Pvt. Ltd., Chennai, India
National Institute for Research in Tuberculosis (NIRT), Chennai,	Sai Clinical Research Institute, Chennai, India
India	BioLim Biosolutions (P) Ltd., Chennai, India
National Institute of Wind Energy, Chennai, India	Synkromax Biotech Pvt. Ltd., Chennai, India
Global Pharma Healthcare Ltd., Chennai, India	Cedicom Electronics, Shoranur, Kerala, India.

"Knowledge grows when shared," goes the adage, and we completely believe in it. Our meritorious students are encouraged to visit various universities and collaborate for the exchange of ideas, knowledge, and work. We passionately also run an Entrepreneur Development Cell to nurture young business minds. First-hand training is imparted to students on handling various business tasks.

Student Exchange Programmes

Vels School of Management Studies has instituted a oneweek crash course and industry visit to Singapore in collaboration with the Management Development Institute of Singapore. Under this programme, 24 M.B.A students from Vels University visited Singapore on May 29, 2016.

Mr Aashish Mini and Ms Rajendrani Bose, 3rd year students of the Department of Computer Science and Engineering, School of Engineering, completed their internship at the University of Texas, USA from June 1 to June 30, 2016.



Let's Share Knowledge

Entrepreneur Development Cell

The Entrepreneur Development Cell functions effectively to motivate and nourish young entrepreneurs. As part of the activities in the cell, members were taken to the Ministry of Micro, Small, and Medium Enterprises recently to conduct an EDP workshop with KITCO. The point was to impart training to students in order to motivate them to become entrepreneurs. Students were given training in preparing their business plan and to revise their ideas further.

Extension Activities

Community Services

One of the main purposes of being educated is to give back to society. Our National Service Scheme, Youth Red Cross, and Rotaract Club are three active wings encouraging students to be a part of various community services.

National Service Scheme (NSS)

The NSS has 400 students on its rolls with four officers coordinating its activities. Students undertake activities like the adoption of villages, betterment of the environment, conducting adult literacy programmes, and education programmes in the adopted villages.

The NSS regularly organises day-long training programmes in blood donation, street cleaning, traffic assistance, awareness camps, etc.

The management department has also organised daylong training programmes for self-help groups and trained members in marketing skills. Self-help groups have set up their stalls on campus. Participants were taught how to mobilise funds from banks.

Youth Red Cross (YRC)

The Youth Red Cross is another functional unit of Vels University. The unit provides motivation to sociallyoriented students of the university to respond to emergencies.

Rotaract Club

The Rotaract Club of the university undertakes projects like blood donation camps, and visits to orphanages and old age homes. Thus, the Rotaract Club fulfils its motto of *"Service to Humanity is Service to God."*



Learn, Play, and Achieve

Community Services

Physical activity is the in-thing for the overall development of students and in the last 25 years, several efforts have been made to encourage them in various sports and games on par with education and research. We have designed world-class facilities for students to pick up a game or a sport of their choice, and for their physical and psychological well-being.

Sports and games

Our university has excellent facilities for all indoor and outdoor games. Students are trained at the department of sports. Students actively participate in various interinstitutional and inter-university tournaments and sports, and has won several trophies and medals. We conduct summer camps for the promotion of performance. We also conduct selection trials for sports quota admissions and provide fees concession and free education facilities for those admitted under the quota.



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Sports and games facilities:

- Cricket nets
- Volleyball court
- Kabaddi court
- Basketball court
- Badminton court
- Aquatic complexFitness centre
- Fitness centreIndoor centtre
- Football and Cricket field

The university has created a world-class gymnasium with a state-of-the-art-air-conditioned fitness centre for enhanced healthiness of body and mind.

Value added course

Vels University has signed an MoU with Vethathiri Maharishi Institute for Spiritual and Institutional Education (VISION), the educational wing of the World Community Service Centre. Vels University in collaboration with Vethathiri Maharishi Institute offers a Certificate under the title "Yoga for Human Excellence". Courses are also available on our online platform.

Memorable moments

The university organises cultural festivals, inter-departmental and inter-university functions, seminars, workshops, national and international conferences, and sports events. Vels always presents a vibrant campus life.



Milestones and Accolades

Appreciation awards received by Vels University



Award for Academic Partner Excellence for the year 2017 by ICT Academy.



Best Multidisciplinary Deemed University Award by Pearl Foundation



Award for Best Contributor towards building "India Skills 2016" by Cll

NIRF RANKINGS 2017

Pharmacy:

Management Studies:





(Ranking announced in the 1st week of April, 2017)

Ranked within the 'Top 75'

Ranked within the 'Top 75'

Seventh Annual Convocation:

The Seventh Annual Convocation was held on 1st March, 2017 with chief guest, Shri A S Kiran Kumar (Secretary of Department of Space and Chairman, Indian Space Research Organisation ISRO, Bangalore). The function was presided over by the **Dr Ishari K Ganesh**, Founder-Chancellor of Vels University.

1,872 Total Awardees: Gold Medallists: 31



Dr P Sivakumar Director, CVRDE, Government of India



Thiru S Sathyaraj Film Actor

Convocation 2017

Honoris Causa Awardees



Shri Shekhar Basu Chairman AEC & Secretary DAE, Department of Atomic Energy, Government of India



Dr R Chidambaram, Dr K Sridharan Special Convocation 2017

Memorable Moments



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From L to R (red robes): Shri K Murugan, Chief Guest Dr V M Katoch, Shri G Prabhu and Shri S Ramakrishnan



From R to L (red robes): Dr Baldev Raj, Mr Krish Srikanth, Mr N Ram and Chief Guest Thiru M K Stalin



Mr Sourav Ganguly and Dr Sivathanu Pillai



From L to R (red robes): Thiru. A Vivekh, Dr Mylswamy Annadurai and Ms P V Sindhu

Dancer's Set Guinness Record

It is no mean feat to bring 5,000 Bharatanatyam dancers, especially youngsters, to perform the classical dance to perfection and achieve recognition in the Guinness World Records. On April 14, 2017, Vels University in association with Lakshman Sruthi and Ahistabalan, organised Bharadham 5000 and found a place in the Guinness World Records for organising the largest Bharatanatyam dance recital. Graced by danseuse **Padmasri Dr Padma Subramaniyam**, Vels' Founder-Chancellor, **Dr Ishari K Ganesh**, and many other art lovers, the programme was an absolute visual delight.



Meet the Best

University-Industry Interface Cell

Vels University is strengthening its interaction with the industry by inviting CEOs and senior executives to be external members of the Board of Studies and the Academic Council, and as chief guests, special guests of honour, and as resource persons to deliver guest lectures at most functions organised by the departments.

The experts also serve as visiting faculty/research advisors to aid scholars doing their Ph.D. They encourage students and scholars to take up field studies in industrial organisations, and meet periodically to explain the activities and achievements of the departments and institutes. They also invite business houses and companies for campus interviews, and enter into MoUs for joint academic and research programmes. These are a few methods in which the university-industry interface is executed with companies such as Cisco Systems, Red Hat India, Tata Elxsi Ltd., Oracle India Pvt. Ltd., IBM, Infosys Campus Connect, Microsoft IT Academy, NIIT, etc.





Department of Training and Placement

The Department of Training and Placement is where the career graph of every student starts in educational institutes. From the very beginning, the institute has laid greater emphasis on industrial training, and practical training for Engineering and Management students. During these 25 years, countless students have been introduced to industrial practices through training in institute workshops and in factories, installation works, etc.

The goal of the Training and Placement Cell of the institute is to provide employment opportunities and world-class training to students in leading organisations/companies. The Training and Placement Cell further provides ample opportunities to students to develop their personality by conducting programmes regularly on various soft skills and communication.

The Training and Placement Cell imparts training to students from the pre final year onwards, giving emphasis to motivational skills, communication skills, interpersonal relationships, leadership qualities, group discussions, and interview techniques.

Resource persons and professionals from reputed management institutions along with college faculty train students. The Placement Cell also helps students with lower academic



Get Placed

performance to improve through counselling. It also provides infrastructural facilities to conduct group discussions, tests, and interviews, besides catering to other logistical requirements. The database of students is managed by the cell, which plays a critical role in alumni getting jobs.

The Training and Placement Cell of the institute centrally handles campus placement of Engineering, Management, Arts and Science, Life Science, and Pharmacy students. The cell provides complete support to visiting companies at every stage of the placement process. Arrangements for pre-placement talks, written tests, interviews, and group discussions are made as per the requirement of visiting companies.

The Training and Placement Cell is well-organised by Mr N Srinivasan, who is known for his hard work, dedication, and experience spanning over 20 years in various disciplines. He also maintains an amicable environment with good organisations. In his presence, students are able to procure many placements in top MNCs.

Placement officer

Mr N Srinivasan 9962506343

placement@velsuniv.ac.in

Placement Cell

- * More than 100 companies visited
- * Over 1,000 students placed in rewarding careers
- * More than 3,500 students from other universities and colleges got placed at Vels through off-campus interviews.

TG CAMS LAKSHMI CONSTRUCTIONS INTERGLOBE TG TERMINALS <u>الا کې</u> SKN ORGANIC Tech LifeCell SHARDA MOTOR Mahindra Eurocon amazon Technosoft CORPORATION Justdia JU11/1 **RR** DONNELLEY M REVATURE 2adpro Muthoot Group 6 ASHOK LEYLAND **ETAISEA** Kotak Mahindra Bank accenture LABORATORIES LTD. agshealth BARCLAYS jaro edúcation^{*} CSS Abbott ~ BNY MELLON Cybernet - SlashSupport нушпояі CEN Descar Capgemini **FICICI PRUDENTIAL** GLOVIS Intelligence to Decision Making virtusa **ISWARYA** GRE EDGE Dr Lal PathLabs HEN'S HOSPITAL & **N**Trust Eris Lifesciences Pvt. Ltd. Mphasis Synthesis tealthcare SUTHERLAND CONGRUENT* 1 RFtronics SAFEXPRESS SHRIRAM HCL SREERAM ENGINEERING WORKS equitas polaris risht KUEHNE+NAGEL SUNDARAM BUSINESS SERVICE PURAVANKARA® **B** Glenmark ACCEL FRONTLINE savvysoft SIC Birla Sun Life 11. Insurance lobal services /15



ΤΛΤΛ TATA CONSULTANCY SERVICES







Admission Procedure

Admission to academic programmes are organised on an all-India basis. Advertisements will be released in leading dailies. Application forms and prospectuses can be procured through direct sales, the website, postal offices, and banks.

Registration of candidates in eligible courses Conduct of All India entrance examination (for professional courses) Preparation of Rank list and checking eligibility (Department concerned) **Medical Examinations (Maritime Studies)**

Provisional selection based on merit

The rules of the Central Government on reservation are followed. Interview cards will be sent to applicants. Issuance of admission cards is done after payment of fees.

Application Form

Prospectus and application forms for various courses can be obtained by paying the relevant fee at the office of the Registrar, Vels University or from the City Administrative Office (Nandanam). Application forms can also be downloaded from the website and submitted online. For all professional courses, admission is based on marks scored in the entrance examination and qualifying examination.

Submission of Application Form

- and the
- and a all a
 - a
 - b.

 - Community Certificate.

 - (Refer to our website for details).
 - C. of Tamil Nadu.
 - d. with "Application for Admission to Course".

Admission of Foreign/NRI students

Foreign/NRI students who wish to study at Vels University are required to fulfil the admission procedures, complete relevant admission forms, provide all necessary documents, and pay the processing, eligibility, and tuition fees. For admission to specific programmes, the requirement of subjects studied shall be the same for both national and foreign/NRI students as prescribed in the admission prospectus.

Top Recruiters

How to Get into Vels

The last date for the receipt of a complete application form at the university office is the 10th day from the date of publication of the results of the qualifying examination for undergraduate courses (Tamil Nadu Higher Secondary Examination) and 15 days after results for undergraduates pursuing a postgraduate course are published.

Application forms will be received even after the stipulated last date. Such applications will be registered as "Late Applications" and will be considered only after all the applications received on time have been processed.

All applications, duly filled, along with the registration fee should be sent either by registered post or can be handed over in person at the university office and should have the following enclosed:

Three passport size photographs of the applicant.

Two self-addressed stamped (₹10/-) envelopes along with photocopies of the following:

Marksheet of the qualifying examination or equivalent.

Provisional Pass Certificate/Degree Certificate of the qualifying examination.

Transfer Certificate and Conduct/Degree Certificate from the institute last studied.

Applicants who have graduated from other universities should get an eligibility certificate.

The university entrance exam for the academic year 2017-2018 is to be held on 6-5-2017

Any other document/certificate required by the University/Director of Technical Education/Government

All communications should be addressed to 'The Registrar' and the envelope should be superscribed

Eligibility for Admission to Graduate Programmes

For any discipline, applicants must have completed 12 years of formal schooling. Students who meet the eligibility criteria as prescribed in the admission prospectus will be considered for admission. Evidence of required academic performance must be in the form of certified English transcripts listing all the courses with grades or marks earned. Transcripts in languages other than English are not acceptable.

Eligibility for Admission to Postgraduate Programmes

For any discipline, applicant must have completed 12 years of formal education followed by a Bachelor's degree of at least 3 years duration. Students who meet the eligibility criteria as prescribed in the admission prospectus will be considered for admission. However, admission to a postgraduate course is restricted and the applicant should have an excellent academic record to stand a fair chance for admission.

Procedure for Applying and Seeking Equivalence Certificate

The application form for foreign/NRI students must have an Equivalence Certificate from the Association of Indian Universities (AIU), www.aiuweb.org. Students are advised to send the following documents to the Association of Indian Universities in order to obtain the Equivalence Certificate:

- Degree/certificate together with a year-wise academic transcript duly authenticated by the Indian Embassy and the in the country or its concerned Foreign Mission in India
- Accreditation status of the university/institute that the student last attended a de
- Copies of academic certificates from higher secondary onwards (where necessary)

The service charge for the issuance of the Equivalence Certificate is applicable and payable through Demand Draft in favour of "Association of Indian Universities, New Delhi". The onus of procuring this certificate from the AIU is on the candidate and an application will be considered only after the Equivalence Certificate is submitted.

Provisional offer for admission will be given to shortlisted applicants. Confirmation will be based on the following:

- If the student is eligible for the said programme and there is a seat available for the course, then a provisional eligibility letter will be issued.
- This provisional eligibility-cum-admission letter will enable the student to obtain a student visa from the a la Indian Mission in his/her home country.
- Only on the production of a student visa, endorsed by Vels University will the student be given final admission to a de the course of his/her choice, provided a seat in that particular course is available at that point in time.
- The student has to bear in mind that they need to arrive at the university within the time frame stated in the provisional at the admissions letter.
- The student visa to Vels University is for joining a full-time course. No other endorsement will be accepted. a la The visa should be valid for the prescribed duration of the course.
- Submission of Medical Test Report within a week from the date of admission from a Registered Medical Practitioner or a Medical Practitioner nominated by Vels University.
- Adequate Medical Insurance Cover.
- All foreign/NRI students will be required to register themselves with the concerned District Foreigners Registration ß Office/Foreigner Regional Registration Office, within 14 days of their arrival in India.

All foreign students are required to have their stay visa extended at least 30 days before the expiry of the same. Students who overstay will be dealt with as per the rules stipulated by FRRO.

The following documents are required at the time of registration with the Foreigners Regional Registration Office:

- Photocopy of passport and visa
- Four photographs
- Details of residence in India
- HIV/AIDS test reports from one of the WHO recognised institutions
- Provisional admission letter from Vels University in support of your student visa.

Admission - Sports quota

Students who have already participated in interstate and inter-university sports and game competitions are selected under the sports quota and are offered free education including boarding and lodging.

Reservation of seats for SC/ST/OBC and differently-abled candidates

As much as 22.5 per cent of seats in each programme of study are reserved for Scheduled Caste and Scheduled Tribe candidates, and 27.5 per cent of seats are reserved for OBC candidates (non-creamy layer).

not considered a hindrance in pursing the course. be filled by other category candidates on the basis of merit.

Admission - General rules

Admission to all courses is based on merit and a personal interview by the selection committee of the institution. The selected candidates should report to the Directors of Schools/Heads of the Department on the specified date and time with all the original certificates.

Candidates and his/her parents/guardians should submit a joint declaration in the prescribed form at the time of admission. The original certificates submitted at the time of admission will be returned only after verification by the authorities concerned. Candidates are advised to take a sufficient number of photocopies of transcripts and other certificates before submitting them to the university at the time of admission.

Fees once paid by the student will not be refunded under any circumstances. The admitted students should obey the rules and regulations in force, and the university has the right to dismiss a student in case of non-compliance.

The institution is not responsible for any injuries to students due to careless handling of equipment/chemicals. Candidates who have passed any qualifying exams, other than the Higher Secondary course examination conducted by the Government of Tamil Nadu, should obtain an eligibility certificate from Vels University by remitting the prescribed fee along with the said application form (for an undergraduate degree).

Procedure for withdrawal

Before the commencement of the programme:

An application for withdrawal from a programme is to be sent to the admission office. After the commencement of the programme: An application for withdrawal from a programme is to be submitted to the Registrar through the respective department. The application will be processed within 15 days. There shall not be any fee/fine due at the time of submitting application.

Refund of fees

Fees once paid will not be refunded. Request for cancellation of admission and refund of fees may be considered under the following conditions:

- Registration and admission fees are non-refundable.
- to pay the tuition fee for the remaining period of the programme.

About 3 per cent of the seats are reserved for qualified differently-abled candidates in all programmes of study.

Such candidates would be considered for admission only to those fields of study/disciplines where their physical disability is

Candidates should submit a "Certificate of Disability" issued by a medical authority stating that the candidate has at least a minimum extent of 40 per cent disability. If any of the seats in the reserve category remained unfilled, these vacant seats shall

If a student applies for cancellation prior to the commencement of classes, then the tuition fee will be refunded.

If a student discontinues after the commencement of the course or in the middle of a course, he/she shall be required

Being Meritorious - the Advantages

Scholarships

Students are eligible to get scholarships from the State Government and the Central Government under various heads. The eligible SC/ST, OBC, PWD students etc. should submit their scholarship applications for the academic year by February each year for processing. They are advised to contact the administrative office of the university for further details. Vels University aims to attract meritorious students and offers scholarships for outstanding students. Sports scholarships are granted on an annual basis and its continuation is subject to the university's scholarship policy. Sports performances in the current academic year will be considered for

continuation/withdrawal of the sports scholarship. All candidates selected under the sports quota will have to submit an affidavit stating that they will participate/ represent only VISTAS. Achievement in their arenas (basic for the grant of the sports quota scholarship) will be monitored by the university sports committee. These scholarships do not include the refundable security deposit or examination fees.



Examinations

Vels University follows the Choice Based Credit System (CBCS). All courses follow the semester pattern except Pharm.D. Undergraduate courses are six semester/eight semester long, while postgraduate courses are normally for a duration of four semesters except in the case of M.C.A and other integrated postgraduate courses.

Each semester consists of 90 working days. The university follows the continuous assessment system, weighted as 40 per cent in continuous assessments and 60 per cent in the university's examinations in each subject. Each course carries a prescribed number of credits in order to obtain the degree.

The semester-end examinations are conducted for odd and even semesters during November/December and April/ May, respectively. The timetables for the respective exams are disseminated to students one month in advance and the results are published within four weeks from the last date of the examinations on the university website.

Re-totalling and re-evaluation of answer scripts are allowed for all undergraduate, postgraduate, and professional courses. Students can get a photocopy of their answer script on payment of a prescribed fee.

The statement of grades with marks for undergraduate, postgraduate, and professional courses for students admitted prior to 2015-2016 are issued to students on par with international



Examination

standards incorporating WAM (Weighted Average Mark) and GPA (Grade Point Average) for each semester.

Consolidated mark statements incorporating CGPA (Cumulative Grade Point Average) and OWAM (Overall Weighted Average Mark) are issued after qualifying for the respective course. For students admitted from 2015-2016, Grade Certificates are issued and Consolidated Grade Sheets will be issued incorporating CGPA after qualifying from the respective course.

Attendance

- 1. Absence from class without proper reason, prior intimation, and without prior permission from the HOD is tantamount to breach of discipline and such absence will attract punishment and should be avoided. One period of absence in the morning or afternoon session will be treated as half a day of absence.
- 2. Absence for more than 10 days without prior permission from the HOD/Directors of Schools may lead to removal from the nominal roll.
- 3. Students appearing for university examinations must have at least 75 per cent attendance as per the rules of the university. A minimum of 75 per cent attendance is required to appear for examinations and a minimum of 65 per cent to get condonation. Students have to redo their course if the attendance is less than 65 per cent.

Home away from Home

(Best Stay, Homely Food, Say NO to Ragging, You Name it, We Have it)

Best Stay, Homely Food

Hostels

Vels University is not just known for its higher quality of education and research, but also for offering the student community the best facilities. For students who prefer to stay in the hostel, outstation students, and international students, we have hostels that provide good food, medical care, and an absolutely comfortable stay.

There are separate hostels for boys and girls within the campus. Laundry facility is also available to students on a chargeable basis. The hostels at Pallavaram campus can accommodate 1,600 boys and 500 girls. Two fully qualified doctors are available on-campus. Medical and hospital facilities are available at Pallavaram. Mess and canteen facilities are also available for students at a reasonable price.

Wi-Fi internet facility is made available to all postgraduate and research students at the postgraduate hostel. There is a separate hostel at the Thalambur campus that has all the facilities to accommodate 870 students.

Hostel fee structure (with lodging facility for students for a period of 10 months - July 2017 to May 2018)

HOSTEL - FOUR OCCUPANCY ROOMS

Non-AC (common bathroom), unlimited food as per menu ₹50,000 (10 months), Rent ₹30,000 (10 months), caution deposit ₹5,000, annual payment for 10 months ₹85,000.

Three occupancy rooms, double and single occupancy rooms with AC and non-AC, bath attached, and with common bathroom facilities are also available at different tariffs.

- Note:
- 1. Caution deposit is refundable at the time of getting a TC after completing the course
- 2. Students are not allowed to use their own electrical appliances such as fan, air-conditioner, electrical cookers, immersion water heaters, etc.
- 3. Mess charges will be calculated on a monthly basis irrespective of number of days stayed in a month.
- 4. Total amount of rent shall be paid on an annual basis at the time of admission and no refund will be made if students quit the hostel in the

middle of academic year. Amenities provided in the common room

Water heater (AC rooms) Wi-Fi facilities Drinking water (hot and cold) TV hall with chairs DTH connection (sports channels)

Hostel Rules and Regulations

- 1. All bona fide students of the university are eligible to get allocated a room at on of the hostels. A separate application should be made to the authorities for hostel admission.
- Parents / guardians should comply strictly with hostel rules and formalities of admission. They shall accompany the students seeking admission to the hostels, which will be done on first-come-first-served basis. University authorities shall make all possible efforts to provide accommodation to all students seeking hostel accommodation.
- 3. Every student admitted to the hostel shall pay a caution deposit, which will be refunded at the end of the course. Students will be notified of mess charges, room rents, and establishment charges from time to time.
- 4. Admission to the hostel is made only for one year with no right to admission for subsequent years. The warden has every right to refuse admission or expel anyone without assigning any reason. Detained students will not be provided accommodation in the hostels.
- 5. No student may change his/her room without prior approval of university authorities
- 6. The allotment of rooms shall not be changed without the prior written approval of the warden.
- 7. No student is allowed to vacate the hostel in the middle of an academic vear
- The room rents and charges for amenities will not be refunded.
- 9. Residents of the hostels should not stay in their rooms during the working hours of the university. In case they do, they should take prior permission from the hostel warden, indicating clearly the reasons for their absence from class.
- 10. Girls staying in hostels should be in their rooms by 6 p.m. and boys by 7





p.m. They will not be permitted to enter or leave the hostel premises after this time. Attendance/roll call will be taken at 8.30 p.m. Those who would like to be away for any specific reason should obtain prior permission of the HOD and warden.

- 11. Students who absent themselves for ten days or more from the hostel will be removed from the hostel. They should take prior permission from the warden to do so, or else they will be dealt with severely. Leave or absence will be granted only in the case of emergency.
- 12. The furniture, fixtures, and any other replacements in the rooms are the responsibility of residents. If there are any damages, the cost of repair or replacement will be collected from the concerned student. If the damages are irreparable, the cost will be recovered collectively from all residents. In addition to the cost of damage, a fine of equal amount will be levied.
- 13. Defacing the walls inside and outside the room by writing slogans, damaging hostel property, and other such antisocial acts, will be viewed seriously and dealt with accordingly.

SAY NO TO RAGGING

- 14. RAGGING IN ANY FORM IS STRICTLY PROHIBITED. Students are clearly informed that ragging is banned by the Government of Tamil Nadu. As such, any student involved in ragging will be expelled immediately, not only from the hostel, but also from the university. Further, students involved will be handed over to the police for appropriate action.
- 15. Hostel inmates are strictly prohibited from engaging in any of the following activities: smoking, drinking, gambling, consuming drugs, etc., in the hostel premises. Any such activity will be viewed very seriously and result in the immediate expulsion of the student from the hostel, as well as the university.
- 16. Residents should pay the mess fees on or before the due date as notified by university authorities.

YOU NAME IT, WE HAVE IT

Student Amenities Communication lab

Communication skill development is an integral part of the curriculum. A state-of-the-art communication laboratory with necessary software for basic, intermediate and business level communication is meant to aid students

Auditorium and conference halls

"Shivalayaa" is a fully air-conditioned auditorium that holds various curricular, co-curricular, and cultural activities like seminars, conferences, intra and inter-university cultural fests. It is one of the biggest auditoriums in this part of Chennai that provides an opportunity for students to exhibit their study. Besides, the university has six well-equipped, stateof-the-art, air-conditioned conference halls with the latest audio-visual equipment. These make the seminars and conference sessions dynamic and interactive. There is an open air-auditorium on campus as well.

Transport facilities

Vels University provides regular transportation services from Pallavaram and Velachery railway stations to the university at concessional rates. Transport facilities are also available from selected areas in the Chennai Metropolitan Region at a moderate fee. The university is well-connected by MTC buses.

ICT resources

The university is equipped with Wi-Fi internet, computers, printers, scanners, and LCD projectors to support the academic and administrative activities on campus. The administration has been automated by introducing ERP. The ERP modules consist of Student Information Systems, Financial Accounting Systems, Student Enrolment, Training and Placement, Alumni Module, Human Resource Management, Parentstudent evaluation systems, etc. The university has already been included in the National Knowledge Network, an initiative of the Ministry of Human Resource Development. The university has video-conferencing facilities, e-journals, e-books, and other e-resources such as SAP, Online Platform, Edx, TED, Khan Academy, Coursera and NPTEL.

Canteens and restaurants

The Vels University Canteen is a welcome refreshment centre for staff and students during the tea break and lunch interval. Good quality, hygienic food, and refreshments are served at fixed timings at a reasonable cost. A new annexe has been added to the existing canteen to make it more convenient and comfortable for day scholars.

Banking facility

ATM facilities are available on the Vels University campus for the benefit of staff and students.

Student store

Students can purchase all their stationery, copier requirements, and day-to-day essentials.

Anti-Ragging Committee

Vels Institute of Science, Technology and Advanced Studies (VISTAS)

TITLE	NAME/CONTACT	DESIGNATION
CONVENOR	Dr A R Veeramani 9962506245, registrar@velsuniv.ac.in	Registrar
CHAIRMAN & NODAL OFFICER	Dr C Dhanasekaran 9962506202, dhans.se@velsuniv.ac.in	Co-ordinator, School of Engineering
CIVIL & POLICE ADMINISTRATION	Mr R Divakaran Pallavaram Police Station, Pallavaram, Chennai – 43	Intelligence Section
LOCAL MEDIA	Mr Sheldon Mark Jarrett 9962236774, Jarrett.sylvester@gmail.com	Media Artist
NGOs	Mr Rangarajan AL 044 - 22235133, 9444971268 alrangarajan@rejuvenateindiamovement.org www.rejuvenateindiamovement.org	Chief Functionary & National Coordinator, Rejuvenate India Movement (RIM)
	Mr Panchaksharam K 044-2248 6791/92/93, sipapanchu@gmail.com sipa@vsnl.com	Secretary & CEO, Federation of South India Producer Association (SIPA)
FACULTY MEMBERS	Dr P Mahalingam 9962506243, dean.studentaffairs@velsuniv.ac.in	Director, School of Languages (Tamil), Dean, Student Affairs (i/c)
	Dr P Shanmugasundaram 9840126575, director.sps@velsuniv.ac.in	Director, School of Pharmaceutical Sciences
	Dr P Mayilvahanan 9962506229, mayil.scs@velsuniv.ac.in	Professor, School of Computing Sciences
	Capt N Kumar 9361852531, director.smts@velsuniv.ac.in	Director, School of Maritime Studies
PARENTS	Mr R Shanmugam 9566104821 95	F/o S Ajithkumar, (II Year B.E – Mechanical) No.3/77, Sengeaiyaman Koil Street, Mylapore, Chennai - 600 004
	Mr P Saravanan 9841492964	F/o S Aishwarya, (III Year B.Sc – Computer Science) 95, Kalaingar Street, North Sanjay, Gandhi Nagar, Pallavaram, Chennai - 600 043
	Mr R Sivasankaran 9840963969	F/o S Surendar, (IV Year – B.Sc Chemistry) Plot No.243 B, Door No.4/4323, 5th Main Road, Vignaraja Puram, Santhosh Puram, Chennai - 600 073

	Mr R Govindhan	F/o G. Vignesh Raj, (IV Year – B.E
	8056139206	(CSE) No 74, Patanoolkaran Thotam, Mylapore, Chennai
JUNIOR & SENIOR STUDENTS	Mr B Aravindan	IV Year – B.Com (CA)
	8056283328	No 5/27, Seven Wells Street, St Mount,
	Mr S J Keerthana	IV Year – B.Sc (Animation)
	9841915321	6/27, 2nd Floor Shenoy Road,
		Nungambakkam, Chennai - 600 034
	Mr S Arun	III Year – B.Sc (Biochemistry)
	9941471966	2/24, Jothi Nagar, 1st Street, Ekattuthangal, Chennai - 600 03
	Ms J Subhalakshmi	IV year – B.E (ECE)
	9041492964	11/5, Varadappan Street, West Mambalam, Chennai - 600 03
	Mr R Bhopalan	IV Year-B.B.A
	9092818483	No.35/111, SS Kovil Street, Mangadu, Chennai-60001
	Ms M Chandralekha	II Year – B.E (Civil)
	9941222810	4/232, Kokilambal Nagar, Thoraipakkam, Chennai - 600 097
NON-TEACHING STAFF	Mr B Anbuchezian	Administrative Manager,
	9962506207	Vels University
	Mr K S Paramasivam	Administrative Officer, Vels Universit
	9962506220	
ANTI-RAGGING SQUAD	Dr R A Kalaivani	Director, School of Basic Sciences
	9962506223, director.sbs@velsuniv.ac.in	
	Dr K Rajagopal	Director, School of Life Sciences
	9962506241, director.sls@velsuniv.ac.in	
	Dr P Jagadeesan	Assistant Professor/NSS Co-ordinate
	9962506219, jaga.sms@velsuniv.ac.in	School of Management Studies and
		Commerce
	Mr S Perumal	Asst. Professor ,
	9941155023, perumal.scs@velsuniv.ac.in	School of Computing Sciences
	Mr A S K Sankar	Asst. Professor,
	9487339617, asksankar.sps@gmail.com	School of Pharmaceutical Sciences
	Mr L Karthikeyan	Asst. Professor,
	9710228778, karthi.sms@velsuniv.ac.in	School of Management Studies
	Mr A Gnanasihamani	Liaison Officer

Sexual Harassment Committee

Vels Institute of Science, Technology and Advanced Studies (VISTAS)

TITLE	NAME/CONTACT	DESIGNATION
CONVENOR	Dr A R Veeramani	Registrar
	9962506245, registrar@velsuniv.ac.in	
CHAIRMAN	Dr R A Kalaivani	Director, School of Basic Sciences
	9962506223, director.sbs@velsuniv.ac.in	
CO-CONVENOR	Dr M Thiyalnayaki	Associate Professor and Head, B.B.A
		School of Management
		Studies and Comm
NGOs	Mr Rangarajan AL	Chief Functionary and National
	044 - 22235133, 9444971268	Coordinator, Rejuvenate India
	alrangarajan@rejuvenateindiamovement.org	Movement (RIM)
	www.rejuvenateindiamovement.org	
MEMBERS	Dr S Preetha	Associate Professor and Head,
	9962506243, dean.studentaffairs@velsuniv.ac.in	School of Management Studies
	Dr S Jeyakumari	Professor and Head,
		Department of Pharmacognosy,
		School of Pharmaceutical Sciences
	Mr T Kamalakannan	Associate Professor,
		School of Computing Sciences
	Dr K Amutha	Associate Professor,
		School of Life Sciences
	Mr S Perumal	Associate Professor,
		School of Computing Sciences
STUDENTS	Mr Arunkumar K	B.Com (CA) – II Year
	Ms Abiniya P	B.B.A–II Year



PROGRAMMES OFFERED

Pro	grammes offered: 2017-18	Pg.No.
*	School of Basic Sciences B.Sc Mathematics B.Sc Physics B.Sc Chemistry M.Sc Chemistry M.Sc Chemistry M.Sc Pharmaceutical Analytical Chemistry M.Sc Organic Chemistry M.Sc Industrial Chemistry and Management	60-64
*	School of Life Sciences B.Sc Biotechnology B.Sc Biochemistry B.Sc Microbiology B.Sc Bio-computing M.Sc Biochemistry M.Sc Immunology and Microbiology M.Sc Applied Medical Biotechnology and Clinical Research M.Sc Biotechnology M.Sc Biotechnology M.Sc Bioinformatics	<u>65-71</u>
*	School of Computing Sciences B.Sc Computer Science B.C.A B.C.A (Hons.) B.C.A (For Hearing Impaired) B.Sc Information Technology M.Sc Information Technology M.Sc Computer Science M.C.A	<u>72-75</u>
*	School of Mass Communication B.Sc Visual Communication B.Sc Animation B.Sc Game Design M.Sc Visual Communication	76-79

* School of Hotel and

B.Sc Hotel and Cater M.Sc Hotel and Cater Diploma in Hotel Ma

***** School of Pharmace

B.Pharmacy B.Pharmacy (Practice M.Pharmacy (Pharm M.Pharmacy (Pharm M.Pharmacy (Pharm Pharm.D (Doctor of F Pharm.D (Post Bacca

***** School of Physiothe

B.P.T M.P.T (Hand Condition M.P.T (Sports Physicon M.P.T (Pediatric Neur M.P.T (Adv. PT in Ort M.P.T (Adv. PT in Car

***** School of Maritime

B.Sc Nautical Science B.E Marine Engineer Pre - Sea Training for Pre - Sea Training for Higher National Diplo Higher National Diplo

* School of Engineeri

- B.E Electrical and Ele B.E Computer Science B.E Electronics and C
- B.E Mechanical Engir
- B.E Civil Engineering
- B.E Automobile Engir
- B.Tech I.T (Cloud and
- B.Tech Biotechnology
- B.E Biomedical Engir
- B.E Mechatronics

Diploma in Visual Communication

Diploma in Animation

Diploma in Game Design

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M.E Communication System
M.E Power Electronics and Drives
M.E Construction Engineering and Management
M.E Computer Integrated Manufacturing
M.E Computer Science Engg
M.E Automobile Engg
M.E Embedded System
M.E Environmental Engg
PG Diploma in Cloud, Mobility and Big Data *
*(In association with IBM)

School of Ocean Engineering

110-113

B.Tech Naval Architecture and Offshore Engg
B.Tech Petroleum Engineering
M.Tech Naval Architecture and Offshore Engg
Diploma in Naval Architecture and Offshore Engg
Diploma in Petroleum Engineering

School of Management Studies and Commerce	114-121
B.A Economics	
B.B.A	
B.Com (General)	
B.Com (Accounting and Finance)	
B.Com (Computer Applications)	
B.Com (For Hearing Impaired)	
M.B.A (Finance, HR, Marketing, Systems, Production)	
M.B.A (Logistics and Shipping Management) – CII	
M.B.A (Logistics and Supply Chain Management) – CII	
M.B.A (Tourism and Hospitality Management)	
M.B.A (Business Analytics) – In association with IBM	
M.B.A Integrated - 5 Years	
M.B.A (Part-time)	
School of Languages	122-124
B.A English	
M.A English	
School of Education	125-128

B.Sc B.Ed - 4 Years B.Ed

* School of Music and

> (In association with Lakshman Shruti) B.A Music (Vocal) B.A Dance (Bharathanatyam) M.A Indian Music M.A Bharathanatyam **Diploma in Vocal** Diploma in Veena Diploma in Keyboard Diploma in Bharatha Diploma in Miruthan Certificate programm Certificate programm Certificate programm Certificate programm Certificate programm Certificate programm

* **Department of Aviat** (Knowledge partner Madras B.Sc Aviation

School of Law

*

B.A LL.B (Hons.) LL.B

Department of Vedic Astrology

B.A in Astrology M.A in Astrology PG Diploma in Astrology

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B.A Music (Instrumental, Veena, Violin, Guitar, Miruthangam, and Thavil)

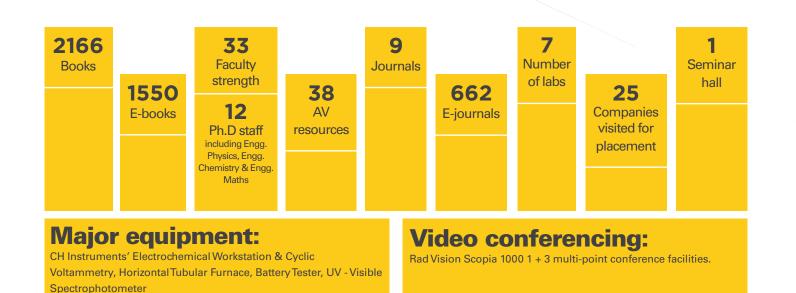
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ne in Violin		

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129-131



School of Basic Sciences





Dr R A Kalaivani is the Director of the School of Basic Sciences with 14 years of experience in academics, research, and administration.

Her main areas of research are electrochemistry and biosensors having authored over 25 research papers and received an M.Sc degree and Ph.D from the University of Madras.

She is on the editorial boards of several professional journals and has won the Best Scientist Award consituted by the Pearl Foundation.

Her awards include a travel fellowship by DST and TNSCST to attend international conferences held in Australia, Taiwan, and Singapore. She has completed research projects funded by DST, DRDO and TNSCST and has guided 20 M.Phil scholars.

A member of the Board of Manag of Studies of Chemistry.

WWW.VELSUNIV.AC.IN

Dr R A Kalaivani Director, School of Basic Sciences

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A member of the Board of Management at Vels University, she is also the Chairman of the Board



Programme

B.Sc Chemistry

Objectives

To provide basic knowledge of physical, analytical, inorganic, and organic chemistry.

Career options

Numerous jobs are available at national and multinational chemical and pharmaceutical companies. Graduates can also take up jobs as chemists, analysts, etc.

M.Sc Industrial Chemistry and Management

Objectives

The programme aims to blend chemistry and management science. This course also includes management related subjects like HR, marketing, and finance, which can be applied to the industry. The Industrial Chemistry and Management programme entails principles of chemistry in the large scale manufacture of different elements and compounds, and also the extraction of metals. Due to the diversity and complexity of chemical processing, broad-based training provides skills useful in designing new manufacturing processes.

Career options

Opportunities to do dual work as manager and chemist in pharmaceutical companies, chemical companies, etc. are available.

M.Sc General Chemistry

Objectives

To provide advanced knowledge in physical, inorganic, organic, and analytical chemistry.

Career options

Various jobs are available at national and multinational chemical and pharmaceutical organisations as a chemist, research scientist, etc. In governmental and non-governmental organisations, jobs such as chemist, researcher, scientist, and teaching faculty are available, as well as jobs in bioinformatics.

M.Sc Organic Chemistry

Objectives

The programme provides broad knowledge of chemistry, specifically in carbon-based compounds, and hydrocarbons and their derivatives. The goal is to impart knowledge in the basic concepts of organic chemistry, reagents, and reactions enabling retro synthetic strategies for the synthesis of novel molecules. Training in separation technologies using chromatographic methods for isolation and purification of organic compounds is provided. Further, analysis and characterisation of molecules from synthetic and natural products is also taught.



Career options

Jobs as a chemist, research scientist, etc. are available at national and multinational chemical and pharmaceutical companies. Governmental and non-governmental organisations also provide jobs as chemists, researchers, scientists, and professors. Specifically, organic chemistry graduates will be required by companies as clinical research associates, chemists, pharmacovigilance officers, medical information analysers, etc. There are jobs in bioinformatics as well.

M.Sc Pharmaceutical and Analytical Chemistry

Objectives

The programme provides knowledge on the synthesis of drugs and studying their properties through analytical techniques. It includes the study of existing drugs, their biological properties, and their Quantitative Structure Activity Relationships (QSAR).

Career options

Various jobs are available in national and multinational pharmaceutical organisations as a chemist, analyst, research scientist, etc. There are jobs as a chemist, researcher, scientist, analyst, and as faculty at governmental and non-governmental organisations as well. Jobs in bioinformatics are also available.



M.Phil and Ph.D Chemistry

Objectives

These programmes aim to train students to conduct original research and to cultivate independent and innovative thinking in the field of chemistry.

Career options

There are jobs available in various governmental and nongovernmental organisations, and national and multinational chemical companies. At universities, research institutions and colleges, students will be placed as assistant professors, scientists, etc. Post-doctoral positions will always be available abroad or at home.

Diploma in Green Chemistry

Objectives

The programme is meant to provide training to students in using eco-friendly approaches to synthesise agro-based chemicals such as insecticides, fungicides, herbicides, bactericides, acaricides, and weedicides.

Career options

After completing the diploma, there are a diverse range of job opportunities from petrochemical and pharmaceutical industries to environmental and clean energy industries. This also includes companies specialising in agrochemicals and biotechnology.

Department of Mathematics

Mathematics is a creative endeavour. It is a human activity that arises from experience and becomes an integral part of culture, social life, and work. It is difficult to teach mathematics effectively as students sometimes find the subject boring. However, one must be prepared to face these problems and be flexible and creative enough to achieve set objectives and goals. A teacher must overcome this boredom by varying the methods of teaching for each student. Otherwise, the student is liable to get lost on the way.

B.Sc Mathematics

Obiectives

Understanding of mathematics provides a powerful and universal language. Students are expected to use mathematical language appropriately for communicating mathematical ideas, and reasoning and findings both, orally and in writing. Through knowledge and understanding, students develop mathematical reasoning to make deductions and solve problems. Students should know and demonstrate understanding of concepts from the five branches of mathematics (number theory, algebra, geometry and trigonometry, statistics and probability, and discrete mathematics). They should also be able to use appropriate mathematical concepts and skills to solve problems in both familiar and unfamiliar situations including those with real-life context.

Career options

In India, more than a few students take up teaching as a career after their graduation or post-graduation in mathematics. However, there are many other career options apart from teaching.

The following organisations/departments have openings for careers in mathematics: banking, Staff Selection Commission (SSC), TNPSC, UPSC, statistical departments, Indian Space Research Organisation (ISRO), Defence Research and Development Organisation (DRDO), National Aeronautical Limited (NAL), etc.

Private sector: IT companies are another good option, along with insurance and investment firms.

Opportunities in the field of teaching: Teaching is always a good option due to an increase in the number of institutions looking for lecturers/professors.

Department of Physics

"Man needs difficulties in life because they are necessary to enjoy the success." - Dr A P J Abdul Kalam

Physics is a beautiful branch of science that helps humanity to understand the fundamental building blocks of the universe. It is an ancient and broad field of science that involves the study of matter and its motion through space-time, along with related concepts such as energy and force. Study of this field provides a refined understanding of nature, nature's mechanisms, and other related phenomena by exploring and answering the basic questions 'what', 'how', and 'why'. The study of physics will greatly aid in mentally preparing a student to tackle the toughest problems in science, and hence in life, with rapidity and remarkable precision. With advances in nanotechnology and biosciences, the study of physics gains considerable significance. The course provides a platform to students for their higher studies and a career in R&D. The degree course is valuable and job-oriented in nature that expands the scope for students' job prospects after completion. Careers can be found in many other areas besides education.

B.Sc Physics

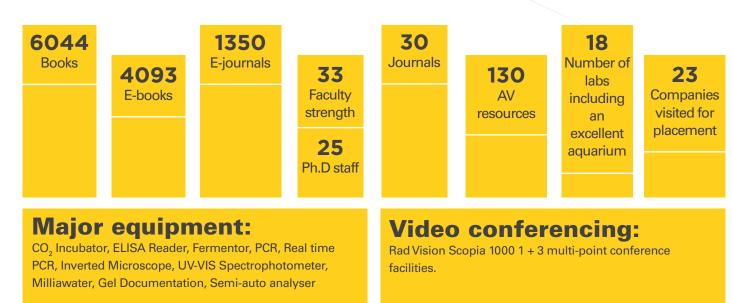
Objectives

The programme aims to provide in-depth knowledge and develop a general competence in core physics, in addition to creating an interest in physics and to develop insights into the techniques used in current research areas. The course is meant to nurture the creative imagination of young minds to have the courage to think differently, to discover the impossible, and to conquer problems to achieve success locally or globally. This programme will also cultivate specific strengths in the flourishing and futureoriented areas of physics and to reinforce the spirit of rational enquiry in a cooperative ambience.

Career options

Career opportunities for students who have completed their B.Sc in Physics are plentiful. Candidates can get jobs with research institutions as technicians and in many industries that design and enhance scientific instrumentation. The degree holder will be equipped to take various postgraduate courses in physics. The degree holder will also be able to face various competitive examinations and take up any job requiring the degree.





Dr R Dinakaran Michael

Dean, School of Life Sciences



Dr R Dinakaran Michael earned his Ph.D (Immunology) from Madurai Kamaraj University in 1986 and has vast experience of over three decades in teaching, research, and in administration at American College (Madurai), Bellevue University, and Oberlin College (USA).

Having published over 50 research papers, his work received research grants worth ₹1.65 crore from DBT, UGC, DST, MoES, Volkswagen Foundation (Germany), and the United Board (USA).

He has been instrumental in developing the fish immunology research unit at American College, Lady Doak College, and Vels University, and has visited USA, Canada, the Netherlands, UK, Germany, Australia, China, Hong Kong, Malaysia, Singapore, and Taiwan to teach, conduct research, and lecture.

Dr Michael has received many awards including the best university/college teacher award from the Tamil Nadu Government, a visiting scientist award from the Indian National Science Academy, the Oberlin Association (Ohio, USA), and the German Science Council, the British Society award for Immunology, an acknowledgement of visiting professorship given by the Asia-North America of United Board (New York, USA) and he was selected as a consultant for Fish Immunology by FAO of the United Nations Organisation [UNO], (Rome, Italy).

The School of Life Sciences comprises of the following departments:

Department of Biochemistry

The Department of Biochemistry offers a three-year undergraduate

degree, and a two-year postgraduate degree in biochemistry. The postgraduate course focuses on the latest advancements in the area of biochemistry. Importance is given to the areas of intermediary metabolism and related clinical pathology, immunology, plant and animal tissue culture, bioinstrumentation, and molecular biology. The department also offers M.Phils and Ph.Ds in biochemistry. Keeping up with rapid advances in the field, the teaching staff's research is focused towards frontier areas in phytochemistry, environmental biochemistry, toxicology, and industrial biotechnology. Other areas of research include cancer biology, enzyme technology, anti-diabetic studies, cardio-protective studies, anti-arthritic, and anti-ulcer activity of medicinal plants. We aim to build a job-oriented profile for students by developing their technical skills and research capabilities. In view of this, we are offering a Government of India approved DMLT course for a period of two years in association with Stannis Institute of Paramedical Sciences assuring 100 per cent placement. We give excellent training and internships in reputed laboratories like Sachika Biomedical Technologies and Dr Kamakshi Memorial Hospital. The record shows 80 per cent of our students being placed in reputed medical institutions and companies like Apollo Hospital, Lister Metropolis, Hitech Diagnostics, Alkem Pharmaceuticals, Himalaya, Ranbaxy, Glaxo Mankind, Unichem, and Dr Reddy's Laboratory. They are also placed in publishing and indexing companies like TNQ publishers, Thomson Reuters, and Scopus.

Programme

B.Sc and M.Sc Biochemistry

Objectives

The programme is interdisciplinary in nature and focuses on the latest developments in prominent areas of biochemistry. The subject basically deals with the study of various physiological processes taking place within a living organism. Biochemists mainly study the structure and function of biomolecules including proteins, carbohydrates, fats and enzymes, the metabolic processes, and the molecular basis for the action of

DEPARTMENT OF BIOCHEMISTRY DEPARTMENT OF MICROBIOLOGY DEPARTMENT OF BIOTECHNOLOGY DEPARTMENT OF BIOINFORMATICS VISTAS, CENTRE FOR FISH IMMUNOLOGY

genes. The two-year postgraduate programme includes the study of various subjects such as molecular biology, enzymology, metabolism, clinical biochemistry, immunology, biochemical techniques, and also innovative papers such as toxicology and forensic biochemistry.

Career options

Prepares students for postgraduate studies and research, and also trains graduates to venture into biochemical entrepreneurship and marketing in pharmaceutical companies.

M.Sc students can find opportunities as scientists at research institutions, biochemists at hospitals, and project leaders and quality control managers in pharmaceutical companies. The programme produces professional biochemists for selfemployment, careers in industry, and teaching and research.

M.Phil Biochemistry and Ph.D **Biochemistry**

Research Expertise:

Our research expertise covers all related fields of Biochemistry and spans several interdisciplinary areas that provide a distinct environment for integrative research. Frontier research areas include clinical biochemistry, toxicology, cancer biochemistry, environmental biochemistry, endocrinology, clinical microbiology, plant biochemistry, enzymology, marine biochemistry, and microbial biochemistry. The research areas focus on investigations into the anti-arthritic, anti-diabetic, and anti-cancer activities of medicinal plants, the gastro-protective, hepato-protective, cardio-protective, and neuro-protective effects of herbs, and germination physiology, diabetic neuropathy and nanopharmaceutics using animal models and cell-lines.

Department of Microbiology

Microbiology is the study of microscopic organisms such as bacteria, viruses, fungi, archaea, and protozoa. This branch of science gives in-depth knowledge on fundamental and advanced aspects of the fascinating world of microbes to its practitioners. Today, microbiologists are required in all interdisciplinary science streams and are seen contributing in many ways towards

the betterment of human life. The department offers a novel joboriented course, M.Sc Immunology and Microbiology in addition to B.Sc Microbiology. Programmes at the research level, M.Phil and Ph.Ds in Microbiology, are also on offer. Microbiologists may have career opportunities in diverse areas from the food sector to the space industries, and everywhere in between. They are on the cutting edge of science. The department comprises of dedicated, experienced, and qualified faculty members.

The laboratories in the department are fully-equipped with all the necessary instruments including a Thermal cycler, Gel documentation system, high speed refrigerated centrifuges, ELISA Reader & Washer, and Class I & II biological safety cabinets. The track record for placement of our graduates is over 85 per cent in reputed concerns (food/dairy/pharmaceutical/ health care/KPO) with a few successful entrepreneurs too.

Programme **B.Sc Microbiology**

Obiectives

The course is designed to impart basic knowledge in all fields of microbiology, immunology, and molecular biotechnology coupled with hands-on training in essential practical skills that will ensure employability of successful candidates.

Career options

Careers as supervisors/technicians for immunodiagnostics/ pathogen identification, QA/QC in pharma, food, and environmental biotechnological industries, and entrepreneurs in FMCG/diagnostic laboratories are available. Opportunities in KPOs/ITES are also available.

M.Sc Immunology and Microbiology

Objectives

The programme is designed to impart cutting edge knowledge in microbiology and immunology coupled with hands-on training in essential practical skills that will enable candidates to troubleshoot QA/QC related problems, implement HACCP/ GMP protocols, tailor immunodiagnostic tools, as well as run screening programmes.

Career options

Roles as QA/QC managers in immunodiagnostic, pharma, food and environmental companies, biotechnological industries, scientists in R&D, entrepreneurs in FMCG and at diagnostic laboratories, senior technicians for immunodiagnostics and pathogen identification, and other opportunities in KPOs and ITES are available.

M.Phil and Ph.D Microbiology

Objectives

The goal is to train postgraduate students and doctoral candidates to pursue original research in microbiology including medicine, agriculture, molecular microbiology, microbial drug resistance and molecular mechanisms, molecular diagnosis, microbial biodiversity, and plant microbiome.

Career options

There are opportunities as scientists in R&D, diagnostic laboratories, faculty positions in colleges and universities. There are also post-doctoral positions available abroad or at home.



Department of Biotechnology

The objective of the department is to provide industry-specific training to students in biotechnology to enhance their skills and their employment opportunities in India and abroad. Biotechnology is a multidisciplinary science. Its existence for over 50 years has had an enormous impact in health care, agriculture, medicine, environment, space and technology, marine, etc. in our country. Several Nobel Prizes have been awarded in this field with a lot more expected. Progress in this field has been rapid in the recent past.

Facilities and resources

- State-of-the-art laboratories with a separate lab for each course,
- Well-qualified and dedicated staff, most of whom are Ph.D holders,
- Industry-oriented syllabus that includes training-cum-placement,
- Plenty of job opportunities with national and multinational companies
- Work on satisfying projects in all modern areas of biotechnology, An average monthly salary of ₹ 10,000 for undergraduates
- and ₹20,000 for postgraduates, Work with like-minded people in a laboratory environment,
 - Visits to the research lab and biotech industry visits.

Programme

B.Sc and M.Sc Biotechnology (BT)

Objectives

The courses are meant to inculcate a sound understanding of the recent advances in biotechnology. They will also provide both theoretical and industry-oriented practical knowledge. Postgraduate students will be provided education and training to take up a research career, be recruited in the relevant industry, or hone their skills to become successful entrepreneurs.

Career options

Opportunities for graduates exist in pharmaceutical companies, food manufacturing and processing industry, chemical industry, agriculture industry, health industry, publicly-funded laboratories, sales, marketing, as production-in-charge, junior scientist, marketing executives, technical support writers, laboratory technicians, medical representatives, business development executives, etc. The scope for biotechnologists can also be seen in various fields such as research, sales, and marketing.

M.Sc Applied Medical Biotechnology and Clinical Research (MCR)

Objectives

This course is meant to provide impetus to the activity of information gathering and educating students in the basics and higher scientific knowledge associated with the field of medical biotechnology, clinical research, and other relevant areas.

Career options

Openings can be found in pharmaceutical industries, drug testing labs, government and private R&D labs, as junior research fellows, junior research scientists, marketing managers, science writers, quality control officers, production-in-charge in pharmaceutical companies, as medical lab technicians, lab maintenance managers, and bioinformists. Apart from this, the scope for medical biotechnologists can be seen in various fields such as research, sales, marketing, administration, technical support, assistant professor, analyst, clinical analyst, clinical data analyser, clinical statistician, molecular technicians in hospitals, etc.

Department of Bioinformatics

The Department of Bioinformatics was started in 2002 to facilitate teaching and research in the interdisciplinary areas of bioinformatics, computer science, biocomputing, and computational genomics, and to create an intellectual environment for interdisciplinary education and training. It became a part of the School of Life Sciences in 2008. The department offers undergraduate (B.Sc Biocomputing), postgraduate (M.Sc Bioinformatics) degrees, and an M.Phil and Ph.D in Bioinformatics.

The department has a well-equipped lab consisting of the latest IBM machines loaded with a complete bioinformatics workbench, coupled to a high-speed broadband internet connection, enabling effective use of biological software for research purposes.

The department is comprised of significantly experienced faculty members with research interests and expertise in structural biology, molecular modelling, computer-aided drug design, pharmacogenomics, cheminformatics, molecular biology, genetic engineering, genomics, proteomics, biocomputing, and database and software development. Moreover, students can access hundreds of scientific journals the university subscribes to on their laboratory desktops, which is essential for project work and subsequent publication. Project work is assigned even for undergraduate students in order for them to develop their own specialisation. They can use well-cited publications in indexed international and national journals. Research findings are also presented at various international and national conferences.



Areas of specialisation:

Drug Designing, Natural Product Analysis, QSAR Studies, Molecular Dynamics

List of collaborations:

The Department of Bioinformatics has maintained collaborations with industrial laboratories and institutes involved in related areas of bioinformatics research and development database. The department has jointly published articles in reputed journals and is collaborating with the following industries and institutes: BIOLIM Private LTD - Centre for Life Sciences, Chennai, Department of Crystallography & Biophysics, University of Madras (students trained in commercial software suite SCHORDINGNER for computer-aided drug designing), and BioNeemTec - Women's Biotech Park, Sirucheri IT Park, Chennai.

Infrastructure facilities

- The Department of Bioinformatics has two well-equipped, air-conditioned computer labs; a Structural Bioinformatics lab and a Biocomputing lab with the latest IBM machines loaded with complete bioinformatics workbench coupled with a high-speed broadband internet connection.
- System enabled with audio-video presentations.
- Students have access to various software tools.

B.Sc Biocomputing

Objectives

Biocomputing is an enigmatic field in areas such as software development, biological database design and maintenance, proteomics, and clinical pharmacology. A broad range of modules are available to establish a basic understanding and appreciation of the issues of computational biology. The course includes an applied component, which gives an introduction to programming for biological data and the use of a range of web-based biocomputing utilities.

Career options

Looking for a career in biocomputing will see offers from IT and pharmaceutical companies in India and abroad. The role will involve programming for biological data and the use of a range of web-based biocomputing utilities.

M.Sc and M.Phil Bioinformatics

Objectives

The Bioformatics courses provide students with theoretical and practical knowledge of the methods required to analyse and interpret data generated by modern biology. This involves the appreciation of biochemistry and molecular biology, together with the techniques of IT and computer science that will prepare students for multidisciplinary careers in research. The course is meant to provide a biological background to data types of genomics, proteomics, and metabolomics. Developing a computational and analytical understanding along with a

Master of Science in Bioinformatics can move straight into the pharmaceutical or food industry. They can also become experts at a biomedical laboratory. Graduates will be strong in data analysis that is a skill that can be applied to great effect in sectors outside life sciences as well, such as banking. Some of the specific career areas that fall within the scope of bioinformatics include database designer, clinical pharmacologist, informatics developer, computational chemist, bioanalytics, cheminformatician, biomedical computer scientist, geneticist, biostatistician, etc. One can also take up a teaching job if they possess adequate teaching skills. understanding is necessary as a platform for processing biological data. The programmes require a demonstration of applications and worked examples in the field of bioinformatics and systems biology. There is also project work involved. Job prospects are available in all sectors of biotechnology, pharmaceutical biomedical, science industries, hospitals, and IT companies. M.Phil graduates who also have a Master's in Computing and IT are suitable for employment in the IT industry in software development work in the area of bioinformatics. M.Phil graduates with Master's degrees in Life Sciences can look for openings in R&D institutions in the life science area all over the world. In addition, a research career is also open to M.Phil holders.

Career options

Employment prospects are excellent and appear to be relatively independent of economic conditions. Bioinformatics is a wide-ranging subject and you can put it to use in many ways in the pharmaceutical and food industry, in biomedical labs, and sectors like banking and teaching.



VISTAS CENTRE FOR FISH IMMUNOLOGY

Why this Centre?

With global fish production through capture fisheries reaching its maximum due to overexploitation, a major source of food/ dietary protein for the teeming millions of people in the new century will be aquaculture. At least 50 per cent of the fish consumed by humans are farm-reared. India has the potential to produce many times more than the current rate of production. One of the main reasons for this failure is the large-scale mortality of fish due to aquatic environmental pollution, crowding, other stressors leading to immunosuppression, and the consequent microbial infectious diseases. Global annual loss to aquaculture industries due to diseases was estimated to be US\$ 6.5 billion per annum (nearly 40 per cent of the production). Fish diseases can be controlled by immunology and other ways such as using antibiotics and immunoprophylactic measures like vaccines and immunostimulants. To develop efficacious immunoprophylactic and immunotherapeutic measures for fish diseases, a better understanding of fish immunity is an important prerequisite. At the national level, there are very few institutions working in the area of Fish Immunology. This situation is due to lack of trained personnel, the field being new. This centre for fish immunology under the leadership of Prof R Dinakaran Michael was established in 2011. The centre provides the necessary facilities for training and research in fish immunology, which is a newly emerging discipline under life sciences.

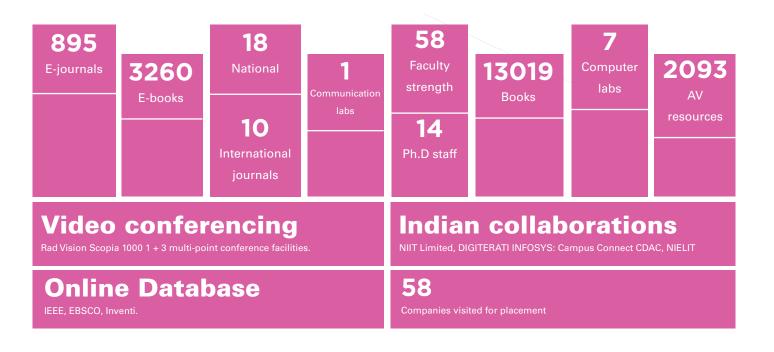
Services offered by the centre

- Research in Fish Immunology immunomodulation, immunostimulants, and immunotoxicology with reference to finfish aquaculture.
- Providing consultancy services to fish farmers on fish health (prophylaxis and therapy), the environment (pollution, etc.), to pharmaceutical companies on vaccine/immunostimulant efficacy testing and also includes protocols for drug administration.
- Providing library facilities for researchers in fish immunology from all over the country.
- Offering short term training in (Fish) Immunology techniques for college/university teachers/researchers.

Research priorities

The thrust areas of research include developing environmentfriendly prophylactic and therapeutic immunostimulants from terrestrial and marine plants for fish culture. Another area is heavy metal-induced immunosuppression in fish. This aspect is relevant to extensive cultures in large water bodies that more often receive polluted water from rivers and canals contaminated with industrial effluents. Stress-induced immunomodulation due to physical and social stressors (e.g. overcrowding, all-male culture, etc.) is another priority area of research in this centre.

School of Computing Sciences





The application of computers in the modern world is unlimited besides their routine use in the IT I industry. The demand for trained professionals keeps on increasing. Openings for computer-trained graduates are many and fast expanding in the present scenario. In order to meet the above requirements, the department has Wi-Fi enabled classrooms, separate laboratory facilities for undergraduate and postgraduate programmes with a well-connected local area network as a backbone. Apart from this, separate Linux and Windows-NT servers are provided to give full exposure to students. In order for student's knowledge to keep pace with the changing environment, a separate online internet accessing facility along with an open source environment is provided. To cope with the astounding growth of IT, the CSI student branch has been inaugurated to harness the various activities of CSI related to the latest technologies. In a bid to provide students with individual attention during practical sessions, each student will be provided with individual laptops enabled with Wi-Fi. Our curriculum comprises of three practicals each semester giving students a way to enhance their practical knowledge. For the benefit of outgoing students, the institution's placement cell has tied up with some of the leading software houses to conduct regular campus interviews. The e-learning platform is used to motivate content development and to promote self-learning for students. Faculty lectures in audio format are uploaded on the e-learning platform that is meant to aid in the learning process. Vels Digital Knowledge Centre helps students keep up with industrial standards through online courses like NPTEL, COURSERA, TED, and EDX. To understand the current industry demand and to equip our students to meet industrial standards, MoUs have been signed with various organisations. Project proposals are submitted to various funding agencies in order to upgrade Research & Development.

WWW.VELSUNIV.AC.IN

The School provides well-furnished facilities like:

- Open source environment in the lab
- Spacious classrooms with Wi-Fi facility
- Assembly language programming lab
- Laptops for all postgraduate students and staff members Our lab is equipped with i5 HP systems with allfacilities and networked perfectly
- 1Ghz internet facilities for the staff and students
- Practical classes are delivered through LCD projectors
- Collaboration with various research oriented
- organisations like CDAC, ICTACT, and NIIT Offering industrial visits to CDAC to develop the skill
- of postgraduate students.

Department of Computer Science

The department provides an outstanding research environment complemented by excellence in teaching. The department offers B.Sc Computer Science and M.Sc Computer Science programmes. The department consists of highly qualified and well-experienced faculty who have earned or are pursuing Ph.Ds. The faculty members and research scholars are actively involved in frontier research areas. Research articles written by faculty members are published in indexed international and national journals with a high impact factor. They also serve as reviewers in various reputed journals. The department organises national and international conferences, seminars, symposia, and workshops to share knowledge, and to bring out student's potential and innovative skills in a variety of fields. Students will be placed in leading companies like IBM, Infosys, Wipro, Cognizant, TCS, Satyam, Microsoft, etc.

Programmes

B.Sc Computer Science

Objectives

The course is designed to accommodate students who want to obtain deep and well-rounded knowledge in the field of computer science. The course covers all aspects of computers right from the fundamentals of a computer to database systems and advanced courses like C++, Java, etc.

Career options

Jobs for professionals in the field of computer science can also be secured with management consultancy organisations, power plants, and other organisations that use computers and computer-aided systems.

M.Sc Computer Science

Objectives

This course offers a broad choice of topics including the latest information technologies, networks (local or global), the fundamentals of computer science (operations research, graph theory, electronic documents), and applied mathematics (Probability theory, statistics). This Master's degree paves the way towards a Ph.D in internationally recognised research laboratories.

Career options

Candidates have opportunities in software development, testing and networking. The availability of jobs range from system programmers and systems analysts to application programmers, etc.

Department of Computer Application

In order to perceive global trends, the department has Wi-Fi enabled classrooms and an open source environment lab. Staffstudent interaction is facilitated through our department's website to exchange ideas and inculcate social values. Our department has learned and experienced research supervisors for M.Phil and Ph.D programmes and many of our faculty members are about to complete the doctoral programme.

B.C.A (Hons.) is a 3 + 1-year degree course jointly conducted with NIIT. Students will get a dual certificate. In the fourth year, the student will undertake a paid internship with GNIIT. The curriculum is designed with latest software content and is oriented towards employability.

Programme

B.C.A/B.Sc I.T

Objectives

The programme aims to produce qualified and skilled professionals by providing theoretical and practical knowledge capable of solving software and hardware problems, and discovering software solutions related to business organisations.

Career options

Students have a bright future in the IT field as programmers. They also have job openings in banks, companies, BPOs, and KPOs. A post-graduation in the relevant field is always preferred.

B.C.A (Hons.)

Objectives

The B.C.A Hons. course introduces every student to the practical aspects of software development keeping in mind the needs and requirements of the IT industry. The fourth year of study includes an internship in the industry.

Career options

This course is jointly conducted by our own faculty and the NIIT faculty. It is an excellent platform for those aiming to enter a profession in computers and students are absorbed by companies in various capacities. Students will be able to successfully have a future in this field as the IT revolution has paved the way to the most exciting vista of careers the world has ever seen. The computer application sector offers a wide range of specialist jobs and training for the same.

B.C.A (For Hearing Impaired)

M.C.A

Objectives

The course is designed to meet the rising demand for qualified professionals in the field of computer applications. The M.C.A programme focuses on providing a sound theoretical background as well as good practical exposure to students in the relevant areas to meet industry expectations.

Career options

M.C.A candidates have a range of job opportunities in software engineering and development, hardware and networking, infrastructure management, research and development, IT enabled services, and in non-IT sectors.



Department of Information Technology

This department provides graduates with the skills and knowledge to take an appropriate professional position upon graduation and to take leadership roles in research activities. The streams are designed in such a way that the graduate develops a practical understanding of the technology. The department is made up of excellent faculty members. The Department of Information Technology has one undergraduate and two postgraduate courses. Separate lab facilities are provided for undergraduate and postgraduate students with state-of-the-art facilities. The syllabus is designed to train students to meet industrial needs. Students are usually placed in various IT and ITES companies after graduation. They are encouraged to participate in various social welfare activities that should increase their social value.

M.Sc Information Technology

Obiectives

This programme focuses on the understanding and implementing of concepts in the advanced traditional computing environment. It aims to develop the skills required to work with highend applications in internet technologies and also cultivate managerial ability to maintain software development.

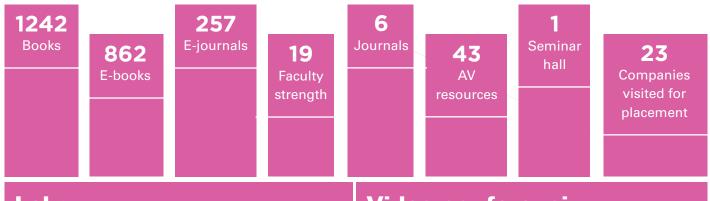
Career options

M.Sc IT graduates have a range of information and IT/ Computing related jobs in IT consultancy, system analysis, software testing and engineering, MIS, networking, and as a software programmer. There are also non-IT/computing-related jobs in banks, companies, BPOs, and KPOs. They can also pursue a Ph.D.





School of Mass Communication



Labs

Computer Lab, Multimedia Lab, Graphic Design Drawing Studio, Video Editing Suite, Audio Editing Suite, Control Room & Shooting Floor Photographic Studio, Art Direction Room, Graphic Multimedia Room, Graphic Studio Video conferencing:

Rad Vision Scopia 1000 1 + 3 multi-point conference facilities.



Visual Communication is an integral part of our life and culture. It is an exciting and growing industry where creativity and vision are paramount. Whether on the internet, in film and television, mass media, publishing and advertising, e-commerce, or any other affiliated industry, all of them need promotional material delivered through the creative skills of a designer. Words and pictures are combined together with charts and numbers, visual effects, and illustrations to better engage audiences.

The programmes provide students with the necessary theoretical knowledge and practical skills in the interdisciplinary fields of visual communication as well as the practical aspects of these areas. It equips students with transferable skills relevant to a wide range of careers in the field of media.

The degrees in visual communication and in animation offered by The School of Mass Communication at Vels University and the Department of Visual Communication are designed to provide a holistic education that incorporates technology, aesthetics, and integrated use of various media. The courses are unique in that the curriculum is structured content-wise and taught with the principal focus of educating specialists who have a firm foundation in the fundamentals of design. This will enable them to function not only in a variety of existing media environments, but also in new and emerging ones as well. The courses equip students with a range of creative approaches, technical skills, and core research skills to prepare them for challenges that lie ahead in this rapidly evolving field.

During the undergraduate and postgraduate courses, students can choose from an industry placement or on-campus projects. In addition to the compulsory course based around visual communication, media technology, printing principles, and the process of drawing, photography, etc., students can also choose from a wide range of courses in each major including web multimedia, design professional studies, advertising design, design for new media, illustration, 2D and 3D animation, gaming, and graphic design. The video studio, dubbing studio, edit suite, drawing lab, graphics lab, and photography studio are specially built to cater to the necessary creative space that facilitates artistic exploration and experimentation by students.



WE OFFER PRACTICAL EXPERIENCE

The School provides students with practical knowledge and skills with exhaustive exploration of the student's creative potential to achieve breakthroughs in design innovation for a variety of media forms including web, print, and broadcast. Our studios, designed for VISCOM, are professional work areas integrated with computer workstations equipped with state-of-the-art software. Students will be exposed to real world creative gateways and industry best practices on-campus in a built-in, wellequipped, fully-fledged audio-visual studio, dubbing studio, edit suite, photography studio, projection hall for screening films, and a beautifully designed media studies library. Elective training is also provided for all majors through real-life projects, guest lectures, and media industry visits. Client-based projects are embedded in a prescribed course during the final year.

CHALLENGES AND OPPORTUNITIES

There is a real need at this point in creative history for the School of Mass Communications at Vels University to provide lessons that deal with practices in today's leading media channels and organisations. The syllabus covered by the School and VISCOM is relevant and vital to the growth and understanding of today's up and coming creative talents. Not only will they be able to compete creatively on a global level, they will also understand the industry better. This Visual Communication course aims to achieve an international standard of high quality training which will lead to a universally recognised qualification, enabling graduates to pursue postgraduate degrees and doctorates.

Programme

B.Sc Visual Communication

Objectives

This course encompasses three creative fields; Fine Arts (drawing and designing), Media Production, and Multimedia (graphics and animation). It is designed to suit the needs of creative individuals who aspire to take up media jobs in various fields such as photography, videography, television programme production, film-making, e-content production, multimedia production, and advertising.

Career options

Career options are abundant and one can pick and choose from the following options, based on their creative aptitude and abilities:

Photography: Still photographer, industrial photographer, advertising photographer, fashion photographer, wildlife photographer, sports photographer, photojournalist, etc.

Film and television production: Feature film-maker, short film/documentary film maker, TV programme director, news producer, reporter, sub-editor, art director, script writer, camera person (still and video), video editor, visual co-coordinator, sound engineer, compeer, anchor, news reader, etc.

Advertising: Ad film-maker, copywriter, graphic designer, story board artist, set designer, web designer, layout designer, etc. Multimedia production: Web designer, VFX and SFX creator, illustrator, 3D modelling, animation, etc.

E-content production: Web page designer, content developer, etc.

Programme

M.Sc Visual Communication

Objectives

This Master's degree is for candidates who wish to learn more about visual media. Students are taught about people and groups that organise themselves as advertisers, agencies, media and suppliers around the world to create, produce and manage visual media.

Career options

The M.Sc programme prepares candidates to get into visual media or make them efficient entrepreneurs.

B.Sc Animation

Objectives

These programmes extensively feature education in computer image syntheses, 3D modelling, and 3D animation. Topics may include visual perception, colour theory, displays and frame buffers, image processing, affine and projective transformations, quaternion, hierarchical modelling, hidden surface elimination, shading, ray tracing, anti-aliasing, texture mapping, curves, surfaces, particle systems, dynamics realistic character animation, and traditional animation principles. The course will include indepth motion analysis of both classical and computer-generated works.



Topics for the undergraduate programme include: Character design and preplanning, design of model sheets, character rigging, character motion in action and acting, design for multiple characters, crowd scenes, lip-syncing, and the principles of character animation.

Career options

The animation industry has job opportunities globally, particularly in Western countries. In recent years, the Indian animation industry has gained steam after a few movie releases and awareness spread by the Government on content development and relearning areas. As demand in this arena outstrips supply in the country, these degrees will place students perfectly in the industry. Vels is the first university to offer an undergraduate programme in animation.

New courses:

B.Sc Game Design Diploma in Visual Communication with VFX Diploma in Animation Diploma in Game Design

School of Hotel and Catering Management



Companies visited for placement ensuring 100 per cent placement

Rad Vision Scopia 1000 1 + 3 multi-point conference facilities.

We are one of the leading catering institutions in India offering undergraduate, postgraduate, and various diploma courses in Hotel Management and Catering Technology. There are four major departments in hotel management:

(I) Food Production(II) Food and Beverage Service(III) Front Office(IV) Accommodation Operations

Students studying here will equip themselves professionally in all these subjects and choose one as their career in the hospitality industry. During the second year, students are sent for four- to six-month internships to gain exposure at luxury hotels in Chennai or at places of their choice. This internship provides opportunities for students to gain experience in their field, create a network of contacts, and gain academic credit that is a part of the curriculum. The objective of the School is to encourage all-round development and inculcate the importance of acquiring varied skills.



(I) Food Production

A. Basic Training Kitchen

Students are introduced to the basic principles of cooking and are trained to cook two portions of food. First year students are trained in French cuisine.

B. Quality Training Kitchen

Second year students are trained in this area. They are taught to prepare food in bulk. The cuisine is usually Indian, though training in global cuisines is provided as well.

C. Advanced Training Kitchen

Students in their final year work in this kitchen. Cooking at an advanced level is taught and practised here. Cuisines such as Mexican, Chinese, Thai, and Mediterranean are prepared and skills like ice carving, vegetable carving, tallow carving, etc. are taught to students.

D. Bakery and Confectionery

Students in this kitchen are trained to make varieties of dough, bread, and cakes during their practical hours. Bulk orders of cakes are made by students and distributed at Christmas. This is an airconditioned facility used to train students to perfect wedding cake decorations, do sugar work, chocolates, and a host of cold dessert preparations.

(II) Food and Beverage Service

There are two restaurants on campus that are air-conditioned and have a capacity to train nearly 100 students at any given time. Students are taught the fundamentals of various restaurant services in the first year, and are taught about alcoholic beverages and their proper service in the second year. During the final year, instructions are provided on how to manage restaurant operations.

(III) Front Office Operation

In this department, students are taught to organise, perform, and evaluate front office functions that are critical to the success of a hotel. They are trained to handle the diverse procedures found in front office operations and management.

(IV) Accommodation Operation

Students are trained directly in day-to-day operations of the housekeeping department that involves the art of bed making, room cleaning, public areas, and other types of cleaning. This department also has a practical lab and laundry for students to learn managing the laundry premises. They are even taught how to balance the needs of guests with a concern for the environment.

AFFILIATIONS & ASSOCIATIONS

A. South India Culinary Association (SICA)

The aims of SICA include industry interfacing, professional networking, internationalisation of Indian food, talent spotting, good practices, development guidelines, and the fulfilment of social obligations, as well as collaboration with educational institutions, student bodies, and the faculty.

B. Skål

Skål is a professional organisation consisting of tourism leaders from around the world, which promotes tourism and hospitality. It is the only international group uniting all branches of the travel and tourism industry.





C. Indian Federation of Culinary Associations (IFCA)

IFCA is the nodal body of culinary professionals in India and is an independent, apolitical, non-religious, non-profit and voluntary organisation. IFCA is recognised by the Ministry of Tourism and is a national member of the World Association of Chefs Societies. IFCA constantly strives towards raising the standards of culinary trade, developing the art of fine cooking, upholding general interests of professionals, and promoting goodwill by always setting high ethical standards.

D. Hospitality Educators & Recruiters Association

This association updates industrial technology and advancements within hospitality institutions and shares the best HR practices within the industry. It organises training for hospitality educators and students to streamline the industrial release scheme (IRS) and recruitment process.

E. The World Association of Chefs Society

WACS is a non-political, professional organisation dedicated to maintaining and improving the culinary standards of global cuisines through education, training, and professional development of its international membership. As an authority and opinion leader on food, WACS represents a global voice on all issues related to the culinary profession.

Programme

Diploma in Hotel and Catering Management

The diploma course provides the necessary foundation needed by students in culinary preparation. Knowledge of non-alcoholic and alcoholic beverages, as well as production, storage, handling, serving, and tasting of these beverages is provided. The three-





year diploma programme is dedicated to craft-based learning and hotel management courses.

B.Sc Hotel and Catering Management

Students learn the management of housekeeping operations, culinary preparation, storage, production, handling, serving, and the legal aspects of a hospitality enterprise through the syllabus.

M.Sc Hotel and Catering Management

The Master's course will give students professional insight into the hospitality industry, in addition to a set of care management skills useful in finance, marketing, statistics, and human resources.

Craft Courses

Objectives

Provides training for positions in the rooms, and food and beverage divisions of a hospitality enterprise including the front office, food production, bakery and confectionery department, food and beverage services, and accommodation operations. Students will be prepared for challenges in managing guest services at hotels.

Career options

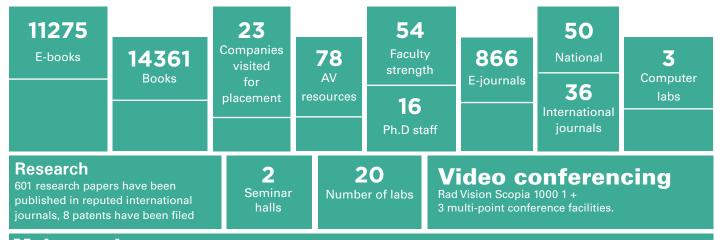
Opportunities exist as management trainees in hotels and in the hospitality industry, airline/flight kitchens and on-board flight services, ground staff, and the Indian Navy Hospitality Services.

The course can also provide jobs as an executive in national and international fast food chains, as a manager at hospitals and institutional catering, faculty in hotel and tourism management institutes, positions at shipping and cruise lines, as a marketing/ sales executive in a hotel, and other service sectors. There are further opportunities for employment in State Tourism Development Corporations, at resorts, self-employment through entrepreneurship, at hospitality-based multinational companies, and the Indian Navy.

All other associated positions in large shopping malls, in mobile catering, in the Indian railway catering services, and in industrial canteens at big companies will also be available. Nationally, about 90 per cent of graduates are employed by the hospitality and other service sectors through on- and off-campus recruitment processes.

Dr P Shanmugasundaram Director, School of Pharmaceutical Sciences

School of Pharmaceutical Sciences



Major equipment: UV - 1700 Spectro-photometres, HPLC, HPTLC, GLC, FTIR, DCS, Brookefield, Viscometers, 10, Station Rotary Tablet Punching Machines.

Pharmaceutical industry collaborations

Novel Therapeutics, Edict Pharmaceuticals, Tablets India, Herbal Galenicals, KNISS Labs, etc. Hospital collaborations: ESI Hospital, Chettinad Hospital, etc.



Dr P Shanmugasundaram received his Ph.D in the field of pharmaceutical sciences.He has published 90 research articles in various reputed scientific journals and presented scientific papers in more than 20 national and international conferences.He is a recipient of 5 best paper presentation awards in national and international conferences.

His current research areas include Analytical Method Development and Metabolite Profiling.

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The booming pharmaceutical industry is creating endless opportunities across the globe in research, manufacturing, marketing, and distribution. Vels University has been leading the way in pharmaceutical studies and research for over two decades. It provides higher educational facilities for young aspiring students. For an institution of repute like Vels, the expectations are high and the School of Pharmaceutical Science has exceeded them. It performs more than just academics; research opportunities and a creative outlet are available here. The programme not only creates competent pharmacists but also complete individuals. Infrastructure facilities help to carry out research on par with international standards. The School undertakes collaborative research projects with various organisations and hospitals. Campus interviews are conducted regularly to provide placements for students.

A qualification in B.Pharmacy and M.Pharmacy from a reputed institute is one of the most sought-after in the industry. Presently in India, Contract Research Organisations have been established in order to contribute towards research for multinational pharmaceutical organisations. These organisations are in need of research scholars who have completed their M.Pharmacy, Pharm.D, and Ph.D in Pharmacy. B.Pharm (Practice), a two-year programme, will begin in the academic year 2017-2018 as a part-time course. The course has been approved by the Pharmacy Council of India, New Delhi, with the prime objective of upgrading the quality of pharmacists currently working in hospitals, clinics, and as community pharmacists with a Diploma in Pharmacy.

The Ph.D programme in Pharmacy is available at this School. This research degree is given to candidates who successfully carry out research on various specialised areas like drug delivery systems, development of new analytical methods, drug design, molecular docking, phytochemical investigations, case studies related to drugs, and pharmacotherapeutics. The School has state-of-the-art research facilities for pharmaceutics, pharmaceutical chemistry, pharmaceutical analysis, pharmacology, pharmacognosy, pharmacy practice, and pharmaceutical biotechnology, and has published 601 original research papers in various national and international journals.



LABORATORY AND INFRASTRUCTURE

The School is equipped with the latest laboratory facilities, computers, and a treasure trove of books. The infrastructure includes a lecture hall with internet facilities and a large conference hall where seminars, conferences, workshops and symposia, etc. are held.

MULTIFACETED AVENUES OPEN TO YOUNG PHARMACY ASPIRANTS

The avenues open to students in this field are jobs such as hospital pharmacists, clinical pharmacists, production pharmacists, research and development pharmacists, analytical pharmacists, pharmaceutical biotechnologists, formulation pharmacists, marketing executives, community pharmacists, herbal drugs experts, pharmacologist, academics, and pharmaceutical technologists.

Financial Assistance for Students

- AICTE Scholarship (Grant in Aid GIA) for GPAT qualified,
- Tamil Nadu Pharmaceutical Sciences Welfare Trust,
- Vels University Merit Scholarship stipend has been granted for full-time Ph.D scholars,
- Quality Pharmacy Practice Module-1 organised at our campus,
- Celebrating Pharmafest, National Pharmacy Week, and World Pharmacist Day every year,
- To attend hands-on training in the alternative use of animals in medical education,
- Preclinical research exposure for postgraduate students.

Extra-curricular events

Mr Sulaiman, Pharm.D student received the Best Blogger award for his blog.

Mr Bhargav, Pharm.D student - Cubing record holder at the national level.

Extension activities

- Blood Donation Camp,
- Deepam Hospital Breastfeeding Awareness Programme,
- Meningitis Awareness Rally,

Research excellence

The School of Pharmaceutical Sciences is marching towards becoming one of the premier academic research and innovative centres in India. A total of 8 patents have been filed during the last five years and the School has published more than 601 original research papers during the same period.

Programme

B.Pharmacy

Objectives

The curriculum is designed to provide knowledge of drugs identification, analysis of chemicals, and to dispense drugs with the correct information for patients to use.

Career options

Jobs are available as drug manufacturing chemists, analysts in quality control and assurance, in hospitals and community pharmaceutical services, marketing and drug regulation services.

B.Pharmacy (Practice) – 2 years

Objectives

The main objective of the curriculum is to upgrade the knowledge and skill of hospital, clinical and community pharmacists.

Career options

A career as a pharmacist in hospitals, and clinical and community pharmacies in India and abroad is available.

Pharm.D

Objectives

The course focuses on basic science and therapeutics in the curriculum. Students will be able to discuss the value of integration of science and therapeutics through coursework, come up with ideas for improving contextual relationships between science and clinical education, monitor therapy, provide drug information, provide patient counselling, improve communication skills, pharmacy management, jurisprudence, compounding, dispensing and drug delivery.

Career options

There are jobs available in hospitals and community pharmaceutical services in India and abroad. Further opportunities exist in pharmacovigilance, pharmaceutical education, clinical research organisations, and other specialised pharmaceutical areas.

Pharm.D (Post Baccalaureate)

Objectives

To provide knowledge and training in pharmacokinetics, clinical research, toxicology, and pharmacotherapeutics to pharmacy graduates. The curriculum also includes an understanding of the concepts of clinical trials, patient counselling, pharmacoepidemiology, and pharmacoeconomics to provide enhanced therapy and safety to patients.

Career options

Opportunities in clinical research, hospitals and community clinics, pharmacovigilance, and other inter-professional areas in the healthcare sector in India and abroad are available.

M.Pharmacy (Pharmaceutics)

Objectives

To inculcate specialised knowledge of formulations, novel drug delivery devices, and quality assurance.

Career options

Product development, formulation, quality assurance, academic, clinical research, drug regulation in national and international agencies, IPR, research and development services are the areas where opportunities exist.

M.Pharmacy (Pharmaceutical Analysis)

Objectives

To train students to analyse various drugs rapidly using state-ofthe-art analytical instruments.

Career options

Quality control in biological companies, clinical research in the pharmaceutical industry, and validation.

M.Pharmacy (Pharmacy Practice)

Objectives

To prepare students so that they can work in a clinical set-up and utilise their knowledge of drugs to maximise activity and monitor the effects of those drugs on patients.

Career options

Pharmacist in multi-speciality hospitals, pharmacovigilance specialist, drug information centre, clinical research, and R&D.

Ph.D Pharmacy

Objectives

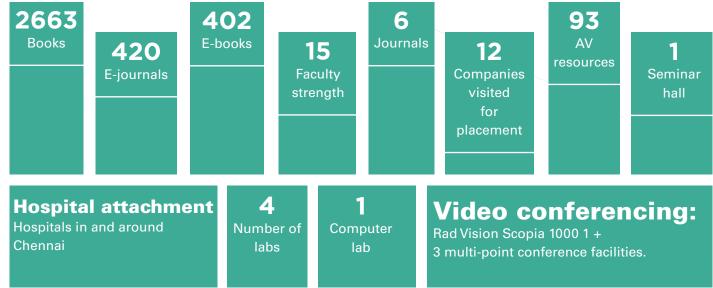
To formulate a higher level of knowledge in the respective areas of research by utilising state-of-the-art research facilities.

Career options

Drug design, product development, validation, quality assurance, clinical research, pharmacovigilance, drug regulatory affairs, academic and pharmaceutical services abroad.







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School of **Physiotherapy**



The physiotherapy course has been designed to serve the needs of the paramedical vocation established within a biomedical paradigm. Today, physiotherapy has achieved autonomous professional status in many countries. A dynamic science, physiotherapy is an integral part of modern scientific medicine. It is a drugless therapy that plays a major role in prevention and medical rehabilitation of the differently-abled. Vels College of Physiotherapy was started in 1993 and is now a part of Vels University.

Infrastructure facilities

The school is well-equipped with all modern amenities from various therapeutic laboratories, a research laboratory with EMG and treadmill facilities, a hydrotherapy unit, a wellestablished anatomy museum with all soft parts, and cadavers

Equipment: Arm ergo meter, inflatable bolster, trampoline, wedge, continuous passive mobiliser, myoshort wave diathermy, laser unit, multi station.

Clinic facilities

The School operates a free physiotherapy clinic for the poor and needy with all modern amenities. This provides an excellent inhouse training programme for students during their period of study. Apart from the in-house training programme at Shri Isari Velan Mission Hospital, students are posted to reputed hospitals Lifeline Hospital, HOSMAT, Manipal Hospitals, NIEPMD (National Institute for Empowerment of Persons with Multiple Disabilities), Dr Kumar's Ortho Clinic, Bone and Joint Hospital, Medical Mission, and Kamatchi Mission Hospital. This training programme not only allows for an in-depth understanding about the varied approaches in treatment, but also provides technical knowledge to develop the proper attitude required for the practice of physiotherapy.

Programme

BPT **Objectives**

The course aims to impart in-depth theoretical knowledge and practical therapeutic skills in the science of physical diagnosis and physiotherapeutics. This will enable graduates to practise the profession in a competent manner with autonomy, quality-care

Programme

MPT

Objectives To prepare postgraduate students for professional autonomy with selfregulating discipline; to form a base of professional practice by referral and

the first contact mode using evidence-based practise to impart research basis in order to validate techniques and technologies in the practice of physiotherapy; to provide experience in clinical training; and to provide honest, competent, and accountable physiotherapy services to the community.

Career options

Graduates will work as specialist researchers, advisers or consultants with research centres or in the private industry. Experienced and qualified therapists find opportunities in administration and management or as directors of major research projects and facilities. With an increased emphasis on sports and fitness and with greater awareness of occupational health and safety, aged care and the needs of the differently-abled, opportunities will also continue to emerge for graduates to contribute to community education programmes. Teaching jobs are quite excellent. After completing a Master's degree in physiotherapy, one may join a college/university as a lecturer, and progress to assistant professor after three year of teaching experience.

MPT Neurology and Pediatrics

Career options include chief physiotherapist in neurorehabilitation centres like the Spastic Society of India, NIEPMD, and NIMHANS; assistant professor in physiotherapy colleges; owning a clinic; and chief physiotherapist at special homes for kids like MAITHREE.



MPT Musculoskeletal Diseases

Jobs as chief physiotherapist in orthopaedic hospitals like HOSMAT, Bone & Joint, etc.; assistant professor in physiotherapy colleges; owning a clinic; and chief physioconsultant in fitness centres.

MPT Cardiopulmonary Diseases

Careers as chief physiotherapist in cardiac hospitals, assistant professor in physiotherapy colleges, owning a clinic, and as a physio in the Intensive Care Unit exist.

MPT Hand and Ergonomics

Occupations as a chief ergonomic advisor in IT firms and offices, assistant professor in physiotherapy colleges, and owner of a clinic are available.

MPT Sports Medicine

There are jobs as a physio instructor for state as well as national sports teams, assistant professor in physiotherapy colleges, owning a clinic, and graduates can work as on-field and off-field physiotherapists for sports.

Ph.D **Objectives**

A Ph.D in Physiotherapy signifies that postgraduates have successfully mastered skills and knowledge in physiotherapy that will help them to prepare for a career as an independent scholar.

Career options

After completing their Ph.D, students will find work as research scholars, professors, physio-managers at corporate and public clinics, and hospitals.

School of Maritime **Studies**





Capt N Kumar is the Director of the School of Maritime Studies at Vels University.

He completed his Pre - Sea Training with SCI's Maritime Training Institute in 1993 and during his fifteen-year tenure in the Merchant Navy, he sailed with the Shipping Corporation of India Limited, Univan Ship Management Limited, and Fleet Management Limited.

With commanding experience on-board product/crude oil carriers and chemical tankers, he is a member of the Institute of Chartered Shipbrokers, UK, having obtained first position in the ICS, UK professional qualifying examination in 2009 in the Chennai region.

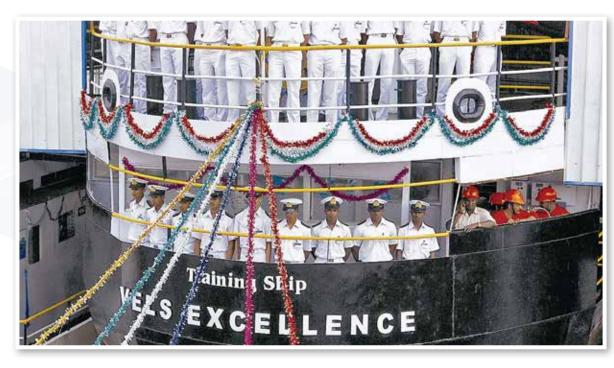
As a member of the Nautical Institute and a life member of The Company of Master Mariners of India, he now endeavours to transfer his knowledge and expertise to the cadets under his charge.

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Capt N Kumar Director, School of Maritime Studies

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T fficient transport by sea is extremely important, particularly for a country like India, which has a long L'coastline and glorious maritime traditions. Indian Merchant Shipping includes passenger vessels, cargo liners, tankers, carriers, container vessels, and many other types of specialised ships. These vessels need navigators with specialised training. The School of Maritime Studies offers integrated and comprehensive training for navigating officers and marine engineers. Candidates who successfully complete training at this School are eligible for taking jobs as navigating officers and marine engineers on board any ship anywhere, sailing on the vast oceans of the world. Navigating officers who qualify will be responsible for the navigation of ships, loading and discharging of cargo, maintenance of ships, safety of passengers and crew, and observance of various national and international codes of conduct. The courses at the School of Maritime Studies also prepare candidates to pursue a career in shipping companies or shipping-related activities onshore.



FACILITIES AND RESOURCES

- Full Mission Bridge Simulator from Kongsberg, Norway
- All Steel Ship-in-Campus
- Computer lab with high speed internet
- Fully-equipped physics-cum-electronics lab
- Seamanship lab
- Life Saving Appliance lab
- Engine Simulator lab
- Marine Electrical workshop
- Fitting shop and machine shop
- Strength of Material lab
- Applied Mechanics lab

- Fluid Mechanics and Heat Transfer lab
- Separate dining hall for cadets •
- **Control Engineering lab**
- Swimming pool with separate diving pool •
- Electrical Machine Lab
- Four-seater accommodation in the hostel
- Sports and recreational facilities •
- Fire Fighting Appliance lab
- Basketball court
- Volleyball court



Department of Nautical Science

Programmes B.Sc Nautical Science

The three-year B.Sc Nautical Science programme has been approved by the Directorate General of Shipping, Government of India.

Objectives

This course is designed to produce navigators for ships. The navigating officers who qualify at the end of this course will be responsible for the navigation of ships, loading and discharging of cargo, maintenance of ships, safety of passengers and crew, and observance of various national and international codes of conduct.

Career options

This course leads to a Second Mate Foreign Going Certificate of Competency awarded by the Ministry of Shipping, Government of India, after 12 months of sea service, enabling cadets to become navigating officers on board merchant naval ships anywhere in the world. This is a highly lucrative career. In so far as they relate to sea transportation, the highest rank that navigating officers can expect to attain on board merchant ships is that of a Master or Captain of a ship.

HND UK - HIGHER NATIONAL DIPLOMA COURSE

The School of Maritime Studies has signed a Memorandum of Understanding with City of Glasgow College (CGC), Scotland, UK, to jointly conduct fully residential Higher National Diploma (HND) courses in Nautical Science and Marine Engineering, respectively. The Higher National Diploma courses are approved by the Maritime and Coastguard Agency (MCA) UK, and the awarding authority is the Scottish Qualification Authority (SQA), Scotland, UK.

HND Nautical Science

The first year of the HND Nautical Science course will be conducted at Chennai, and the second year of study will be conducted at CGC, Glasgow. Phase I is 39 weeks at Chennai, followed by 36 weeks at CGC. Thereafter, 15 months of sea service is required to qualify for the role of Deck Officer of the Watch Certificate of Competency (earlier known as class 3 or Second Mates Certificate) examinations in the UK.

Department of Marine Engineering

Programme

B.E Marine Engineering

The four-year B.E Marine Engineering course leads to a Class IV Marine Engineer Officer Certificate of Competency, awarded by the Ministry of Shipping, Government of India after six months of sea service, enabling cadets to become marine engineers on board merchant navy ships anywhere in the world. This course is strictly residential.

Objectives

This course is designed to produce marine engineers. It is no mean feat to carry out the job of keeping a ship moving on the high seas given the harsh conditions and vagaries of the weather. Working on a stable platform on solid ground, it is easy to maintain and run machinery. But with ship rolling forty degrees on either side, it becomes a herculean task to run the main engine of a ship. The maritime engineer needs to be proficient in the areas of electronics, electrical, mechanical, refrigerator, and air-conditioning engineering. This demands a very high calibre of marine engineer who wishes to go to sea.

Career options

The highest rank that a marine engineer can expect to attain on board a merchant ship is that of a chief engineer. The skills acquired on board a ship as a marine engineer are very useful when he or she wishes to branch off into the shore sector of the shipping industry. He or she can literally merge into any industry ashore after having spent around ten years on board ships as a marine engineer.

Pre · Sea Training for Graduates (GME)

Objectives

The one-year Pre - Sea Training for Graduate Engineers (GME) programme is a course leading to a Class 4 Marine Engineer Officer Certificate of Competency awarded by the Ministry of Shipping, Government of India after six months of sea service, enabling cadets to become marine engineers on board merchant navy ships anywhere in the world.

Career options

The highest rank that a marine engineer can expect to attain on board a merchant ship is that of a chief engineer. As with the B.E Marine Engineering degree, the career prospects are similar.

Pre - Sea Training for Diploma Holders (DME)

Objectives

This two-year Pre - Sea Training for Diploma Holders (DME) programme leads to a Class 4 Marine Engineer Officer Certificate of Competency awarded by the Ministry of Shipping, Government of India after six months of sea service enabling cadets to become marine engineers on board merchant naval ships anywhere in the world.

Career options

The highest rank that a marine engineer can expect to attain on board a merchant ship is that of a chief engineer. As with the B.E. Marine Engineering degree, the career prospects are similar.

HND Marine Engineering

Objectives

The first year of HND Marine Engineering course will be conducted at the School of Maritime Studies, Vels University, Chennai and the second year of study will be conducted at CGC, Glasgow. Phase 1 is of 39 weeks at VAMET followed by 36 weeks at GCNS. Thereafter, 6 months of sea service is required to qualify for Engineer Officer of the Watch Certificate of Competency (earlier known as Class 4 Certificate) examination in the UK.

Career options

The highest rank that a marine engineer can expect to attain on board a merchant ship is that of a chief engineer. As with the B.E Marine Engineering degree, the career prospects are similar.











Engineering is the application of scientific principles to improve the standard of living. Engineering education at Vels University is designed to accommodate current trends and future needs, and to make students industry ready. Having incorporated flexibility in our curricula, we have an obligation to address the full range of higher education studies namely; teaching and learning, research, and service to the community. Major elements in the design of our engineering education are teamwork and partnerships. In addition to the regular curriculum, we provide additional courses in communication skills so that our students will be able to face any interview. We also arrange several invited talks, conduct seminars/workshops, and national and international conferences on state-of-the-art technology. Students are regularly taken to various organisations to give them information about happenings in the real world.



The School of Engineering is an associate of various professional bodies and associations:

Builders Association of India	NIQR
Indian Concrete Institute	
American Society for Mechanical Engineers	ISHR/
Institution of Electrical and	
Electronics Engineers	IAENO
Institution of Engineers (India)	CSI -
Indian Society for Technical Education	ENFU
Society of Automotive Engineers	
Indian Institution of Production	IETC ·
Engineers	
	Indian Concrete Institute American Society for Mechanical Engineers Institution of Electrical and Electronics Engineers Institution of Engineers (India) Indian Society for Technical Education Society of Automotive Engineers Indian Institution of Production

-	National Institution for quality &
	Reliability
AE -	Indian Society of Heating, Refrigerating
	and Air-Conditioning Engineers
G -	International Association of Engineers
	Computer Society of India
ISE -	Energy and Fuel Users Association
	of India
	Institution of Electronics and
	Telecommunication Engineers

Department of Electronics and Communication Engineering

The Department of Electronics and Communication Engineering aims to impart knowledge and conduct research through appropriate teaching methodology and research initiatives. The undergraduate and postgraduate curricula includes foundation and advanced courses thereby allowing students to know the basics and keep up with the current trends in electronics and communication technology. Furthermore, the employability and analytical skills of students are enhanced through well-equipped laboratories, add-on courses, professional development courses, and collaboration with industries and research institutions at national and international levels. The experienced and dedicated faculty of the department not only impart technical knowledge but also provide the needed mentoring to help students be successful.

Programme

B.E Electronics and Communication Engineering

Objectives

The vast growth in the field of electronics and the recent advancements in communications make this programme a coveted option. This programme concentrates on modules such as analogue electronics, digital electronics, digital signal processing, linear and switching circuits, control systems, transmission lines and waveguides, antennas and wave propagation, computer networks, wireless communication, optical communication, and



satellite communication. Laboratories are associated with the courses to help students improve practical knowledge. Advanced elective courses such as medical electronics, speech processing, advanced digital signal programming, cryptography and network security, advanced microprocessors, VLSI, high speed networks, and soft computing help students get trained according to their interests.

Career options

Graduates in Electronics and Communication Engineering will find opportunities in government institutions, and private and multinational companies that work in the core electronics domain, communication systems, networks, signal and image processing, microprocessors and micro controls. Electronics engineers are required in aerospace, ocean, and defence production. Graduates of this department are also equipped to pursue higher studies in premier institutions both in India and abroad.

M.E Communication System

Objectives

Rapid progress in communication technology makes this course vital for communication engineers who opt for higher studies. Advanced courses such as advanced digital communication techniques, advanced digital signal processing, spread spectrum techniques, RF system design, wavelet theory and applications, DSP processor architecture and programming, high speed switching architecture, electromagnetic interference and compatibility in system design, etc., provides more insight and depth into the subject. This programme also includes an exhaustive research for one year that equips students with the needed research, analytical, and publishing skills.

Career options

Postgraduates in Communication System will find positions in design, research and development of core communication companies, R&D institutions, and government research laboratories.

Department of Electrical and Electronics Engineering

The most important objective of this department is to impart quality education and research at undergraduate, postgraduate, and doctoral levels in the various areas of electrical and electronics engineering with an emphasis on the design aspects of electrical and electronic systems. The department has well-equipped facilities and is successfully guided by a set of well-qualified and dedicated faculty members. The department has also signed MoUs with leading organisations to conduct soft skills training, workshops, seminars, conferences, and industrial visits for the overall improvement of students.

Programme

B.E Electrical and Electronics Engineering

Objectives

This programme is aimed at producing engineering graduates with a good grounding in electrical engineering and a strong background in electronics. The course stimulates and involves student's intellect in an effective manner by providing training in power production, transmission and distribution, electrical machines, power electronics, control and automation.

Career options

Electrical and electronics engineers work in a variety of fields including the power sector and renewable energy sector, in biomedical engineering, in the aerospace, communications, and IT industry, and in robotics.

M.E Power Electronics and Drives

Objectives

The objective of the Power Electronics and Drives course is to teach how to use electric power effectively and efficiently, and how to improve the quality and utilisation of electric power.



Career options

Power electronics experts find openings in the aerospace industry, power system-related companies, industrial drive oriented companies, automotive industries, and power supplies production industries.

Department of Civil Engineering

The Department of Civil Engineering has been in existence since 2008 and has grown into a full-fledged department with specialisations in all major areas of civil engineering. The department collaborates with the construction industry, service sector organisations, and community education to improve innovation in technical education systems. The laboratories are designed with modern, high-capacity equipment that cater to the requirements of various civil engineering areas such as strength of materials, fluid mechanics and machinery, and concrete and structural testing. There is a geotechnical, environmental, and highway engineering lab. The aim of the department is to provide academic leadership in the area of civil engineering education and training, research and development, and innovations in technical education systems. The department has well-qualified and experienced faculty in various specialisations in civil engineering such as water resources engineering, irrigation system engineering, structural engineering, geotechnical engineering, construction engineering and management, environmental engineering, transportation engineering, remote sensing, etc. The department offers an undergraduate programme in civil engineering, and postgraduate programmes in environmental engineering, and construction engineering and management.

Programme B.E Civil Engineering

Objectives

Civil engineering is considered to be among the most versatile branches of engineering. The department focuses on research and education in broad areas of mechanics of solids, mechanics of fluids, surveying, strength of materials, applied hydraulic engineering, geotechnical and water resources engineering, environmental engineering, construction techniques, and structural analysis with seismic forces, computer-aided design, and the drafting of structures. Estimation and costing, transportation engineering, and prestressed concrete structures, feasibility and economic analysis of the above, etc. are also included.

Career options

Employment opportunities exist in the public and private sectors in large numbers in all areas of design, construction and maintenance, and infrastructure development in India and abroad. The recent policy of the Government will definitely create a boom in the construction industry and will generate huge employment opportunities throughout the country. A variety of careers in infrastructure design and development (housing, malls, commercial establishments, dynamics, and earthquake resistant structures), hydraulic structures such as dams and reservoirs, transportation and highways (roads, bridges, railways, including mass transit) irrigation, hydropower, thermal and nuclear energy, renewable energy, surveying, GIS and remotesensing, soil testing, and construction management.

M.E Construction Engineering and Management

Objectives

Construction engineering is a professional discipline that deals with the designing, planning, construction and management of infrastructure such as highways, bridges, airports, buildings, dams, and utilities. The course helps to develop knowledge and tools that add value in construction projects with a focus on risk management. The department focuses on research and education in broad areas of modern construction materials, construction equipment, advanced construction techniques, contract laws and regulation, construction planning, scheduling and controlling, shoring, scaffolding, construction projects management, quality control and assurance in construction, etc.

Career options

Construction is the realisation of many of our society's goals and aspirations. The entire environment of homes, buildings, roads,

freeways, bridges and much more, come about from the delivery of construction projects. It is the responsibility of construction engineers and the construction manager to deliver these projects in a manner that maximises value; a quality product at a fair price, safely constructed, and delivered in a timely fashion. A variety of careers are available in construction management methods and tools, construction techniques, quantity surveying techniques, advanced civil engineering materials, and construction equipment selection and management. Roles in project implementation and material management, construction finance, contract laws arbitration and specification, personnel management, operations in research and decision theory in construction management information systems, and value engineering are available.

M.E Environmental Engineering

Objectives

Environmental engineering is the application of science and engineering principles to improve the environment and involves designing environmental protection or remediation strategies for multiple resources such as water, air, and soil. It is often done with combinations of physical, chemical, and biological treatment methods in the context of a complex regulatory framework to provide healthy water, air, and land for human habitation and for other organisms, and to remediate polluted sites. The department focuses on innovative research and education in broad areas of environmental engineering such as environmental chemistry, water and waste water treatment, solid and hazardous waste management, environment impact, and risk assessment. An understanding of air pollution, noise pollution monitoring and control, marine pollution, environmental legislation, cleaner production, resource energy management from waste water, air quality modelling, and instrumental monitoring of the environment, etc. is provided.

Career options

Career opportunities in environmental engineering are diverse. Environment engineers can seek employment in the private sector as well as in government organisations, corporations, and NGOs. Positions as designers, pollution control officers, society workers, planners and operators, and professors exist. Environmental engineers can also seek employment in pharmaceutical companies, production firms, utility providers, and many other businesses that require specialists and engineers to meet environmental protection requirements.

Department of Computer Science and Engineering

The Department of Computer Science and Engineering was established in 2008. It offers undergraduate, postgraduate, and doctoral programmes based on the Choice Based Credit System (CBCS) to enrich students with courses comprising core and professional enhancement, and ability and skill enhancement electives. In addition to the curriculum, various add-on courses are offered thereby providing a platform for gaining in-depth knowledge. The department is well-equipped with excellent computing facilities, the latest software, and state-of-the-art IT infrastructure. The department has set up two IBM software labs for cloud computing and big data analytics to enhance research activities and to explore current technology needs. Faculty members have a good blend of industrial as well as teaching experience. Adding to its credentials, students are given international exposure through internships in leading foreign universities. The department equips students with the skills required to mould them into successful entrepreneurs in software development.

Programme

B.E and M.E Computer Science and Engineering

Objectives

The B.E course helps students establish themselves as effective professionals by solving real world problems. Through the use of computer science, the course puts the spotlight on teamwork, effective communication, and critical thinking. This stream mainly focuses on computer networks, database systems, software engineering, operating systems, multimedia, artificial intelligence, programming languages, computer architecture, and information retrieval systems so that students become industry-ready professionals.

The M.E course places emphasis on intelligent systems and human-computer interaction, pervasive and ubiquitous computing, systems engineering, theoretical computer science and image processing.

Career options

Modules such as data structure, database management systems, data warehousing, and data mining prepare students to function successfully as data analysts/data scientists in a fast emerging market. After taking courses like computer architecture, computer networks and cryptography, students are skilled enough to function as network administrators. The success stories of companies like Google, LinkedIn, Facebook, Twitter, and the rising profits of IT solution providers indicate a niche for students to work in this field. Budding engineers get accustomed



to the development of modern application software in C, C++, Java, .Net, and Python.

On the M.E programme, modules such as advanced computer architecture, advanced database technology, advanced data structure, and algorithms enable students to become data analysts, IC designers, and algorithm developers. Students will easily get placed in higher educational institutions, the IT sector, and research organisations.

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Career Education Programme, an initiative by IBM

In the current era, where there is growing demand for skilled professionals, the key to transform today's student into tomorrow's working professional is to develop industry capabilities right from foundation level. The Career Education Programme, an initiative by IBM, is designed to develop critical skills and nurture basic competencies in higher education that are needed in this dynamic industry. The Career Education Programme has launched specialised courses to develop sufficient manpower with the required skills in emerging areas of technology such as cloud, mobility, big data, business analytics, and cyber security.

Vels University and IBM have decided to collaborate in building critical mass in these areas. As part of the endeavour, Vels University has set up an IBM Business Analytics Lab and IBM Cloud Computing Lab on-campus to help students build their skill set. The platform brings together the latest software content, real-world industry experience, hands-on lab courses, and best practices, all into a single unique education programme to prepare students to be readily accepted by organisations.

B.Tech IT (Cloud & Mobile based application development in association with IBM)

Obiectives

This programme provides an educational foundation that trains students in core subjects and current technology for excellence and leadership along diverse career paths with professional ethics. This course puts importance in the areas of cloud computing, mobile applications, Internet of Things, and Big Data analytics.

Career options

Modules such as software engineering, software testing, and software project management enable students to be recruited by IT companies. The course instils students with an entrepreneurial spirit by developing mobile apps in a cloud environment. Training in the Internet of Things and cloud computing elevates Vels' students above students from other universities in the job market.



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Postgraduate Diploma in Cloud, Mobility & Big Data in association with IBM

Objectives

This course focuses on a broad range of computer science skills, tools, mathematical techniques, and the capability of applying them to analyse and design complex systems. It creates a deep understanding of fundamental, theoretical, and practical computer science, and the ability to adapt to an ever-changing technological landscape. It enriches students to solve a wide variety of problems by applying the principles of computational thinking.

Career options

Students well-versed in Cloud Data Security and virtualisation techniques are in great demand. Developers of apps on mobile platforms with cloud technology for data storage are needed everywhere. Business organisations look for students who are specialists in Big Data analytics.

Dr M Chandrasekaran

Dean i/c, Academic Courses & Director, Department of Mechanical Engineering



Dr M Chandrasekaran, holds a doctorate from the National Institute of Technology (NIT), Trichy.

He has 17 years of experience and has served in various capacities as a professor in reputed institutions and is presently serving as Director, Faculty of Mechanical Engineering at Vels University.

An expert in job shop scheduling, optimisation, and heuristics, his current research interests include multiobjective optimisation scheduling, flexible manufacturing system, and design optimisation of gears. He has also published more than 60 publications in international and other scientific journals.

Serving as Editor-in-chief for several international journals such as IJPTMR, IJMEMS, he is on the editorial board of USAK University's journal UUJMS, Turkey; IJPTM; IJDMT for IAEME. Active Reviewer for IJAMT, Springer link, IJPR, Taylor & Francis, IJINS, Elsevier. He has reviewed more than 150 research papers and guided 5 research scholars.

A member of the American Society of Mechanical Engineers (ASME), he is a also a life member at the Institution of Engineers (MIE), National Institution for Quality and Reliability (MNIQR), Indian Society for Technical Education (MISTE), and the International Association of Engineers (IAENG).

Department of Mechanical Engineering

The Department of Mechanical Engineering ensures high quality education to students with intense professional training by the faculty. The state-of-the-art laboratories, a very well balanced curriculum, and practical, hands-on workshop experience help students in meeting the needs of the industry. The department currently focuses on curriculum-based collaboration with academic bodies to promote innovative changes in the course structure. In addition, it has introduced competency and flexibility modular programmes for industrial benefit in the larger interest of technical education. The department constantly expands its horizons to adapt to changing technologies, advancing in design, conducting research and development. It is equipped with all the necessary equipment, gadgets, and machines for preparing mechanical job models.

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Programme

B.E Mechanical Engineering

Objectives

Mechanical Engineering is primarily concerned with the design, development, installation, operation, and maintenance of any mechanism that requires components and parts. The programme focuses on producing mechanical engineers who can contribute in numerous functions such as product and process design, R&D, production, maintenance, production planning and control, quality management, testing, technical marketing, projects management, erection and commissioning.

Career options

A wide range of career options are available in private and public sector companies such as the civil services, defence force, industrial consultancy, and project management. Emerging areas have opened new vistas including entrepreneurship, supply chain management, CAD, CAM, and ERP.

B.E and M.E Automobile Engineering

Objectives

Automotive engineering has been recognised as an important field ever since motor vehicles capable of transporting passengers with ease have been in vogue. Now, due to the rapid growth of auto component manufacture and the automobile industry, there is a great demand for automobile engineers. The

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automobile industry is one of the most challenging careers in the field of engineering with a wide scope. This branch deals with the designing, developing, manufacturing, testing and repairing, and servicing of automobiles such as cars, trucks, motorcycles, scooters, etc. and the related sub-engineering systems. For the perfect blend of manufacturing and designing automobiles, the automobile engineering course combines different elements of engineering such as mechanical, electrical, software, and safety engineering.

The M.E programme is developed in such a manner that students can learn systematically from the basics of natural science and engineering along with new automotive technologies. Students also study automotive technologies in new vehicle propulsion systems (electric, hybrid and fuel-cell systems), new materials, active/passive safety systems, CAE, and intelligent transport systems.

Career options

The automobile industry has been booming recently due to the growing demand for vehicles. Job prospects for automobile engineers have also increased rapidly both in India and abroad. Some career prospects in the field of automobile engineering are automobile engineering technicians, safety engineering, emissions research, NVH (Noise, Vibration and Harshness) engineers, performance engineers, vehicle dynamics controllers, operations research and designers. This field offers a wide range of opportunities for aspirants and includes automobile manufacturing companies, production plants, service stations, state road transport corporations, private transport companies, insurance companies, motor vehicle departments, etc. With computer knowledge in CAD, CAM, and ERP, automobile engineers can find employment in computer-aided industries as designers or they can design vehicle models by joining the R&D wing of companies.

Postgraduate students will be provided internship opportunities in the automobile industry. This course provides students a great opportunity to study modern automotive engineering and helps them to become leading researchers and competent leaders in the field.

Chennai being a leading global automobile hub, the Indian automotive industry produces innovative vehicles such as hybrid, electric, and hydrogen cars. Especially the region where the university is located in Chennai has been developed as a centre of automotive production. With this geographical advantage, students can execute many types of research in cooperation with automotive companies.

B.E.Mechatronics

Obiectives

In recent years, there has been great demand for computer controlled electro-mechanical systems in industrial automation and new product development. Mechatronics engineering is a more suitable programme for this integrated approach to industries. This course focuses on design, implementation, troubleshooting, and maintenance of mechatronic systems to cater to the requirements of modern engineering companies.

Career options

The course will benefit students by providing opportunities for direct employment after completing the programme. Mechatronics is a discipline designed to meet the current and emerging needs of technology and engineering. With its multidisciplinary skill set, mechatronics is a high-priority occupation that is utilised by current generation industries like manufacturing, service, medical, and robotics. Mechatronics graduates will find opportunities to work in the following areas: advanced manufacturing, robotics and image processing, the automotive industry, aerospace, agricultural equipment, the food industry, in the field of green energy, security systems, medical equipment, biotechnology, production support, and industrial machinery, etc.

M.E Computer Integrated Manufacturing

Obiectives

Computer integrated manufacturing is the integration of computer-aided design, computer-aided manufacturing, and computer-aided engineering. This course is designed to emphasise quality improvement, automation, and advanced

manufacturing techniques to produce the highest calibre products quickly, efficiently, inexprensively, and synchronously with the marketing, sales, and customer services departments in a company. This course focuses on 2D and 3D transformations, modelling and analysis, CAD/ CAM integration, CNC machine tool building, metal cutting and cutting tool materials, special machining processes, unconventional machining processes, micro machining processes, and rapid prototyping. Students will get adequate knowledge in robot anatomy, end effector sensors, vision systems, kinematics, programming and the application of artificial intelligence in robotics. This includes the areas of design of single-point and multi-point cutting tools, dies, jigs, fixtures, limit gauges, and toll design for CNC machines.

Career options

This course prepares postgraduates for employment in different industries as a maintenance engineer, renewable energy engineer, industrial programmer, field service engineer, industrial controls, system integration, and many other high tech employment opportunities in automated manufacturing. Postgraduates will be prepared to install, program, interface, service, troubleshoot, and implement automated equipment and robotic systems for various applications. Students will have knowledge of electronics, robotic systems, programmable logic controllers (PLCs), instrumentation, process control, hydraulics and pneumatics, mechanical drive systems, industrial networking, and industrial control circuits.

There are opportunities to work in diverse industries such as chemical, pharmaceutical, renewable energy, automotive, consumer goods, power plants, refineries, and other manufacturing-based companies.

Department of Bioengineering

The Department of Bioengineering is a fusion of engineering and life sciences created to promote scientific discovery and invention of new technologies, and therapies through research and education. The department offers one undergraduate programme; B.Tech Biotechnology, and a doctoral programme. The syllabus of each programme covers the latest developments in their corresponding streams and has been designed based on student's developing skills in the industry and researchoriented field to develop expertise in common national level examinations. The department has initiated efforts to establish research laboratories in all thrust areas. Apart from fundamental research, the school aims to meet the demands of biologicalbased industries. The academic programme is based on the Choice Based Credit System (CBCS) that provides students with an open choice of courses comprising core modules, electives, internships, and project work. The syllabus is consciously designed to help students keep up with the rapidly

changing trends and progressive growth in this exciting field. The department has highly-qualified faculty members with rich experience in teaching and research; some of them have visited international institutions of repute for collaborative teaching and/or research programmes, while others have presented their research findings in international forums abroad. Infrastructure and facilities: The Department of Bioengineering has well-equipped classrooms, seminar halls, and a departmental library. Major equipment includes a Bioreactor, Laminar air-flow chamber, Gel electrophoresis unit, CO, Incubator, Autoclave, Orbital Shaking Incubator, Real-time PCR, Incubator, Electrophoresis power packs, Binocular and Monocular Microscopes and Gel Documentation Unit. Students have access to all the instruments individually based on instructions given.

Extracurricular activities: Students are periodically taken for industrial visits to biotechnology and pharma companies to gain knowledge and get good exposure at an industrial level. Students are encouraged to undergo in-plant training, complete a minor project, understand the paper writing process, and participate in various national and international conferences.

B.Tech Biotechnology

Obiectives

The major thrust of the department includes molecular biology, industrial biotechnology, plant biotechnology, animal biotechnology, bioprocess technology, and downstream processing.

Career options

Biotechnology is a field that comprises of a number of disciplines. There is greater demand for biotechnical experts in the industry, biotechnology companies, and pharmaceutical sectors. The following are areas where biotechnological techniques are used:

- Agriculture
- Animal husbandry
- Genetic engineering
- Healthcare
- Medicine
- Industrial research

Students who excel at specialising in different sub-disciplines can find jobs in private and public sector undertakings. Many recruiters include companies engaged in processing and developing agricultural and biological products, bio-processing industries, pharmaceutical, and chemical industries.



Department of Biomedical Engineering

The Department of Biomedical Engineering aims to develop manpower in the modern health care industry. Biomedical engineering applies engineering principles to understand, modify, or control biological systems, as well as design and manufacture products that can assist in the diagnosis and treatment of patients. The course has been designed and developed for students who wish to work as an engineer in the health care sector. The course utilises engineering disciplines and design principles to create and develop instruments and equipment to be used in the medical stream. The syllabus is based on the CBSC with a greater emphasis on research and implementation to meet the requirements of health care companies. The department's highlights include industry-institute interactions, sponsored laboratories, faculty interaction with the outside world, 24/7 Apollo Shine Clinic, and a lot more. The department has healthy interactions with SRMC, Chennai, where hospital experts are invited to deliver lectures, conduct sponsored workshops, pursue consultation work to help the student community gain a comprehensive understanding in the field. Workshops are conducted frequently to help students gain hands-on training in hardware and software design. The department has conducted a national conference, staging a meeting ground for the experts in the biomedical industry with healthy interactions and an exchange of ideas with the faculty and students.

B.E Biomedical Engineering

Objectives

This programme focuses on educating students to understand the human body as an integrated system so that they can design better therapeutic strategies, devices, and diagnostics, to serve society. This can be done by conducting research, to catalyse interactions between biologists, physical scientists, and engineers to benefit medicine and human health and to create enabling technologies through innovative and evidence-based interventions and practices for the improvement of human health and health care.

Career options

There is demand for biomedical engineers as it is a growing technology and its applications in medical equipment and devices are vital. Employment of biomedical engineers is projected to grow 23 per cent from 2014 to 2024, much faster than other occupations. They work in designing prosthetic limbs and artificial organs, and regenerating tissue. They create drugs and pharmaceuticals, collect and analyse biological data, and design life-saving equipment. They work with universities, hospitals, labs, governments, within industries, and with regulatory agencies. They also work with doctors and patients seeking solutions to physical as well as physiological problems.





Certificate Course on Enterprise Resource Planning (ERP) using SAP

Almost all organisations are turning to some sort of Enterprise Resource Planning (ERP) package as a solution to their information management problems. SAP is a German company with business interests across the globe and is the market leader in applications and analytics. SAP is among the fastest growing companies. ERP using SAP modules are used by more than 11,700 companies around the world.

Queensland University of Technology, Australia operates a SAP University Competency Centre which hosts and provides educational institutions in the Asia-Pacific and Japan region with access to various SAP software applications. Vels University has become a SAP University Alliance Partner under SAP's University Alliances Program and is allowed to access and use SAP products hosted by QUT's University Competency Centre (UCC) for conducting a certificate course on ERP-SAP.

The objective of the certificate course on ERP using SAP is to enable the learner to understand the foundation, business functions, processes, data requirements, development and management of ERP systems for sales, marketing, accounting, finance, human resources, production, supply chain, and customer relationship management.

Students of Vels University will be taught the intricacies of ERP using SAP by well-qualified and trained faculty.

Undergoing the Certificate Course on ERP-SAP will empower students, thus ensuring quality placement and highly rewarding careers in aerospace and defence, automotive, banking, health care, consumer products, oil and gas, pharmaceuticals, telecommunications, wholesale distribution, and professional services. This golden facility is available only at Vels University under the 'University' system.

Dr C Dhanasekaran Co-Ordinator, Engineering



Dr C Dhanasekaran is the co-ordinator of engineering studies and has been teaching thermodynamics, and alternative fuels for internal combustion engines.

He has 24 years of experience and has served in various capacities as professor in reputed institutions and is presently serving as the co-ordinator in the faculty of Mechanical Engineering, Vels University, Chennai since 2008.

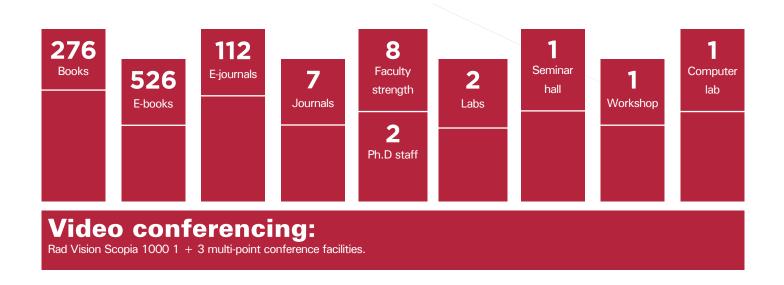
His expertise is in alternative fuels, controlling emissions from automobiles, and he has also published papers in international journals.

A postgraduate from the Collect from Anna University.



A postgraduate from the College of Engineering, Guindy campus, he obtained his Ph.D

School of Ocean Engineering





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cean Engineering courses such as Naval Architecture and Offshore Engineering, and Petroleum Engineering are applications of scientific method for the benefit of mankind. Courses at the School of Ocean Engineering at Vels University are designed according to the needs of industries related to ocean engineering. As such, Vels University has an obligation and commitment to provide education right from Diploma to Ph.D levels. The School of Ocean Engineering provides excellent education for students through teaching and learning, practice and training, research, and service to the community. In addition to the regular curriculum, students are taught communication skills and soft skills to make them fit for the industry. Students have to undergo an internship/ training in various ocean-related industries including shipyards, design offices, offshore companies, ports and harbours, and oil and gas industries to get acquainted with the field where they are likely to work. Apart from this, international/national conferences, seminars, workshops, and special lectures by eminent people will be arranged for the benefit of students.

The School of Ocean Engineering is associated with various professional bodies and organisations such as:

RINA, UK	Royal Institute of Naval Architects	
IMO	International Maritime Organisation	
SNAME	Society of Naval Architects and Marine	
	Engineers	
IAMU	International Association of Maritime	
	Universities	
IRS	Indian Register of Shipping	
NIO	National Institute of Oceanography, Goa	
NIOT	National Institute of Ocean Technology,	
	Chennai	
IPA	Indian Ports Association	
ICE	Institute of Civil Engineers	
SPE	Society of Petroleum Engineers	
OPEC	Organisation of Petroleum Exporting	
	Countries	

Programme

Diploma, B.Tech, and M.Tech Naval Architecture and **Offshore Engineering**

Objectives

These courses prepare naval architects and offshore engineers to meet the manpower demands of the industry by imparting knowledge in basic science subjects and common engineering subjects for the understanding of core subjects. The core subjects taught are basics of naval architecture, theory of ships, theory of structures, resistance and propulsion, strength of ships, wave hydro dynamics, marine design, ship production, fundamentals of offshore structures, advanced offshore engineering, elements of geotechnical engineering, structural design of ships and offshore structures, sea keeping and manoeuvring, marine engineering and marine electrical technology, finite element analysis, quality health safety and environmental management, production and project management, IMO codes, classification society rules, ship and offshore design calculation methods, and drawing and drafting both manually and in AutoCAD.

Apart from this, students have to undergo an internship/ training. They are also taught ship design and offshore design software such as Maxsurf, SACs, Moses, Marine AutoCAD, Ansys, etc. In addition, students have to perform practical experiments in labs, work on the ship-in-campus, and participate in workshops. Students will be fully-equipped to face any challenges in the industry.

Career options

A naval architect is a professional engineer responsible for the design, construction, and repair of ships, boats, other marine vessels and offshore structures, both civil and military. Modern engineering practice is essentially a team activity conducted by professional engineers in their respective fields. However, it is the naval architect who integrates their activities and takes ultimate responsibility for the overall project. This demanding leadership role requires managerial qualities and the ability to bring together the often conflicting demands of various professional engineering disciplines.

The naval architect must have an understanding of many branches of engineering and must be at the forefront of high technology areas. Naval architects require a creative, enquiring, and logical mind; the ability to communicate clearly orally and through writing, inside and outside the engineering profession; sound judgment and qualities of leadership. The education and training given to the naval architect is designed to develop these skills and qualities. Naval architects have a wide range of employment opportunities in India as well as abroad. They are involved in such a wide variety of work that it is difficult to categorise comprehensively.

However, the main areas are as follows:

Design, construction, maintenance and repairs, consultancy,

marketing, operations, regulations, surveying and overseeing, research and development, and education and training.

Employment opportunities exist in public sector undertakings such as Mazagon Dock Ltd. (Mumbai), Cochin Shipyard Ltd. (Kochi), Goa Shipyard Ltd. (Goa), Hindustan Shipyard Ltd. (Visakhapatnam), Garden Reach Ship Builders and Engineers Ltd (Kolkata), and private shipyards such as L&T Shipbuilding (Chennai), Pipavav Defence and Offshore Engineering Co. Ltd. (Gujarat), Chowgule Shipyard Ltd. (Goa), etc. Opportunities exist at foreign shipyards such as NKOM (Qatar), Sembawang Shipyard (Singapore), Jurang Shipyard (Singapore). Classification societies such as the Indian Register of Shipping, Lloyds Register of Shipping, and the American Bureau of Shipping also hire naval architects, as do R&D organisations such as Naval Ship Testing Laboratory at Visakhapatnam, the Naval Material Research Laboratory in Mumbai, National Institute of Ocean Technology in Chennai, etc. Diploma holders will assist naval architects in their day-to-day activities and will work as their subordinates.

Programme

Diploma and B.Tech – Petroleum Engineering

Objectives

This course prepares petroleum engineers to meet the manpower demands of the petroleum industry by imparting knowledge on basic science subjects and common engineering subjects. The core subjects taught are the principles of petroleum engineering, petroleum geosciences, reservoir rocks and fluids, mechanics of fluids and solids, electronics and instrumentation, reservoir engineering, drilling operations and equipment, natural gas engineering, oil and gas evaluation, production operations and equipment, heat and mass transfer, petroleum environmental studies, enhanced oil recovery, reservoir modelling and simulation, petrochemical and refining engineering, marine engineering, onshore and offshore engineering techniques, principles of management, hazard management, project management, production in chemical and oil-field, petroleum storage and transportation, and IT applications in the petroleum industry. In addition, students have to do practical work in the labs and in workshops. Students will be fully equipped to face any challenges in the petroleum industry.

Career options

The job of a petroleum engineer is to look for reserves of oil or natural gas. Once these resources are discovered, petroleum engineers work with geologists and other specialists to understand the geologic formation and properties of the rock containing the resource, determine the drilling methods to be used, and monitor drilling and production operations. They design equipment and

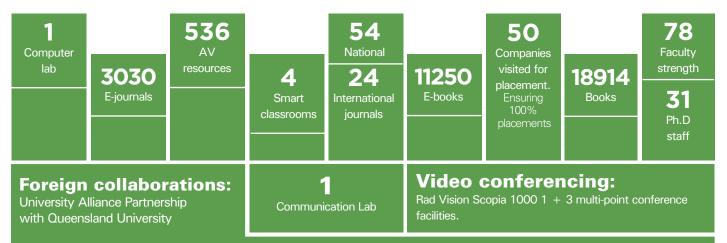
processes to achieve the maximum profitable recovery of oil and gas. Petroleum engineers apply their knowledge on reservoir simulation for optimising production. Similarly, they develop the latest machines and equipment that can be used in the extraction and processing of oil. After gaining a qualification in petroleum engineering, engineers work in the exploration and production of petroleum and other related products. Refining processes are crucial for oil products and employ petroleum engineers as well.

Career prospects are quite attractive in the petroleum sector as petroleum companies have great influence and offer attractive salaries. The demand for petroleum and petroleum products is only expected to increase and the increase would lead to the creation of new jobs. In fact, there is great demand for efficient petroleum engineers and almost every young graduate in petroleum engineering gets a job offer from oil and gas companies in India and overseas. Whereas private petroleum companies offer attractive salaries to petroleum engineers, government sector oil companies are not far behind in terms of paying attractive salaries.

Candidates with a qualification in petroleum engineering can find jobs at ONGC, Schlumberger, British Petroleum, Halliburton Services, Gujarat Gas Ltd, Shell, Gas Authority of India Ltd, Cairn Energy, Indian Oil Corporation, Essar Oil Ltd, Qatar Gas, Saudi Aramco, Total SA, Baker Hughes, Reliance Energy, etc. Sound communication skills in English would enhance chances of getting international exposure and a higher position within an organisation. Diploma holders will assist petroleum engineers in their day-to-day activities and will work as their subordinates.



School of Management Studies and Commerce



Indian collaborations: Super Auto Forge Ltd., SAP India Pvt. Ltd., CII Institute of Logistics, IIMM, IDBI, IBM, i-Nurture. MoUs signed: Super Auto Forge Ltd., SAP India Pvt. Ltd., CII, IIMM, IDBI, Campus Connect, ICT Academy of Tamil Nadu, GIGA VISTAS Private Ltd.



Dr K S Meenakshisundaram is a multifaceted seasoned professional with over 38 years of rich and dynamic experience in teaching, general management/personnel administration/training and development/HRM and facilities management across various industry verticals.

The follwing programmes are led by him: Ph.D (Management), Ph.D (Agri. Extensions), M.B.A. (HR), M.B.A (Marketing), M.Sc (Ag. Ext), PGDTD, PGDJMC, PGDBM, DST.

With hands-on experience in general administrative activities, personnel management, corporate policy implementation and facilities, he has handled several successful assignments.

Known for being result-oriented, dynamic, and a proponent of timely, accurate reporting, Dr Meenakshisundaram served as an expert member in the Cauvery Technical Cell – Water Dispute.

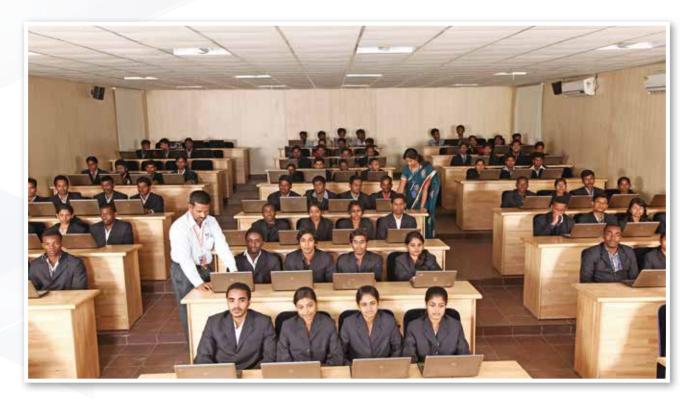
He is a member of the Board of Studies at Vels University and is a member of doctoral research committees at various organisations.

A member on the editorial board for more than 70 national and international journals, he has published more than 35 papers in international journals, and more than 12 papers in national journals, besides guiding Ph.D scholars in management.



Dr K S Meenakshisundaram Director, School of Management Studies

The School of Management Studies offers a two-year postgraduate programme in Business Administration (M.B.A) with various specialisations. The School is ranked as the sixth best B-School in Tamil Nadu and is ranked 46th in India by The Sunday Indian - ICMR Survey 2010.



Integrated MBA (5 Years)

The five-year integrated M.B.A programme can be pursued by candidates after the completion of twelfth standard. The objective of the programme is to build and groom students to get entrylevel managerial positions in manufacturing/service-based organisations with good communication and business knowledge. The programme will focus on preparing students to be a "Top Notch Management Professional" who can take up creative and ethical leadership challenges in the global market through intensive training for developing the overall personality of the student. The course comprises of presentations, internships, industrial visits, guest lectures, and club activities. In short, the five-year integrated programme intends to provide overall development of the student which in turn results in employment. The programme is offered on a "modular basis" with flexibility. If a student completes five years successfully, they will be awarded an M.B.A. Exiting the course at the end of the second year leads to a Diploma in Business Management, while exiting at the end of the third year leads to a B.B.A. A student that completes the fourth year will be awarded a Postgraduate Diploma in Business Management. Students who exit the programme early can rejoin the class within three years of exiting.

Eligibility

+2 / Above 50 per cent marks / Any specialisation (Science, Commerce, Arts). The programme offers additional personality development courses in communication skills, presentation skills, and leadership.

Membership details

The School of Management Studies is an associate of various professional bodies and associations. It has an institutional membership in the following organisations:

- Confederation of Indian Industries (CII)
- Madras Management Association (MMA)
- Economic Times Club
- INFOSYS: Campus Connect
- ICT Academy of Tamil Nadu

Industrial visits and industrial tours

These are organised periodically. Students experience the actual functioning of organisations. The learning from these visits makes them ready to face various organisational challenges.

The Teaching-Learning Process

The teaching-learning process at the institute is a novel one, concurrent with the latest technological know-how and adoptions. Thus the teaching-learning sessions are deemed a rich

experience for students as well as for the teachers of the institute. The sessions are well-supported by group discussions (GDs), case analysis, paper presentations, video deliberations, seminars, management games, business diplomacy, role-playing, in-basket exercises, industry quizzes, and so forth. Faculty members follow a well-defined plan and have regimented teaching methods. Every student and staff is given a laptop and the teaching is done with the help of PowerPoint using LCD projectors. Classrooms are equipped with a Wi-Fi connection. The teaching-learning process also includes guest lectures and industrial visits.

Guest lectures

Guest lectures are organised in every domain of management. Industry experts are invited every fortnight to share their experiences with the students.

Co-curriculum

The syllabus will be prescribed by Vels University's Board of Studies. The university has also laid stress on value-add programmes and activities for the development of students. This includes conducting seminars, workshops, paper presentations, creating business plans, quizzes, video screening, management games, and so forth.

IPR projects

SOMS has an IPR cell and has worked on an R&D project titled, "Students Database, Possible Conversion to patents and ToIs and SME's". The estimated cost of the project is ₹71.44 lakh for a period of one year w.e.f 01.08.09 to 31.07.10 from the Department of Information Technology, Patent and IPR Division, R&D (IT) group, Government of India, New Delhi.

Special placement training

Students on the M.B.A programme are given special training to enrich their soft skills and also to equip them to face interviews. Interview skill training is given by the Face Academy for the 2016-2018 batches of students. There is also an in-house training module now. The School has also entered into an MoU with GIGA VISTAS for language training.

Career development programmes

Career development programmes are an inclusive part of the curriculum. Students are motivated to upgrade their skills and personality on a customised basis. Students are trained in analytical skills, conceptual skills, human skills, leadership skills, communication skills, presentations skills, adaptability skills, interview and interpersonal skills, and other personality improvement skills. Apart from the above, the students are motivated to advance and update indispensable knowledge on various issues including the most important current affairs. The faculty helps to push students towards a winning career. Students have to undertake project work in an organisation of repute and submit three copies of their dissertation.

Programme

M.B.A (Integrated 5-year, after +2)

Objectives

The aim is to offer an innovative course to groom students after their higher secondary education, and inculcate management principles, thoughts, theories, and practices. This is a studentfriendly and flexible programme leading to a Diploma in Business Management at the end of the second year, Bachelor of Business Management at the end of third year, and an M.B.A at the end of the fifth year. An aim is to provide global exposure to students in current trends and developments in management and to create sustainable competitive advantage for businesses.

Career options

A wide scope of careers in various specialisations is offered in departments like finance, marketing, HR, operations, systems, logistics, and supply chain. Students are equipped with foreign language skills and exclusively drafted into the personality development programme to shine in production or services like ITES, banking, retailing, automobile, hospitality, airlines, public services, financial services, NGOs, pharmaceuticals, online businesses, etc.

M.B.A

Objectives

The programme is meant to develop a sound understanding of the key functions in management, in addition to a wide range of management skills and techniques for creative thinking. The course will also train students in problem solving and decisionmaking, provide an international perspective on business and management activities, and provide experience in interpersonal skills through group work and team building activities.

Career options

Careers are available as functional managers and executives in various companies engaged in manufacturing, media, FMCG, insurance, banking, event management, financial services, telecom, IT, hospitality, advertisement, tourism, data analytics, and others.

Finance

Objectives

The course will provide a sound understanding of the theories and application of financial management, money and capital markets, forex markets, international finance, project management, and mergers and acquisitions.

Career options

Jobs can be found as stock market and investment consultants, financial analysts, and as controllers/advisors in banks, financial institutions, financial service firms, and investment firms.

HR

Obiectives

The course objective is for students to acquire sufficient knowledge, insights, and understanding of the interdisciplinary areas of managing human resources productively in an organisation. The programme helps students in attaining conceptual and practical understanding of the various human resource management techniques, practice, motivation, and skills for managing and developing people as productive assets in the organisation.

Career options

Career options as HR recruiters, executive training and labour relations managers, and as HR specialists in diverse businesses, government and non-government organisations are available.

Marketing

Objectives

The programme aims to develop a basic understanding of core concepts in marketing and sales, customer support services, and CRM. This includes brand management, marketing research feasibility studies, and decision making in strategic areas of marketing.

Career options

There are jobs as marketing managers, executive market research analysts, brand/advertising manager, corporate/sales communication executives.

Operations Management

Objectives

Operations Management deals with the design and management of product processes, services and supply chain. It considers the acquisition, development, and utilisation of resources that firms need to deliver the goods and service their clients require.

Career options

An M.B.A or Master's in Operations Management is very good preparation to start at a higher level in the management chain. Operations management offers excellent career potential in the short- and long-term. It is unlikely, however, that you will be able to come into a position of significant authority immediately out of school. Movement in an operations function can be very rapid provided performance is strong.

Systems Management

Objectives

The Systems Management programme includes training and systems deportment of organisations, business development, systems consultancy, account management, and sales and marketing. Candidates are further trained to develop enterprise resource planning solutions such as automating attendance, punching, putting daily sales, developing enterprise resources, planning solutions, and the distribution of data online.

Career options

Candidates holding an M.B.A with a sound understanding of business concepts and system management are seen as ideal for the job of a project manager in software development activities. They are responsible for developing an online network with company distributors across the country. They can be also recruited to IT firms for the post of project managers, systems analysts, and supporting experts.

M.B.A (Logistics and **Shipping Management**)

Objectives

The objective is to impart knowledge and practical exposure on handling activities related to logistics (inbound and outbound), and shipping such as inventory, purchasing, transport, warehousing, documentation, stevedoring, linear trade, port agency, and supply chain issues. Regular industrial visits, internships, and placement assistance are also offered. Participation by well-chosen faculty from the industry is a highlight of this course.

Career options

An array of careers are available in logistics advisory agencies, haulage companies, multinational transport companies, shipping agencies, shipping companies, logistics service providers, and airport ancillary service providers as executives and managers.

M.B.A (Logistics and Supply **Chain Management**)

Objectives

The course teaches students to ensure quality products and material arrive on-time and at low cost to the end-user.

Career options

Career opportunities are available wherever the flow of materials, funds, or information happens. Supply Chain Management is the next Information Technology (IT) boom in India and across the globe according to experts with jobs at the level of managers and executives being offered.

M.B.A Tourism and Hospitality Management

Obiectives

Tourism and Hospitality is a two-year multidisciplinary course of study with the purpose of preparing people with the expertise, commitment, and skills in heritage, cultural, medical, business, sports tourism, and hospitality management. This course helps to develop a basic understanding on core concepts of tourism and medicare.

Career options

An M.B.A in Tourism and Hospitality Management provides different careers opportunities like restaurant managers, tour guides, travel guides, operational staff in any type of leisure or travel-related industry, as travel management consultants and event managers.



Obiectives

The course aims to provide candidates with the expertise to join a technically sophisticated workforce as successful, practising business managers on business analytics and big data. It is meant to give relevant theoretical and practical knowledge to understand business analytics solutions and highlight key capabilities of big data and business analytics. An understanding of core technical concepts related to business intelligence, big data analytics along with Hadoop Architecture and many more, is also provided.

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Use cutting edge analytical tools to find, interpret, and analyse business data and align technology to the needs of the business and interpret the outcome. Students could also pursue further studies in business, or other professional fields.

Career options

Careers as financial analysts, business analysts, industry experts, project managers, data analysts, big data analysts, as well as data warehousing experts, business intelligence experts, B.A architecture, and data mining experts are available.

M.B.A Part-time (3-year)

This MBA programme is offered for working professionals who have a minimum 2 years of experience in addition to education in any degree $(10+2/3 \text{ and } \frac{3}{4})$ who are currently working.

Objectives

The programme intends to develop a sound understanding of key functions in management, a wide range of management skills, and techniques for creative thinking. Additionally, problem solving and decision-making skills, an international perspective on business and management activities, and experience in interpersonal skills through group work and team building activities is also provided. The main aim of this programme is to give exposure to candidates from industries with the latest developments in various research studies and case studies that will enhance their ability to perform with confidence. This will further help them to grow to the next level and excel in their career.

Career options

A wide range of careers in various industries are offered such as finance, HR, marketing, systems operations, logistics and supply chain, shipping, production, and business analytics.

Department of Business Administration

The Department of Business Administration belongs to the School of Management Studies. It is a vibrant department, which dates back to the starting of Vels College of Science in the year 2003. The department abounds with qualified faculty members possessing a Ph.D, SET, and NET degrees. Students learn and develop various skills such as leadership skills, innovative skills, managerial skills, technical skills, analytical skills, and entrepreneurial skills. This training is provided through various seminars, conferences, group discussions, industry interactions, guest lectures, industrial visits, internships, and group projects. 100 per cent of our students are placed at top companies. Consequently, the goal of our department is generating and

cultivating SMART managers, QUALITY leaders, and YOUNG entrepreneurs for the future of India. This department and the university are contributing towards the development of our country, i.e. for the future and the vision of India 2020.

HIGHLIGHTS:

- A 100 per cent placement for students
- Students receive a merit scholarship that is offered by the management.
- Involvement in sports and cultural activities by students.
- Service-oriented activities in NSS and YRC are best practices at Vels
- "Cultural integration" in the classroom provides added value. •
- Students actively participate in various activities like institutionindustry interactions, internships, projects, guest lectures, seminars, conferences, industrial visits, and other training programmes like placement training, soft skills development training, competitive exams coaching training, personality development classes, and Yoga training programmes.
- Students bring goodwill to the department and the university due to outstanding performance in programmes conducted by various institutions.
- One of the most important assets is our alumni who are in top authoritative and commendable positions.
- They represent the notable "BRAND OF VELS."

Programme

B.B.A

Objectives

To enable students to understand the dynamics of the business world and the basics of diverse subjects such as marketing, finance, HRM, general principles of management, economics, business law, fundamentals of computers, and the honing of communication and interpersonal skills for better business decisions. Group projects for industrial exposure, career guidance, and entrepreneurial programmes are available to upgrade the skill level.

Career options

The course will prepare graduates to work in diverse business organisations operating in finance, accounting, hospitality, retailing, wholesaling and manufacturing, including the operation and management of self -usinesses. It also prepares students to take up higher studies in management in India and aboard.

Department of Commerce

The department has highly qualified and experienced faculty. Over the years, the department has introduced many innovative subjects in the B.Com course to make it more practical and job-oriented. A proposal has been put forward to introduce industrial visits during the fourth semester so that students can gain hands-on experience.

B.Com (General)

Objectives

The programme aims to provide knowledge and skills in the core concepts of all areas of commerce and business. Efforts are taken to equip students and make them employable in different sectors of trade and commerce in areas of market research, marketing, CRM, brand management, business law, business communication, finance, cost accounting, management accounting, and other corporate law positions.

Career options

Students are eligible to join professional courses like Chartered Accounting, company secretary-ship, law, brand management, and event management. Students can enter these areas of corporate entities with ease after becoming professionals.

B.Com (Accounting and Finance)

Objectives

The course aims to develop comprehensive professional skills that are required for a Commerce graduate. The curriculum is designed so as to inculcate practical orientation, basic accounting, corporate law, business ethics, quantitative skills, and computeraided programmes.

Career options

A degree in B.Com (Professional) would create greater interest in studying CA, ICA, and ACS. Becoming entrepreneurs in the own right as well as high-end professionals in corporate entities and software companies is an added prospect of studying this course.

B.Com (Computer Applications)

Objectives

This programme aims to widen the understanding of basic concepts in commerce, financial accounting, cost and management accounting, the general principles of management accounting, the general principles of management, marketing, finance, computer languages, software and its applications,

and other trade and corporate law roles besides making them computer savvy.

Career options

The curriculum imparted during the three-year course makes students competent enough to take up any job in this arena today. As such, the course has opened the floodgates in the areas of software, computers, and other core industries in India and abroad.

B.Com (General) (For Hearing Impaired)

Objectives

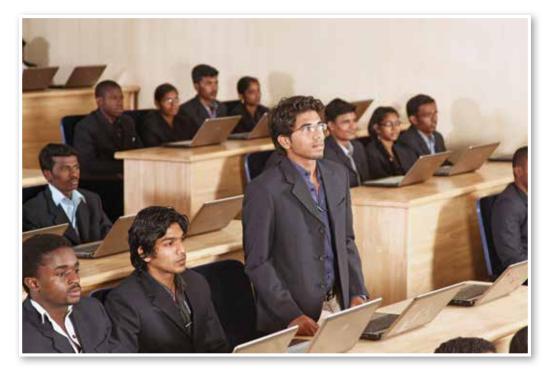
This course aims to educate students with disabilities. It focuses on obtaining knowledge and basic concepts in visualised accounting, e-banking, online trading including business law, taxation, costing, management accounting, entrepreneurship development for the hearing impaired, etc.

Career options

Hearing impaired students can get employed or be self-employed in the fields of online trading, e-banking, taxation, agency-related jobs, etc. These are major thrust areas for carrier opportunities and employment globally. The programme also aims to enhance knowledge and develop skills on par with other students.

Department of Economics

The Department of Economics began with the objective to enrich youngsters academically by means of imparting knowledge



with theories and techniques of economics, in order to attain sustainable growth in the Indian economy. Most state and central government organisations prefer to hire an undergraduate in economics as current recruitment examinations include a larger number of multiple choice questions from economics, business, current affairs, English, mathematics, and statistics disciplines. The Department of Economics offers these subjects in its threeyear undergraduate course. The eligibility for admission for B.A Economics is 10 + 2 or an equivalent course. The department has highly-qualified staff members and is well-equipped with the latest computer systems and internet facilities along with a Wi-Fi connection.

B.A Economics

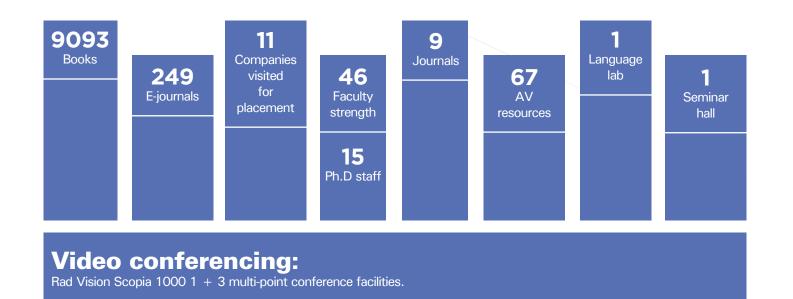
Objectives

The course has been designed to make students easily employable. The course includes all the topics of economics such as microeconomics, macroeconomics, Indian economy, state economy, history of economic thought, international economics, agricultural economics, industrial economics, labour economics, services marketing, fiscal economics, monetary economics, econometrics, and statistics along with English and other languages (Tamil, Hindi, or French). The main aim is to achieve a holistic and an all-round development.

Career options

Students of the Economics Department will be employable in all government departments (IES, IAS, IPS, and IRS, IFS, planning commission, and economic analyst) and also as entrepreneurs. They will have ample employment opportunities in the service sector and have opportunities to pursue higher education abroad.

School of Languages



Prof Dr P Mahalingam obtained his Ph.D in 1991 from the International Institute of Tamil Studies, Chennai after his higher studies at Pachaiyappa's College.

He has served for more than 30 years in various government colleges in Tamil Nadu and at Presidency College (autonomous) for 20 years

Besides being the Head of the Department of Tamil for postgraduates and research students at Presidency College for six years, he held several administrative positions in his career. He is a renowned Professor and Dean of Languages.

He was the Chairman and member of the Board of Studies at various universities and autonomous colleges in Tamil Nadu, and has guided over 50 M.Phil students and 24 Ph.D scholars.

Having authored more than 20 books in Tamil, he has published and presented over 60 research papers in international, national and state conferences. He served with distinction for three years as the NSS Co-ordinator and cultural co-ordinator of the University of Madras.

His great interest is in the propagation of Tamil Literature through television, radio, journals, etc.

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Prof Dr P Mahalingam Dean i/c, Student Affairs and Director, Indian Languages



The School of Languages plays a vital role in the curriculum design and development at VISTAS. It provides ample opportunities L for undergraduate students of all disciplines to hone their communication skills and to develop positive personality traits. The main objective of this School is to complement the core skills offered by various disciplines at VISTAS by adequately equipping students with effective communication skills and soft skills that are essential to ensure a bright future in today's highly competitive job market. Further, this integral division of VISTAS gives utmost importance to the teaching of life skills by heightening their language competency and literacy sensibility in various languages. This School plays a crucial role in training young learners to develop their co-curricular skills. This is made possible by dedicated members of the faculty, innovative programmes, and more than adequate library resources. Personalised coaching and remedial classes for slow learners outside working hours are hallmarks of this department.

The School of Languages comprises the Departments of English, Tamil, Hindi, and French to provide a wide array of choices to students when it comes to the selection of a second language.

Department of English

The department has a team of highly talented and wellexperienced faculty. It offers various courses in English ranging from Degree to Ph.D programmes. It has a spacious conference hall equipped with audio-visual and internet facilities. The library in the department has 7,000 books, 25 periodicals, and various online resources. This department's USP includes dedicated teaching, seminars, group discussions, and special classes for slow learners outside working hours.

B.A English

Objectives

The course provides a thorough knowledge of the basics of the English language and literature. Spread over six semesters, the syllabus aims at familiarising students with important aspects of all genres of English literature from the ancient to the modern. New topics in literary studies, Indian writing, English literature, translation, and American literature are also included.

Career options

The B.A English course has great job potential as it provides ample job opportunities and is also a gateway to many postgraduate programmes. Candidates can successfully clear Bank, TNPSC, and UPSC examinations, or can pursue the M.A English course, which is in demand in the current job market. Students can choose from a variety of job options including teaching, content writing, editing, and BPO services, not to mention the traditional career opportunities that have always been available to B.A English students.

M.A English

Obiectives

This programme contributes to a thorough knowledge of English Literature comprising the literary work of English-speaking countries and countries where English is an official language. Linguistics, history of the English language, contemporary literature, and literature in translations are the main thrust areas. The objective is to equip the students with facile expressive power and knowledge in world literature.

Career options

An M.A English degree-holder with good expressive power is a sure fit in any organisation. Opportunities are available in the field of journalism, software, colleges, and other companies. Further, the qualified can confidently take IAS, IPS, and other similar examinations besides those relating to banking.

Department of Tamil

The Department of Tamil offers a Foundation Course in Tamil that is common to all undergraduate students. The department offers full-time and part-time M.Phil and Ph.D programmes. The Foundation Course in Tamil is a comprehensive two-semester course for students of B.Sc Visual Communication, Bachelor of Business, Bachelor of Commerce, and Bachelor of Computer Applications. The Foundation Course is also offered as a four-semester course for students of B.Sc Biotechnology and B.Sc Computer Science. Students who have taken Tamil as their second language at the junior college level are eligible to take this course. All members of this department are well experienced and hold Ph.Ds in various aspects of the Tamil language and literature and have also published many papers and authored about 35 books.

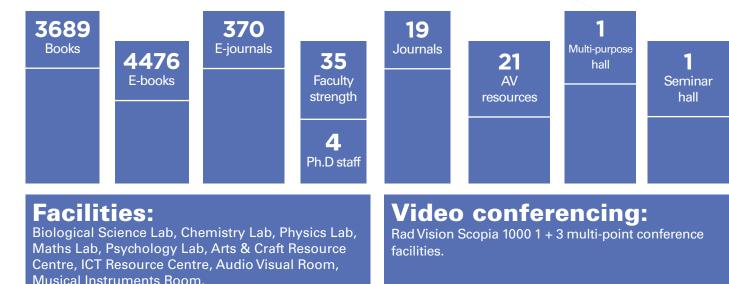
Department of Hindi

The Department of Hindi offers a Foundation Course at the undergraduate level and a Ph.D programme in Hindi. The Foundation Course in Hindi is meant for undergraduate students who have taken Hindi as their second language at the high school level. The well-designed curriculum includes masterpieces of Hindi literature, which is meant to motivate students to improve their communicative competency and creative ability in Hindi. The department is headed by an experienced teacher.

Department of French

The Department of French offers a Foundation Course in French for undergraduates who opt for it. The curriculum includes all important aspects of the French language and literature. Students who have taken French at the junior college level are eligible to take this course at the degree level. The department, headed by a teacher with significant experience, also offers a Ph.D programme in French.





Musical Instruments Room.

Dr D Kumaran Dean, School of Education



Prof Dr D Kumaran is a renowned researcher, an inspiring teacher, and an adept administrator.

An ardent speaker with a strong passion for teaching and research, he worked with the University of Madras as reader, professor and Head of the Department of Education. He was the President Faculty of Teaching till his retirement in 2011.

Helping to coach 23 Ph.D and 36 M.Phil candidates, and having published 23 research papers in various refereed journals, he has written seven books for Tamil Nadu Text Book Corporation, Institute of Correspondence Education, University of Madras, and the Tamil Nadu State Council for Higher Education (TANSCHE).

He was the chairman/member of the Board of Studies of several universities in South India and was nominated as the Member-Syndicate of Manonmaniam Sundaranar University by the Governor-Chancellor of Tamil Nadu Universities from January 12, 2012 to January 11, 2015.

His association with several academic bodies of universities in South India, autonomous colleges, Regional Institutes of Education, showcase his expertise, as does his connection to the Tamil Nadu School Education Department, TANSCHE, and various national level bodies like NCTE, NCERT, ICSSR, National Testing Service (NTS), NAAC, etc. Vels University's School of Education began in the year 2015 and has a clear vision of promoting excellence in teacher education at different levels including B.Ed, M.Ed, M.Phil, Ph.D, post-doctoral, and need-based certificate/diploma courses. To start with, the School of Education has initiated two courses: a two-year B.Ed programme and a four-year integrated B.Sc B.Ed programme, after getting formal recognition and approval from the National Council for Teacher Education (NCTE).

Both these programmes had begun in the academic year 2016-17. The course structure and curriculum for the B.Ed programme (two-year) includes all the optional subjects in pedagogy, while the B.Sc B.Ed course (four-year integrated) comprises of B.Sc (PCM – Physics, Chemistry and Mathematics), (BCZ – Botany, Chemistry and Zoology) as the main subjects and corresponding B.Ed pedagogy courses. The courses follow the Choice Based Credit System (CBCS) as per UGC regulations. These courses are taught by qualified faculty who have extensive exposure to their respective specialisations. More than adequate infrastructure facilities have been provided to create a conducive academic ambience for students.



Integrated B.Sc B.Ed (Four-year course)

The four-year integrated course in B.Sc B.Ed/B.A B.Ed was instituted for the first time in India by the National Council of Educational Research & Training (NCERT) in its five Regional Institutes of Education (RIE) from the academic year 1965-1966. Vels University is the first in Tamil Nadu to start this integrated B.Sc B.Ed course after obtaining approval from the National Council for Teacher Education (NCTE).

This programme also ensures opportunities for students to pursue postgraduate education such as an M.Sc/M.Ed, M.Phil, and Ph.D in their own parent discipline or in a professional discipline under the education umbrella. As per UGC guidelines, the first part of the integrated degree programme encompasses

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subjects like mathematics, physics, chemistry, botany, and zoology under the umbrella of sciences. The first part of the B.Sc B.Ed degree has a special feature that provides opportunities to students to specialise in three science subjects as a major. In other words, this integrated B.Sc course is an all-major programme. The same structure is available for students specialising in Physics, Chemistry, and Mathematics prescribed in the B.Sc B.Ed programme (PCM). Similarly, the course content related to Botany, Chemistry, and Zoology prescribed in the B.Sc B.Ed programme (BCZ) is equivalent to majoring in the above mentioned subjects at Vels University or any other Tamil Nadubased university. The course content related to pedagogy in the B.Sc B.Ed programme is equivalent to a B.Ed programme at Vels University and the Tamil Nadu Teacher Education University.

Programme

B.Sc B.Ed

Objectives

The programme will enable students to:

- Promote capabilities for inculcating national values and goals as mentioned in the Indian Constitution,
- Act as agents of modernisation and social change,
- Promote social cohesion, international understanding and protection of Human Rights and the Rights of Children,
- Acquire and use competencies and skills needed to be an effective teacher,
- Be sensitive about emerging issues such as environment, population, gender equality, legal issues, literacy, etc.,
- Inculcate rational thinking and scientific temperament among students,
- Develop critical awareness about the social realities among students,
- Use managerial and organisation skills.

Career options

The course provides multiple career opportunities such as teaching in schools, developmental planning and administration, and the framing of curriculum for different programmes. It also widens career prospects in non-governmental organisations, in clinical psychology centres, child clinics, sports centres, and yoga centres.

B.Ed (Two-year course)

The conventional B.Ed course has four components: (a) Perspectives in Education Studies (PES), (b) Pedagogic and Allied Studies (PAS), (c) Professional Competency Studies (PCS), and (d) Field Experience Studies (FES). The course has been planned meticulously to provide students with a rich experience in these areas and make them professionally competent so as to deliver the subject matter in an efficient and effective manner.

B.Ed

Objectives

The course aim is to impart teacher training to students using modern pedagogy and scientific sources. The programme is meant to nurture, motivate, and empower future teachers to act as role models in teaching-learning situations. The programme should help in developing confidence, effective communication skills, problem-solving ability, and managerial skill, coupled with deep insights into the subject. The training given is an amalgamation of classroom teaching, practical experience, educational tours, community need-based projects, seminars, and workshops.

Career options

The programme will provide multiple career options including teaching in schools, developmental planning and administration, and the development of curriculum for different courses. This also widens career prospects in non-governmental organisations, clinical psychology centres, child clinics, sports centres, and yoga centres.

Certificate/ Diploma Course in Research Data Analysis:

The School of Education has also planned to institute a Research Aid Centre (RAC) to help researchers in Humanities, Social and Behavioural Sciences to specialise in:

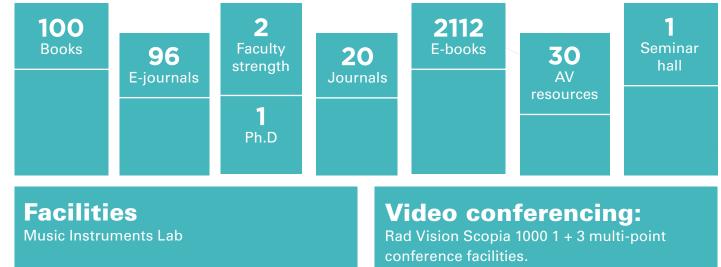
(a) Research Methodology,

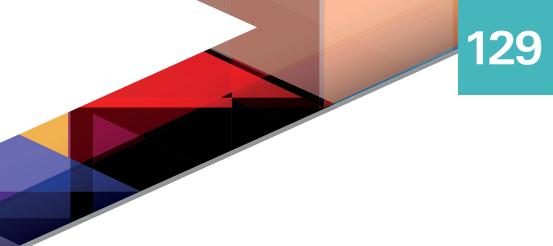
(b) Statistical Techniques, and

(c) Research Data Analysis using SPSS and other related software.

At the RAC, full-time and part-time (Summer Sequential and Weekend) Certificate and Diploma courses will be offered. These programmes are designed to empower the researcher to carry out research work with complete confidence.







School of Music & **Fine Arts**

Dr Premeela Gurumurthy

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Dean, School of Music & Fine Arts



Prof Premeela Gurumurthy has completed her M.A (Indian Philosophy), M.A (Indian Music), and Ph.D from the University of Madras.

Having joined as a lecturer in 1984, she then retired as Professor and Head of Department of Indian Music, and as the Chairperson and President of the School of Fine and Performing Arts in June 2015.

She served as a syndicate member from 2007-2010, was nominated by the Governor, and was a member of the NAAC team to SNDT College for Women in Mumbai, the Khairagarh University, and Hindustani Music Institution at Gadag, Karnataka.

Dr Premeela Gurumurthy has authored five books and around 75 research papers.

After her retirement in June 2015, she served as the Head of the Department of Art and Culture at the AMRITHA University at Coimbatore and Trivandrum.

Her concert performances and lecture-demonstrations include touring the USA, UK, Australia, New Zealand, Singapore, Sri Lanka, Malaysia, Muscat, Mauritius, and Hong Kong.

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usic is a medium through which people can express thoughts and feelings. The three focus areas of music namely; Wocal Music, Instrumental Music, and Dance, vary according to aesthetics and people. The School of Music and Fine Arts endeavours to be the vanguard of providing the highest calibre music education that would help students take their first steps or take their career in music to higher levels.

The curriculum is designed to open avenues and to assimilate knowledge about the latest trends in various disciplines. The main aim remains to train professionals with a sense of fulfilment and a feeling for contribution to the betterment of society, and their own selves. Programmes offered by the School of Music and Fine Arts combine academic rigour, personal development, life skills, and career opportunities.

The courses strive to provide students with the ideal learning environment, a careful balance of both structure and creativity. Performing opportunities, internships, industry attachments, excursions to concerts and recording studios, and master classes by visiting artists are just some of the activities organised for students to learn beyond the classroom. In addition, our recording studio, classrooms, and computer labs are fitted with top-notch recording equipment and instruments and amplifiers, along with the latest software used today. These facilities are open to all students for project work, assignments, general practice, and rehearsals, and even for jamming sessions.

The Vels University School of Music and Fine Arts offers M.Phils and Ph.Ds in South Indian Music and Bharatanatyam along with interdisciplinary areas of ethnomusicology and the various styles in India.

The School provides a challenging academic programme in the form of training in traditional Indian classical music followed by teaching various genres of music from across the globe. Musical education at Vels University builds character and personality, preparing students to enter the music industry as performers, arrangers, songwriters, composers, producers, teachers, and more.

The School also offers regular Certificate/Diploma programmes (at primary, junior, and senior levels), undergraduate, and postgraduate courses in vocal music, dance, and instruments.

Courses offered by Lakshman Shruti:

Some courses are offered jointly in association Shruti, an outstanding performing musical troop

Degree courses (Three years)

- 1. B.A Music (Vocal)
- B.A Music (Instrumental Veena, Violin, Guitar, 2. Miruthangam, and Thavil)
- B.A Dance Bharatanatyam 3.

Eligibility: High school graduate, HSC or equivalent

Postgraduate courses (Two years)

- M.A Indian Music
- M.A Bharatanatyam 2.

Diploma courses (Two years)

- Vocal
- Veena 2
- Keyboard
- Bharatanatyam
- Miruthangam 5.

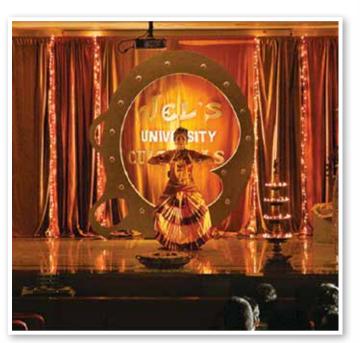
Eligibility: 10 years of formal education

Certificate programme (One year)

with Laksh	man
D.	
e)	

Vocal
Veena
Violin
Flute
Thavil
Keyboard

Eligibility: 8 to 10 years of formal education (Joint programme with Lakshman Shruti)





Department of Aviation

The Department of Aviation at Vels University combines an innovative education and training model with a curriculum based on industry trends and opportunities. The programme is offered in collaboration with The Madras Flying Club Ltd. The course has been carefully structured with the help of experts in the field of aviation from The Madras Flying Club Ltd.

The curriculum touches on all areas of the aviation industry, from flight design to business aspects. With our focus on industry partnerships, undergraduate students have access to real-world projects, networking opportunities, and up-to-date information that will make them desirable future employees and leaders.

The Indian aviation industry today is gradually undergoing changes. It is not just about core maintenance activities or flying operations, but a host of other allied services. Renowned aviation companies from overseas are seeking India as a joint venture destination to set up their allied business operations.



Highlights

The course has been carefully structured in consultation with

The curriculum covers all the aspects of aviation management and the pedagogy is supported by The Madras Flying Club Ltd., Flying Club Ltd.

German is also available.



Programmes

B.Sc Aviation - 6 Semesters

possession of the CPL licence.

For CPL Holders: Valid CPL (Commercial Pilot Licence).







Dr Dilshad Shaik is a gold medallist in M.L from Sri Venkateswara University and was awarded her Doctorate in Philosophy by Sri Padmavathi Mahila Visva Vidyalayam for her thesis titled "Hacking under the Information Technology Act, 2000-A Socio Legal Study."

Having been the principal at Sri R K M Law College, she has published several papers in various journals besides presenting at seminars and conferences.

She holds great experience as a and sensitisation programmes.

A trainer associate of UGC Capacity Building for Women Managers in Higher Education, she has served as a resource person for AP Judicial Academy in sensitisation programmes for junior civil judges and for district judges.

Dr Dilshad Shaik is a life member of the ISV.



Dr Dilshad Shaik Director, School of Law

She holds great experience as a resource person in various training programmes, workshops,

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E stablished in 2015, the School of Law is dedicated to providing students with practical legal skills and a spirit of service to the legal profession and the community. We offer high quality, innovative legal education with a strong commitment to social justice, interdisciplinary enquiry, and an international perspective. Our main objective is for students to gain practical experience that links learning with legal practice. Our school has designed many assessment tasks to help students develop group problem-solving, communication, and advocacy skills. We also prepare students for employment in a global legal economy by offering electives with an international focus. Our diverse student intake also contributes to a rich teaching and learning environment.

The School of Law comprises of qualified, experienced teaching faculty with expertise in their research areas such as cyber law, intellectual property law, international law and human rights, constitutional law, and corporate law. The faculty is renowned for their innovative student-friendly teaching methods and techniques. Infrastructure facilities include air-conditioned lecture halls with ICT resources for audio-visual teaching, a well-furnished moot court hall with a provision for desktops and laptops and access to Wi-Fi for judges and participants, a Legal Aid Clinic with modern facilities, a language lab, computer lab, a fully equipped seminar hall, central library with a large number of books, periodicals, All India Reporters, and back volumes where students can gain knowledge. All these develop confidence in a realistic setting, gain skills in critical analysis, research, teamwork, use of language and argument, and also the ability to work and learn independently. The School of Law as a part of its co-curricular activities includes Moot Court competitions, client counselling sessions, quiz contests, seminars, group discussions, extension lectures, and legal awareness camps. Our School of Law at present offers two programmes: a five-year B.A LL.B (Honours) and a three-year LL.B that facilitates aspiring students to choose their course according to the eligibility criteria formulated by the Bar Council of India.



Department of Legal Studies:

The Department of Legal Studies provides high quality advanced legal education. Its programmes are among the finest, enabling students to obtain a solid grounding in fundamental legal concepts in civil law and criminal law systems, and to develop unique skills in comparative analysis. Our students are encouraged to see complex legal and social problems in their broader context and seek solutions across disciplines. The Department of Legal Studies at Vels University provides excellence in teaching, research, and service relating to the law and the legal community. Dedicated to its students, the faculty delivers outstanding instruction at the undergraduate level incorporating learning, service, and inquiry. By actively developing meaningful partnerships, it provides exemplary service to the community.

Within our department are several dynamic programmes, staffed by outstanding faculty, each of whom is committed to providing our students with the best academic preparation and placement assistance possible. Its mission is to equip students with the skills to facilitate community engagements with academic, intellectual, professional, and social agencies and organisations, not only regionally, but also nationally and internationally. This includes organisations focused on human rights, poverty, domestic violence, children's rights, and advising.

Infrastructure and facilities

The School of Law provides state-of-the-art infrastructure to facilitate a sound learning experience for its students. It has an independent three-storey building consisting of 18 modern, spacious, smart classrooms with air-conditioners. The School of Law also possesses well-furnished and separate common rooms for boys and girls, an administrative office, a conference hall, a well-equipped computer lab with free internet connectivity and Wi-Fi, and a fully-functional library with a varied collection of books, journals, and other e-resources. The School of Law has also established a well-equipped legal aid clinic and language laboratory to enhance professional and communication skills of students.

The School of Law offers an intensive and dynamic study environment where learning is both substantive in depth, and vast in scope. The learning methodology is provided by diverse and dedicated faculty and includes innovative, practical, and field-oriented delivery methods, and learning strategies to comprehend and diagnose intricacies of various legal and other interdisciplinary issues including drafting, research, advocacy, interviewing, and negotiation skills. The faculty offer expertise in a breadth of interdisciplinary legal fields to enrich education and opportunities for our students.

Guest/Special lecturers

Established dignitaries in the field are invited as guest lecturers. Students at the School of Law become rigorous analytical thinkers thanks to the special lectures from eminent lawyers and academicians across the globe. Students learn from scholars and are trained by brilliant and dedicated lawyers in the finest set of clinical programmes in the country. A highlight of the School is with its constant effort to disseminate awareness by conducting various events.

Opportunities to gain experience in advocacy

The School of Law includes a robust training programme to provide all students with valuable training and experience by providing a valuable opportunity to hone both written and oral advocacy skills in this competitive field. Students get the opportunity to travel to competitions across India, so that they can further polish their research and advocacy skills. It also provides networking opportunities with professionals from diverse practice areas.

Mooting competitions

Moot Court is considered fundamental in a law student's life as it builds on talents that are useful in a court of law by inculcating the court culture and etiquette, and by sensitising various aspects of law among student advocates. The School of Law has always been committed to the pursuit of excellence and its command of academic vitality. Hence the department boasts of a high-tech moot court hall with audio-visual facilities.

Programme:

B.A LL.B (Hons.)

Objectives

The goal of this programme is to develop competent law professionals who have the finest legal skills and a strong sense of responsibility to serve society, and with high moral and ethical values.

Career options

A career in law includes positions such as law officers, legal advisors, and solicitors. Most law graduates become law professionals having independent set-ups. Law degree holders become eligible for appearing in judicial services as well as other competitive examinations.

An advocate, after practising for a specific amount of time, can also become a judge in a Sub-divisional Court, District Court, High Court or Supreme Court.

LL.B

Objectives

The aim of this programme is to equip students with a sound understanding of legal knowledge, to expose students to a wide range of disciplinary approaches to legal study, and to develop students' analytical and research skills, equipping them in their future careers.

Career options

A career in law has been a popular career option in India for a long time. Other than the regular options, there are an array of careers available such as corporate management, legal and judicial services, law firms, as tax and labour officers in MNCs and legal officers/legal advisors, teaching, working with NGOs or LPO.





Department of Vecic Astrology

A strology is an ancient subject of established importance in delineating future events of an individual in various aspects of life, particularly family, spousal relationships, sons, daughters, parents, brothers, sisters, family status, profession, loss and profits, fiscal status, and longevity.

Everyone in this modern world would like the pleasure of knowing what the future holds for them. Astrology serves as a tool for these people to learn about their future based on the science of space and time. It is the study of the planets and stars in relation to the Earth, and their effect on nature through the passage of time. According to Hindu mythology, the Lord Brahma has created the Universe and has been governing nature and time since creation.

The Vedas refer to Astrology as the "EYE OF THE VEDAS". It provides illumination into who we are and where we fit into the great cosmic plan of the Universe.

Zodiac is the path along which the Sun appears to move; an Ecliptic. Zodiac is an imaginary broad belt extending 90 degrees North and South from the Ecliptic. All other planets confine their lateral movements to this Zodiac path. The Zodiac comprises of 360 degrees and it is divided into 12 signs (houses). The Moon crosses the ecliptic at two points – the north point is known as Raagu and the south point is known as Kethu.

Astrology is connected with Karma Theory. If one does good deeds in the last birth, he or she enjoys good things in their current life. On the other hand, if we did bad things in our past life, then we come across difficulties during this lifespan. The astro chart (Jathagam) is known as "MAP OF ONE'S KARMA". It reveals the past, present, and future events of the owner of the astro chart.

Astrology is a gift to humanity from God to know one's karma. Astrologers predict peoples' karma and suggest ways to rescue one from the difficulties that may arise. Nowadays the importance of Astrology has rapidly increased as everyone wants to know the sequence of their life, thus knowledge of Astrology is very useful in the current world.

For this purpose, Vels University has begun the following courses:



Courses:

B.A Astrology - 3 years

M.A Astrology - 2 years

PG Diploma in Astrology - 1 year

Restricted admission to M.Phil Astrology (Regular) - 1.5 years

Restricted admission to Ph.D Astrology (Regular) - 3 years

Eligibility:

For B.A Astrology: 12th pass

For M.A Astrology: UG in Astrology

For PG Diploma in Astrology: UG in Astrology

For M.Phil Astrology: PG in Astrology

For Ph.D Astrology: M.Phil Astrology



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