



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)

School of Mechanical and Construction

Department of Mechanical Engineering

**Annual Report
2021-22**



FOUNDERS



Col. Prof. Vel. Dr. R. Rangarajan

Founder President

B.E.(Elec.), B.E.(Mech.), M.S.(Auto.), D.Sc.



Dr. Sagunthala Rangarajan

Foundress President

M.B.B.S.

FOREWORD



**Col. Prof. Vel. Dr. R. Rangarajan
Founder President**

**Dr. Sagunthala Rangarajan
Foundress President**

The Mechanical Engineering Department at Vel Tech is thriving in every way conceivable. One of the reasons for the Department's continued success is that it has never stayed on its laurels, but instead, it works tirelessly to preserve its leadership along with new trends and technology.

Vel Tech's achievements are the result of an uncompromising commitment to excellence, professionalism, creativity, and innovation. We believe that Vel Tech has sincerely dedicated its desire to make a beneficial impact on education and research.

We believe that this annual report will cover the foot print of the Department's events, accomplishments, and awards. It's worth noting that the Department has organized a number of events such as online conferences and Webinars.

We are happy to note that the Department works hard to improve student employability by conducting placement training sessions. We congratulate the students who have graduated this year and we encourage them to make a commitment to serve society and country.

We greet the Mechanical Engineering Department which has worked tirelessly to ensure success both in the Department level and in the Institution level.

FOREWORD



Mrs. R. Mahalakshmi

Chairperson & Managing Trustee

The Annual Report has always been a successful attempt in bringing out the achievement of the department and thus motivates the best of our young technocrats. I congratulate the effort taken by the Department of Mechanical Engineering for the publication of the Annual Report 2021 - 2022.

It is my pleasure to congratulate the students and the faculty members of Mechanical Engineering for the activities being carried out in the Department. The very purpose of this institute is to bring out the potential of each student and provide them proper guidance so that their potentials can be highly made in building them as Engineers, being capable of meeting any kind of challenge. I feel proud to convey my best wishes to the versatile Faculty crew behind this meritorious effort. The academic achievements of faculty members and students and the innovations occurring in the department take Vel Tech to reach its milestone.

Four years of engineering education at Vel Tech will earn students a degree and transform students' personalities, empowering them to lead a successful life.

FOREWORD



Prof. Dr. S. Salivahanan

Vice Chancellor

The annual report has got its relevance and importance in this technological era. It will create a platform for faculty members and students to share their creativity and innovative ideas. It will be helpful for their overall and individual development. I always believe that one must find the meaning of his life in his daily work. One can give his best only when he realizes that it does not just work, but something more than that which will improve many lives.

I am pleased to introduce this Annual report of the Department of Mechanical Engineering. This Annual Report 2021 - 2022 provides a panoramic view of the department's academic, research, co-curricular activities and achievements during an academic year. Our vision is to impart technical education and training of exemplary academic standards to our students. The Mechanical Engineering department has a rich tradition of pursuing academic excellence and providing a congenial environment for the overall personality development of students. I feel confident that the department is progressing in the right direction. I congratulate the faculty and staff for their hard work and wholehearted efforts to make the department the choicest destination for aspiring Mechanical engineers.

FOREWORD



Prof. Dr. S. Irudayaraj

Dean School of Mechanical and Construction

I am elated to release the Annual Report 2021-2022 of the Department of Mechanical Engineering, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology.

The Mechanical Engineering department holds the manifold distinction of being amongst the best when considering the current technical education status. It is great to find many winners and participants in co-curricular and extracurricular activities, which certainly prove that our faculty members and students are adequately equipped and possess the necessary skill-sets to bring such laurels to the department. I wish that this number may grow in the years to come.

It is my pleasure to congratulate the editorial board on this pleasant occasion of releasing the annual report. I am sure that publishing an Annual Report of this sort containing the achievements of the faculty members and wards will recognize them, and I wish them all the very best for future endeavours.

Table of Contents

Department Profile	1
Laboratory Facilities	4
Teaching Learning	18
Faculty Profile	22
Faculty Contribution	23
Research and Development	23
Projects proposal Submitted	24
Funded Projects	26
Patent	27
Consultancy	28
Journal Reviewer	29
Student Performance	
Profile	31
Graduation	32
MOOC courses	33
Student's Participation	34
Minor & Major Projects	47
Industry Institute Interaction	48
Events Organized	52

Vision, Mission & PEOs

Department of Mechanical Engineering



Vision

To be a Centre of Excellence for education and research in the field of Mechanical Engineering to meet the national as well as global challenges.

Mission

- M1:** To educate and enrich effective and responsible engineers for national as well as global requirements by providing quality education.
- M2:** To maintain vital State-of-the-Art Research facilities to provide its students and faculty with opportunities to create, interpret, apply and disseminate knowledge.
- M3:** To develop linkages with world-class organizations and educational institutions in India and abroad for excellence in teaching, industry and research.
- M4:** To cultivate and promote entrepreneurship using the industry and R&D facilities of the institution.

Program Educational Objectives (PEOs)

- PEO1:** Apply modern analytical, computational, simulation tools and techniques on engineering materials, thermal sciences, applied mechanics and manufacturing methods to address the global challenges faced in mechanical and allied engineering streams.
- PEO2:** Adapt new and recent techniques of engineering science and their applications to conceive, organize and develop the design of engineering systems.
- PEO3:** Work as an individual and in teams on multidisciplinary assignments in industries, research organizations and academic institutions both in national and global level through collaboration.
- PEO4:** Demonstrate techno-commercial skills such as research interest and entrepreneurial ability in students to cater the societal problems.

Program Outcomes & Program Specific Outcomes

Program Outcomes (POs)

- PO1:** Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems
- PO2:** Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3:** Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4:** Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5:** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- PO6:** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7:** Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8:** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9:** Individual and Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10:** Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11:** Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12:** Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcomes (POs)

- PSO1:** Apply their knowledge in the domains of design, manufacturing and thermal sciences to solve engineering problems using advanced technology.
- PSO2:** Engage professionally in industries or as entrepreneurs by applying innovative ideas in design and manufacturing using modern CAD/CAE/CAM tools.

1. Department Profile

The Department started in the year 2001, nurtures graduates who can meet the rapidly changing needs of the mechanical core industry which requires skilled Mechanical Engineers. This Program facilitates the students to be readily employable in Industries or to pursue their higher studies in elite Universities in India and abroad.

B.Tech.,	Mechanical Engineering
Specialization	Mechanical Engineering (AI & Robotics) Mechanical Engineering (Mechatronics)
Honors	Digital Manufacturing Computational Thermo fluids
Minor Specialization	Smart Manufacturing Energy Engineering
M.Tech.,	Metallurgical and Material science Industrial and Safety Engineering
Ph.D.,	Mechanical Engineering (Full & Part time)

Recognitions & Accreditation



B.Tech. Mechanical Specialization

B.Tech. Mechanical Engineering Specialization in Artificial Intelligence & Robotics



Preamble

Artificial Intelligence (AI) and Robotics cater to the needs of the manufacturing industry by providing industrial solutions for making production decisions smarter and instant. AI-enabled robots are growing beyond being the workhorses of manufacturing industries. Mechanical engineering coupled with AI technology contributes to the design of human-machine coordination, resulting in robotics, automation, and sensor technology. This specialization aims to equip the graduates with knowledge in AI and robotics, molding them for promising careers.



Outcome

- ✓ Integrate the concepts of AI with core values of Mechanical Engineering
- ✓ Apply AI tools for manufacturing needs
- ✓ Gain expertise in intelligent computing using AI
- ✓ Design and development of robotic arm using the integration of linkages with AI

B.Tech. Mechanical Specialization



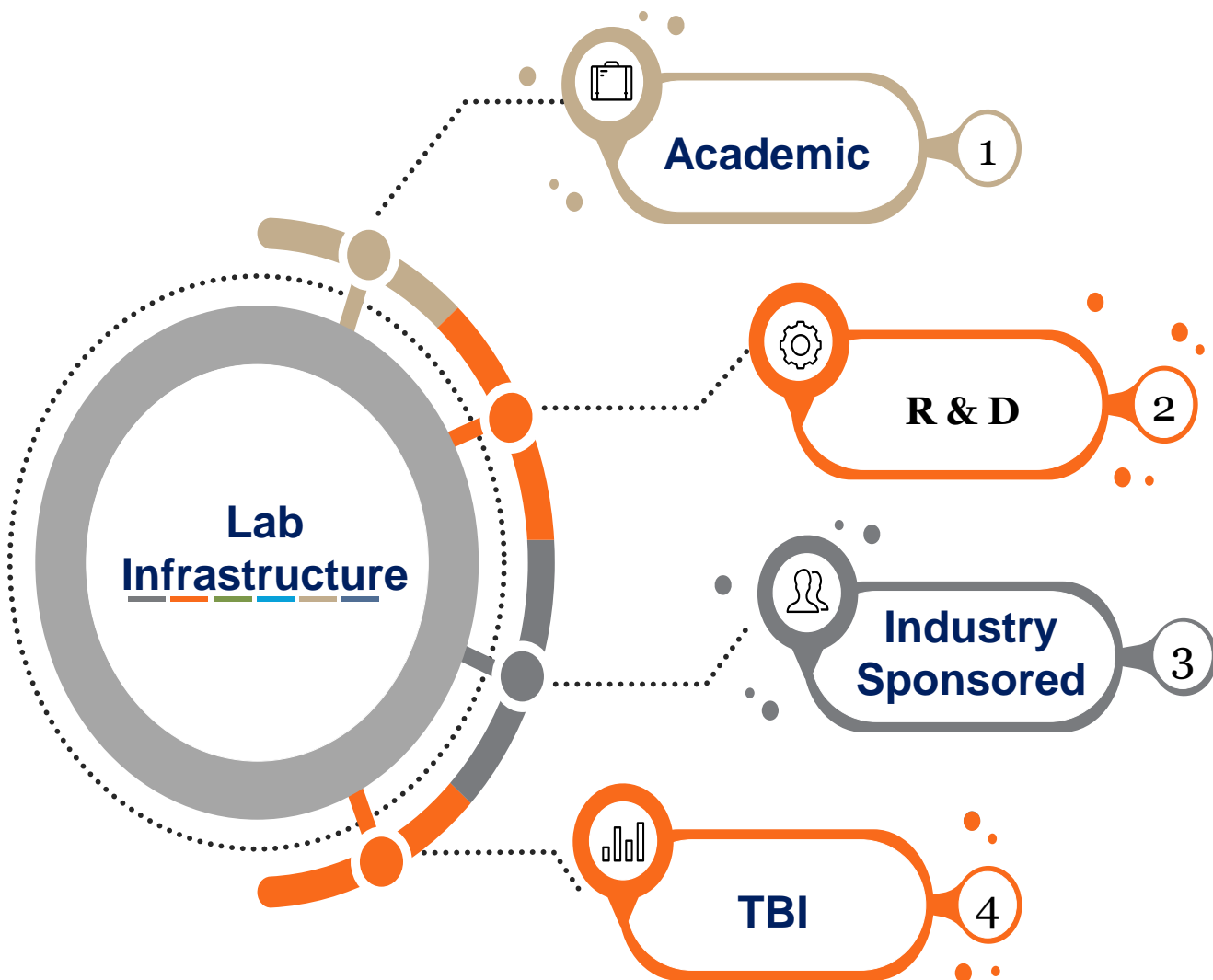
Career Opportunity

As AI and Robotics technologies develop, they are going to create a demand for new skills. The graduates will develop a portfolio during their course of study, giving them suitable experience to expose their practical skills required by the industry. The transferrable skills such as problem identification, analysis, modeling, solution developing and evaluation gained during the study will prepare the students to buildup their careers in various industries such as TATA, BHEL, BARC, DiFACTO Robotics and Automation, NASA, Tech Mahindra Ltd, Kuka Robotics, ISRO, etc., with a package ranging from Rs. 10 lakh to Rs. 20 lakh per annum.



2. Laboratory Infrastructure

Laboratory work is vital for improving and developing products and processes, validating designs and for gaining fundamental understanding of how materials, parts, components or systems will behave under a variety of conditions. As such, it is essential that mechanical engineering students be able to work productively in this setting.





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Manufacturing Center of Excellence



Honourable Vice President of India, Shri. M. Venkaiah Naidu and Guest of Honour, Honourable Governor of Tamil Nadu, Shri Banwarilal Purohit launched the "Centre of Excellence for Manufacturing" in Vel Tech on 13.03.2019

Manufacturing Centre of Excellence offers various specialized courses & Hands on Training in different machinery



Mechanical engineering is one of the broadest and oldest branches of engineering. Mechanical engineers are involved with any system that has a moving part. Their job opportunities are wide open in many areas and in numerous industries irrespective of location.

Manufacturing CoE is the center of attraction at Vel Tech University which promotes the mechanical students to pursue their careers with good expectations and with good skilled knowledge in different machinery. Vel Tech provides innovative, effective, and integrated training opportunities for people who need new skills to enjoy the dignity of employment, independence, and self-reliance in the field of mechanicals. To continuously hone the skills of the industrial workforce for higher productivity bridging the gap between academics and industries for suitable placement for the young generation in technical fields.

BENEFITS OF MECHANICAL ENGG. @ Vel Tech

By using the facilities available in Vel Tech many skill development programs are being conducted to develop and strengthen the confidence of the Mechanical students who want to pursue their careers as successful mechanical engineers. This institute has well-trained and highly motivated training faculty who have been certified by ASDC training institute to provide training in various machinery to students. The emphasis of training is to develop clear concepts and upgrade skills.

Till date, 200+ Mechanical students got trained in these machines to upgrade their level from graduate to industry person.



FACILITIES @ Vel Tech

The Vel Tech Mechanical workshop is well equipped as per industry standards, with a wide range of High fabrication facilities and CNC Precision machining facilities. This institute has well-trained and highly motivated training faculty who have been certified by ASDC training institute to provide training comparable to any international standards in Vocational training. The emphasis of training is to develop clear concepts and upgrade skills.



**CNC HORIZONTAL
MACHINING CENTRE**



**CNC VERTICAL MACHINING
CENTRE**



**CNC HORIZONTAL TURNING
CENTRE**



**CNC HIGH SPEED MOVING
COLUMN VMC**



CNC 5 AXIS VMC



CNC WIRE CUT EDM



CNC PLASMA PROFILE CUTTING MACHINE



NC TUBE BENDING MACHINE



NC SHEARING MACHINE



NC PLATE ROLLING MACHINE



MIG-MAG WELDING ROBOT MACHINE



GAS TUNGSTAN ARC WELDING



CNC CMM



VISION MEASURING MACHINE

Academic Laboratories



Manufacturing Technology Laboratory



Academic Laboratories



Fluid Mechanics Laboratory



Strength of Materials Laboratory



Academic Laboratories



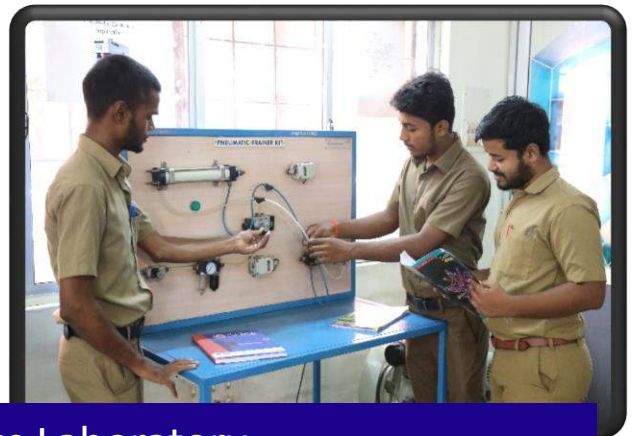
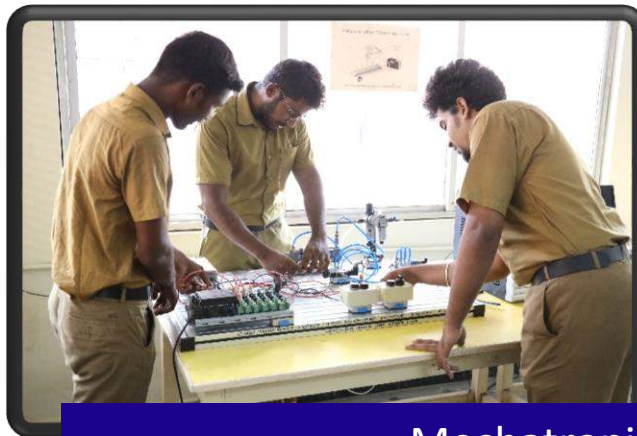
Thermal Engineering Laboratory



Academic Laboratories



Metrology and Measurement Laboratory



Mechatronics Laboratory



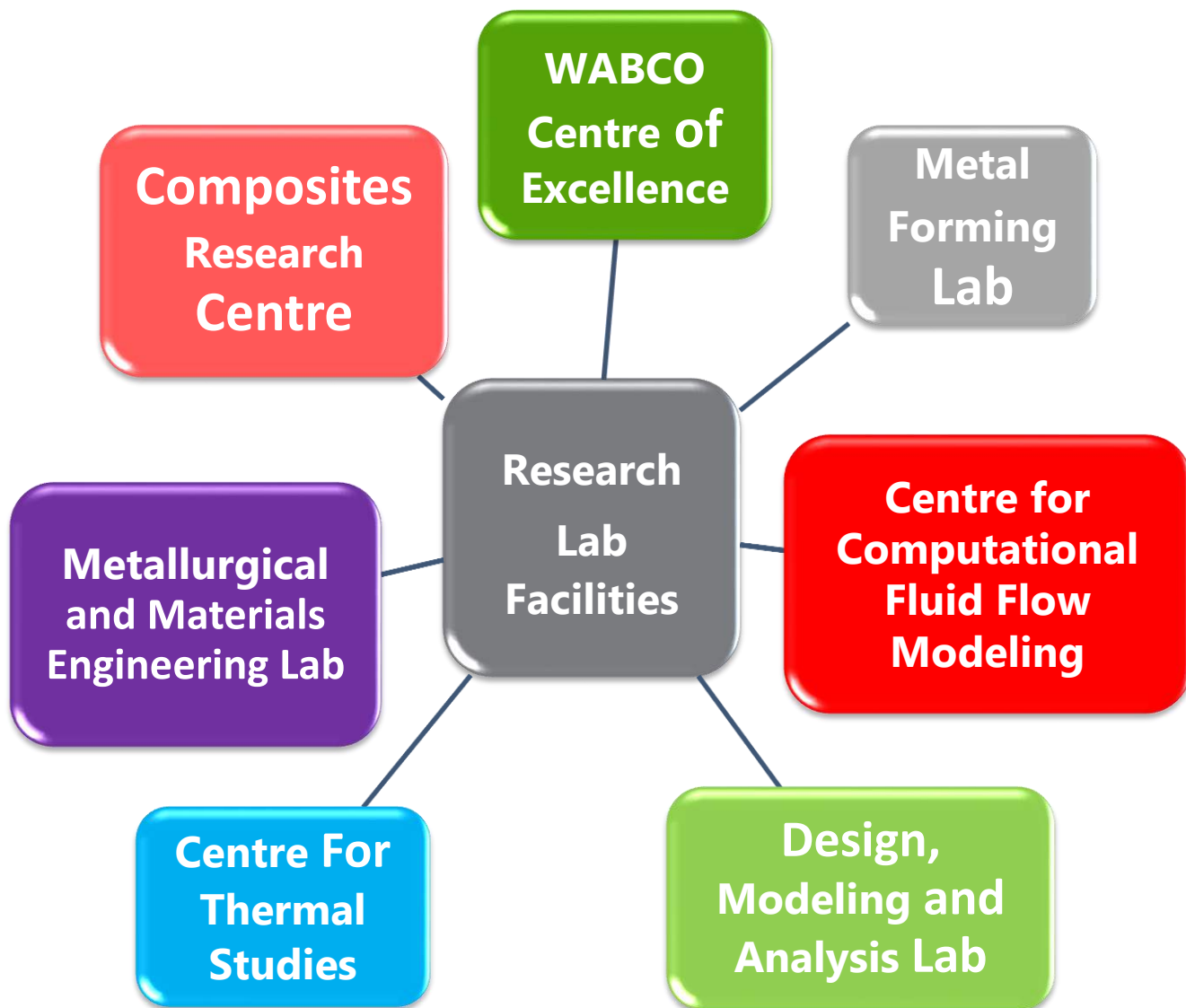
Academic Laboratories



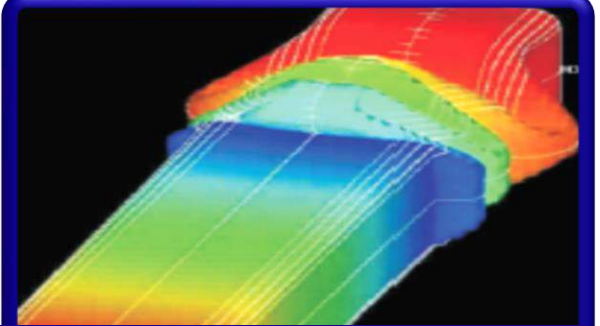
Computer Aided Design & Computer Aided Manufacturing Laboratory



Research Laboratories



Research Laboratories



Design, Modelling and Analysis Lab Centre For Thermal Studies



Metal forming Laboratory & Composite research centre



Centre for Autonomous Systems Research & Metallurgical and Materials Engineering Lab

3. Teaching Learning process

Teaching-learning process has been equipped with the facility called **Learning by facilitation** which happens in a place wherein students will learn actively with peers. The department has taken pedagogical initiatives for improving methods of instruction which are as follows:

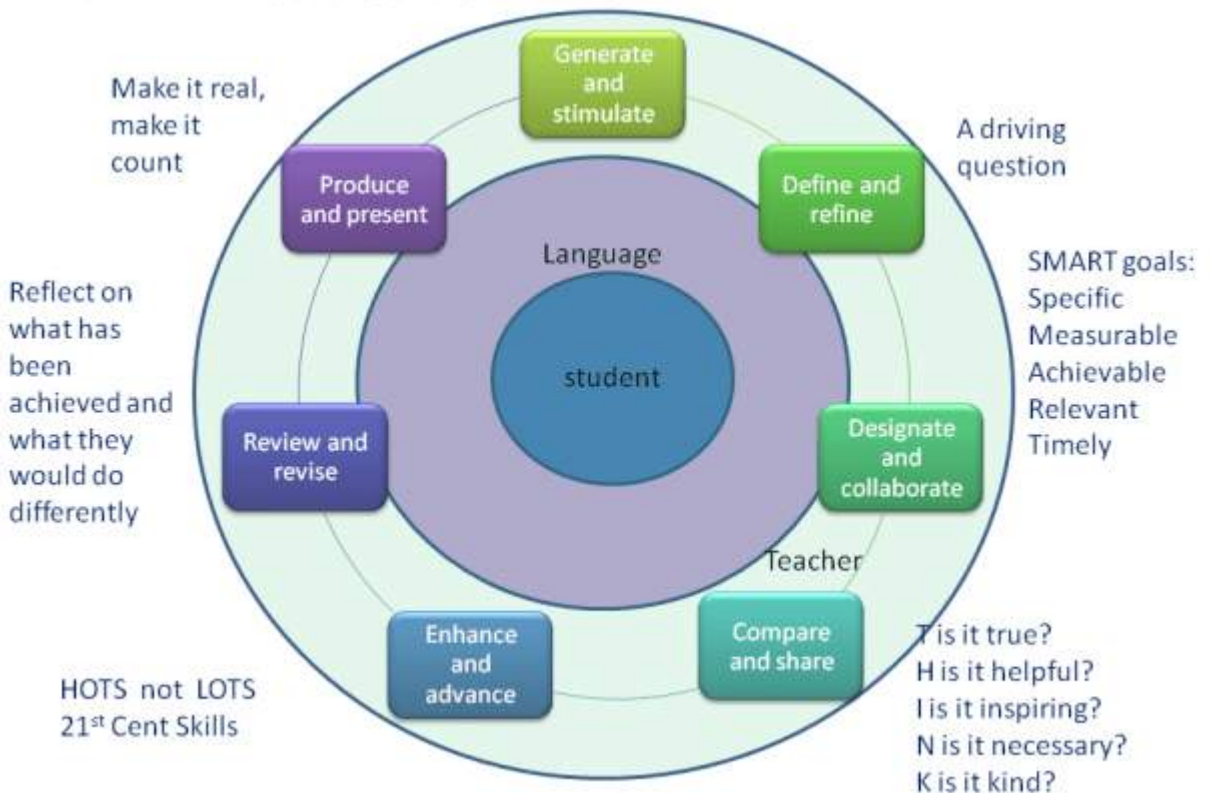
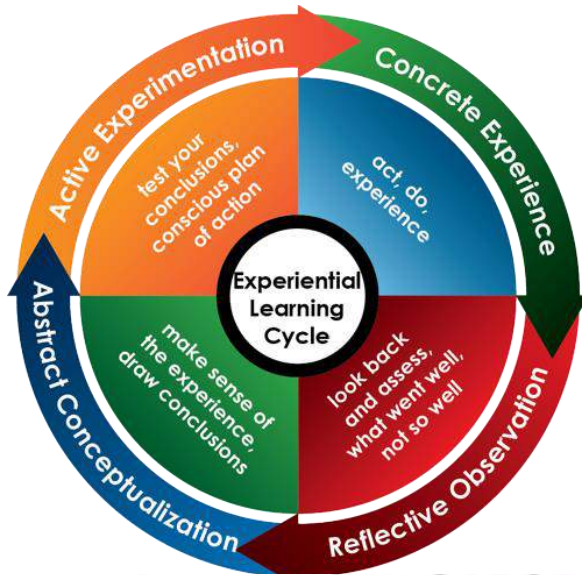
The faculty members have been facilitating students toward **collaborative and experiential learning** through

- Active Learning Environments like Think-Pair-Share, Peer Instruction, Concept Test, and flipped classroom
- Problem-based learning
- Project-based learning
- e-Learning

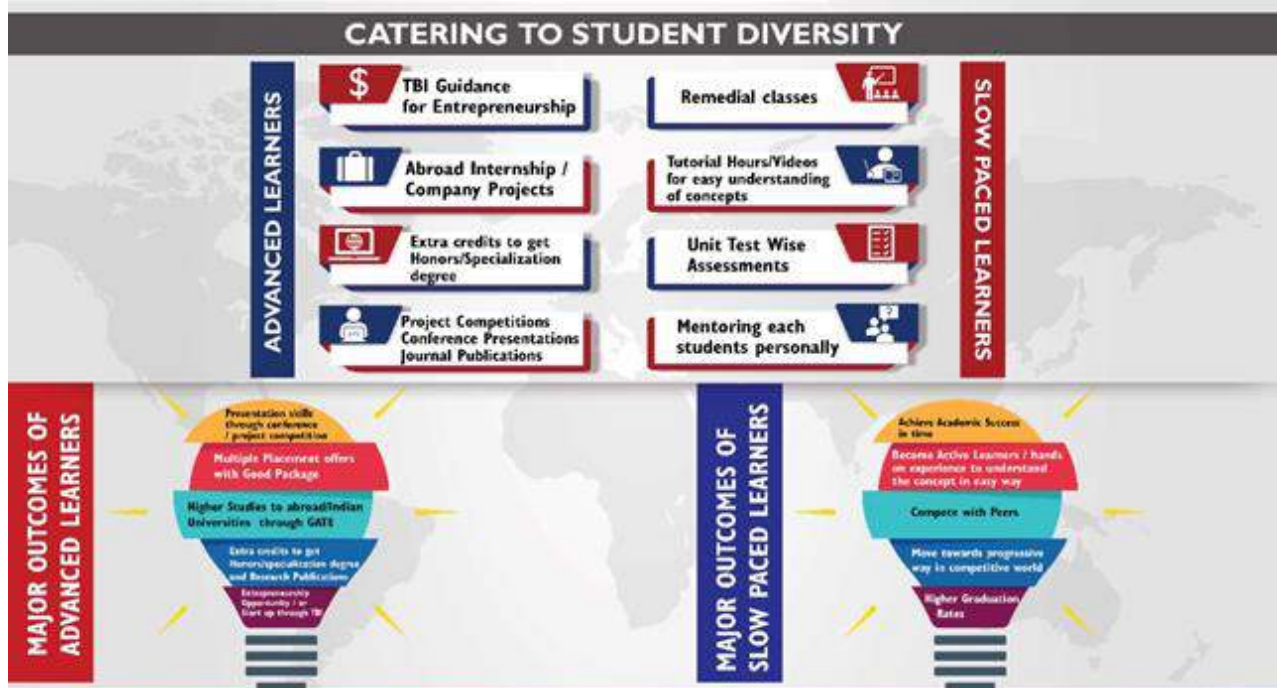


Teaching Learning process

Our goal is to provide students with not only a degree but also the opportunity to tackle some of the world's most critical challenges. We adopt the following student centric approaches to nurture them as a multifaceted graduate.



Teaching Learning process



Encouraging Fast learners & Assisting Slow learners

Teaching Learning process

Student centric methods practiced



Kinematics of Inversion - Model-based learning



Simulation-based learning



ICT facility enabled halls



ICT based Learning

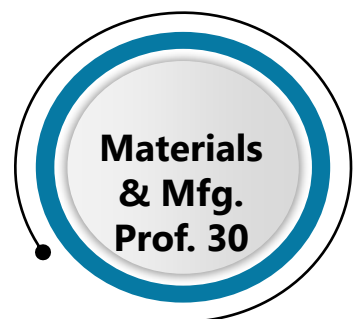
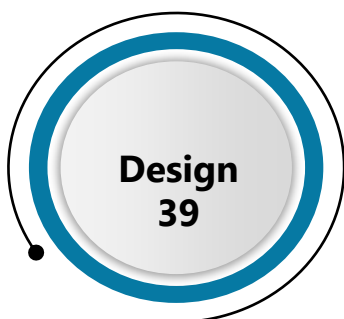
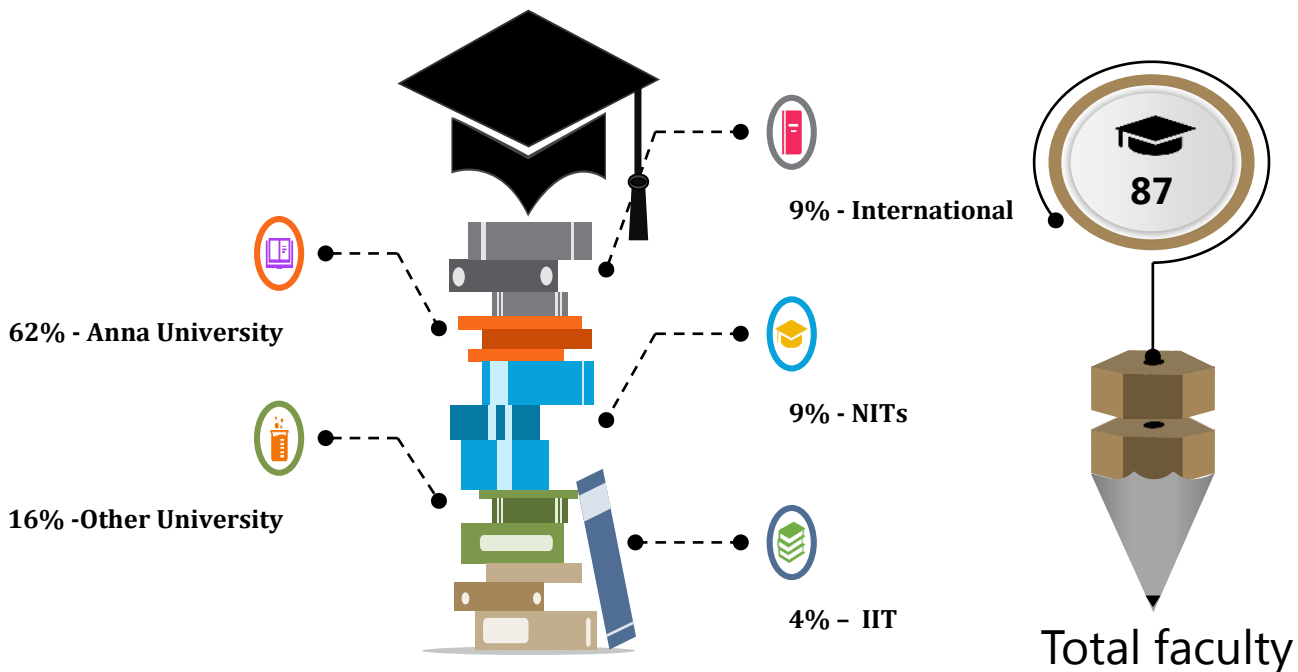


Project based Learning

4. Faculty Profile

The department has got a team of highly qualified faculty members with doctoral and post-doctoral degrees from leading institutes across the globe, to train the students as efficient engineers.

Faculty completed Ph.D. from reputed National and International Institutions



Faculty Contribution

Faculty members have published their research articles in various reputed journal indexed by Scopus / SCI with good impact factor. In the Academic year 2020-2021 around 130 papers were published.



Project proposals submitted

Name of the Faculty	Details (Title, Funding agency and amount)
Dr.ANAND. P	Experimental investigations and Finite Element Analysis of Basalt / Kevlar cross weaved twin fiber reinforced Hybrid Polymer Ballistic Helmet, DST SERB and Rs.18,00,000/-
Dr.ANAND. P	Design and Development of Bio-degradable Prosthetic Limbs Using Additive Manufacturing for Moment Disability People, TNSCST, Rs.5,00,000/-
Dr.M.MEIKANDAN	Multi-objective Optimization and Experimental Investigation of 3D Printed Polymer/ Two-Dimensional Transition Metal Carbides and Nitrides (MXenes) /Strychnos Potatorum Porous Membrane for Enhanced Water Purification, DST SERB-TARE - 2022
	Investigation on degradation and seed germination of nanocomposite based compostable plastics incorporated with mixed vegetable seeds. TNSCST and Rs.5,12,000/-
	Design and Implementation of Advanced Fuel Indicator with Fuel Theft System, TNSCST, and Rs 10,000/-
DR.S.MOHAMED IQBAL	Performance analysis of organic and bio-based phase change materials on building cooling applications
Dr. BALAJI. K	Development of Sustainable Manufacturing Framework for Industrial Solid Waste Products,SERB-TARE,RS.1800000/-
Dr.G.DHARMALINGAM	Ultrasonic additive manufacturing of Al-Ni dissimilar metals joints for various thermal and electrical contact applications, SERB-TARE-2022, Rs.15,00,000/-
Dr. RATHINASURIYAN. C	An Experimental and ANN framework for Submerged Friction Stir Welding of Aluminium Alloy under Nanofluidic Environment in Heat Exchanger Applications, SERB-TARE-2022
Dr.M.VENKATASUDHAKAR	Optimization of Machining Parameters to Counter Delamination of Fibre Reinforced Composites and Investigation Using New Approach, SRB-TARE-2022
Dr. YUVARAJ. N	A smart machining approach to investigate and control the defects of abrasive water jet milling in pocket corners for small scale manufacturing industries, TANSCST and Rs.4,43,400/-
DR.SUNDARRAJ. M	Nitro cracking of waste plastics into liquefied fuel by utilisation of single screw conveying machine for enhancing pyrolytic oil yield (science and technology project scheme submitted to TNSCST, Rs.5lakhs)
Dr.HARISIVASRI PHANINDRA. K	Experimental studies for inventing novel food/pharma grade anti-static additives for increasing the electrical conductivity of nonconductive liquids – A study for improving the workplace safety – SERB – Rs. 19,64,625/-
Dr.HARISIVASRI PHANINDRA. K	Experimental studies on oxygen deficiency environments due to accidental spillage or release of gases - ISRO ²⁴ Rs. 8,65,680/-

Project proposals submitted

Name of the Faculty	Title, Funding Agency and Amount
Dr. S. Christopher	Optimization of solar photovoltaic based water pumping performance with dc motor, serb - tare, dst
Dr. S. Christopher	"Renewable Energy with Small Hydro Actions for the Promotion of Efficient Solutions "RESHAPES", International Cooperation Division, India Italy Call for Network of Excellence, DST, 207,03452 /-- 3 years
Dr. Prabhukumar S	Additive Manufacturing of Si Based Materials for Energy Applications, Ministry of Mines, Rs. 8850864/-
Dr Rupesh P L	Department of Science & Technology WTI Call 2021 on Desalination Technologies
Dr.Dharmalingam G	Additive Manufacturing of Si Based Materials for Energy Applications, Ministry of Mines, Rs. 8850864/-
Dr. Meikandan M	Submitted 2 students project to Tamil Nadu State Council for Science and Technology
Dr.Sumathy Muniamuthu	A potential long term solution for organic and plastic waste handling – 3D printing, SERB - POWER Scheme, Budget - 28,11,360/- / Ref : SPG/2021/004081 on 14.10.2021
Dr M Arulprakasajothi	Department of Science & Technology WTI Call 2021 on Desalination Technologies
Dr. E. Pavithra	Application of heat treatment salt wastes as abrasives in water jet machining process, Power Grant , DST SERB, Rs.22,59,224/-
Dr.Harisivasri Phanindra K	"Inputs for the safety monitoring system using AI-ML – A comprehensive review of Unsafe Acts and Unsafe Conditions/Situations". Funding Agency: Varaanga Engineers Pvt. Ltd, Hyderabad, 1 month, Rs. 26,660/-

Funded Projects



Rs.18,30,000/-

SERB-TARE

Dr. Praveen A.S

Additive manufacturing of osteogenic and infection resistant bone tissue engineering scaffolds

Rs.18,30,000/-

SERB-TARE

Dr. Christopher.S

Optimization of Solar Photovoltaic Based Water Pumping Performance with DC Motor

Rs.18,30,000/-

SERB-TARE

Dr. Rajamani

High strain rate characterization of additive manufactured materials for ballistic loading applications

Rs.18,30,000/-

SERB-TARE

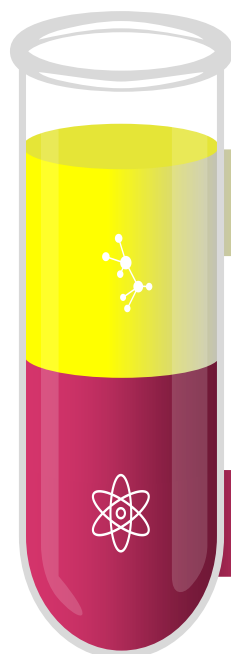
Dr. Arul Prakash Jothi.M

Desalination Technologies

Patent Filed/Published/Awarded

Dr.J.M.Babu	Granted 380952 Application No: 2688/CHE/2014	Introduction of hydrogen oxygen mixture at different injection pressures of diesel engines
Dr. K Raja	published	Exhaust Gas Heat Utiliser
Mr.Gandhi Mallela	Filled (Australia patent) Application No:2021103644	Design and Fabrication of Elliptical Tricycle using Tilting Mechanism

Patent filed/ Awarded



App. No: 2688/CHE/2014

Introduction of hydrogen oxygen mixture at different Injection pressures of diesel engines

Status: Granted

App. No: 2021103644

Design and Fabrication of Elliptical Tricycle using Tilting Mechanism

Status: Filed

Consultancy work by Faculty

Rs 15000/-

**EHS Compliance for
RUI Pharma, S4
Scientifics**

Rs 75000/-

**Safety Studies at
ISRO-IPRC-
Pradesh,**

Rs. 15000/-

**Safety Audit for
BPCL (LPG Plant),
Kurnool**

Rs 45000/-

**Fire Safety Audit
for Hetero drugs,
Hyderabad**

Dr. Harisivasri Phanindra K

Rs 20000/-

**Safety Audit for
Biocon Limited.**

Rs 53100/-

**Fire Safety Audit
for Hetero drugs,
Visag.**

Rs 53100/-

**Safety Audit for
Hetero drugs,
Hyderabad.**

Rs 53100/-

**Fire Safety Audit
for Hetero drugs,
Hyderabad**

Rs 41300/-

**Safety Audit for
Bhavya Cements
Private Limited**

Rs 35400/-

**Safety Audit for
Hetero drugs,
Hyderabad.**

Faculty as Journal Reviewer

Dr. CHRISTOPHER S

- Journal of Applied Fluid Mechanics

Dr. LENIN N

- Journal of Industrial Textiles
- Computers & Industrial Engineering
- Journal of Alloys and Compounds

Dr. ANAND P

- Journal of Polymer Research, Journal of Natural Fibers, Journal of Industrial Textiles, International Journal of Ambient Energy, Materials and Design

Dr. PRABHUKUMAR S

- Transactions of Indian Institute of Metals
- Materials Today Proceedings

Dr. UDAYA PRAKASH J

- International Journal of Ambient Energy
- Materials Today: Proceedings
- Advances in Materials and Processing Technologies
- SN Applied Sciences
- Particulate Science and Technology

- Journal of Materials: Design and Applications (SAGE)
- Lubricants (MDPI) (SCI, IF - 3.584)
- Metal (MDPI) (SCI, IF - 2.695)
- Frontiers in Materials (SCI, IF - 3.985) Dr. Sachin Salunkhe
- International journal for simulation and multidisciplinary design optimization, EDP Science

Dr. Kanak Kalita

Journal Reviewer: 77

Journal Editor

- SAE International Journal of Materials and Manufacturing
- International Journal of Energy Optimization and Engineering
- AIP Conference Proceedings,
- Data-Driven Optimization of Manufacturing Processes, 2020, IGI-Global, USA.
- Advances in Electronics, Communication and Computing,
- IOP Conference Series: Materials Science and Engineering,

Faculty as Journal Reviewer

Dr. YUVARAJ N

- Materials Research Express
- ASTM International Journal of Testing and Evaluation
- Arabian Journal for Science and Engineering
- Journal of Brazilian Society of Mechanical Engineering
- Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture

Dr. BALAJI K

- Advances in Mechanical Engineering
- Total Quality Management and Business Excellence

Dr. MOHAMED IQBAL S

- Journal of Ambient Energy

Dr. RAJAMANI D

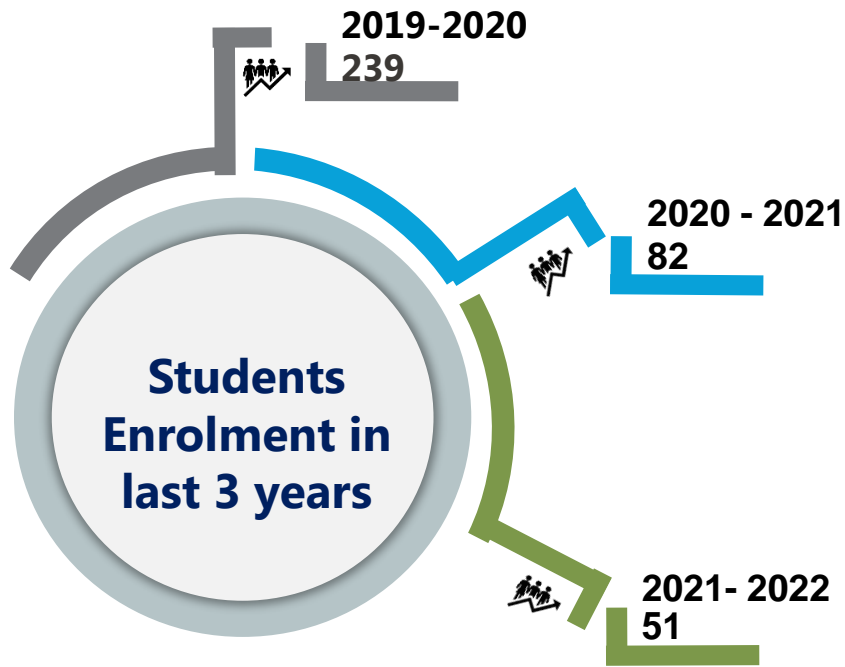
- Journal of Mechanical Science and Technology
- Journal of Brazilian Society for Mechanical Sciences and Engineering
- Rapid Prototyping Journal
- Journal of Precision Engineering and Manufacturing - Green Technology
- Journal of Industrial Textiles
- Journal of Thermoplastic Composite Materials
- Polymers and Polymer Composites
- Part G: Journal of Aerospace Engineering
- SN Applied Sciences

Dr. DHARMALINGAM. G

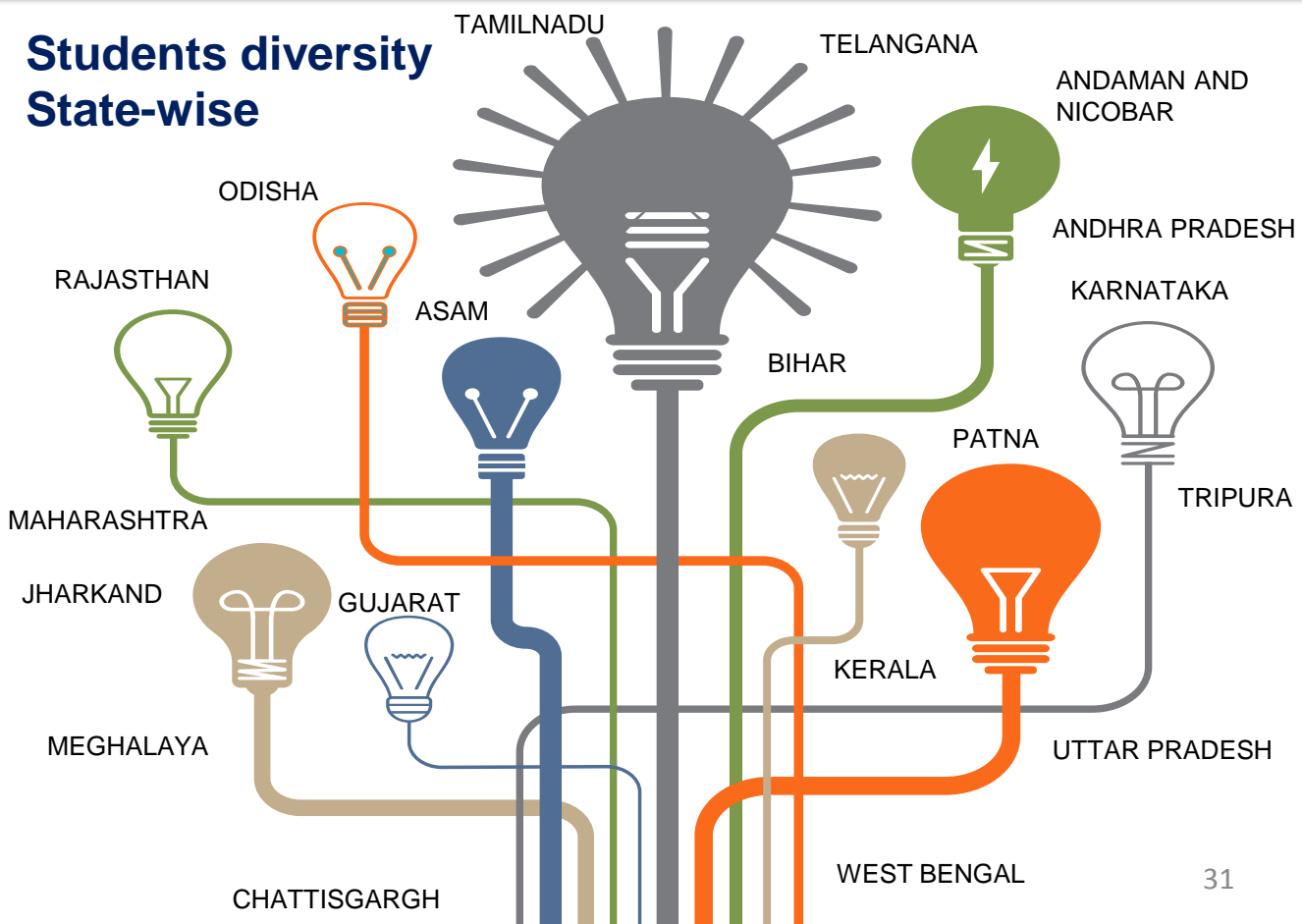
- Materials Research Express
- Australian Journal of Mechanical Engineering

5. Students Profile

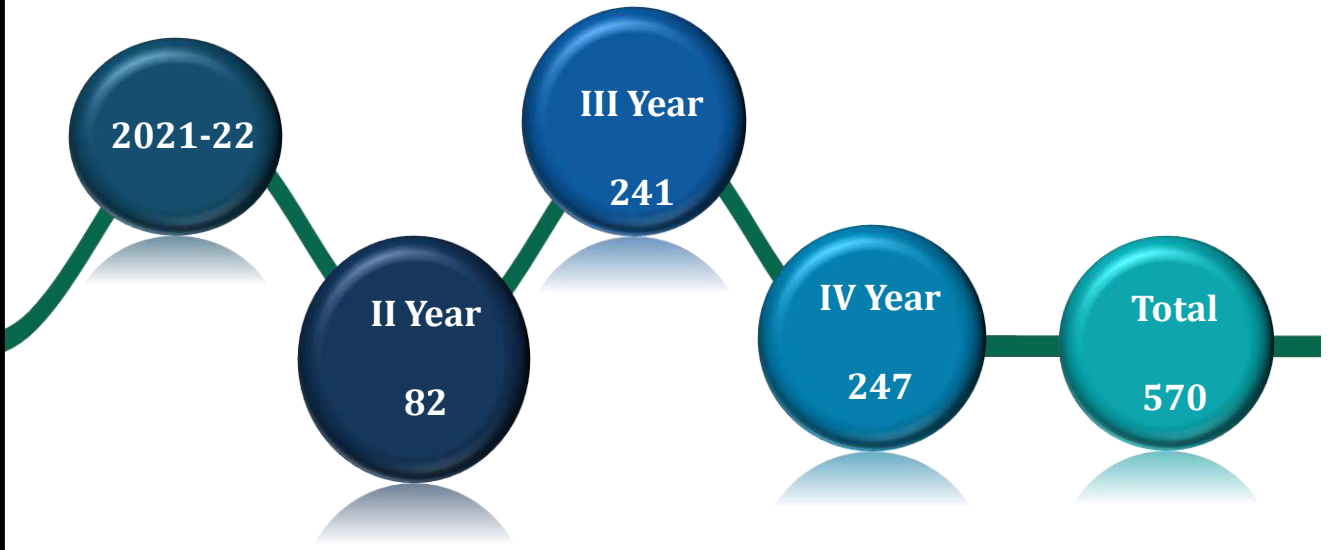
The Department of Mechanical Engineering having 372 students of all years in total from 19 different states.



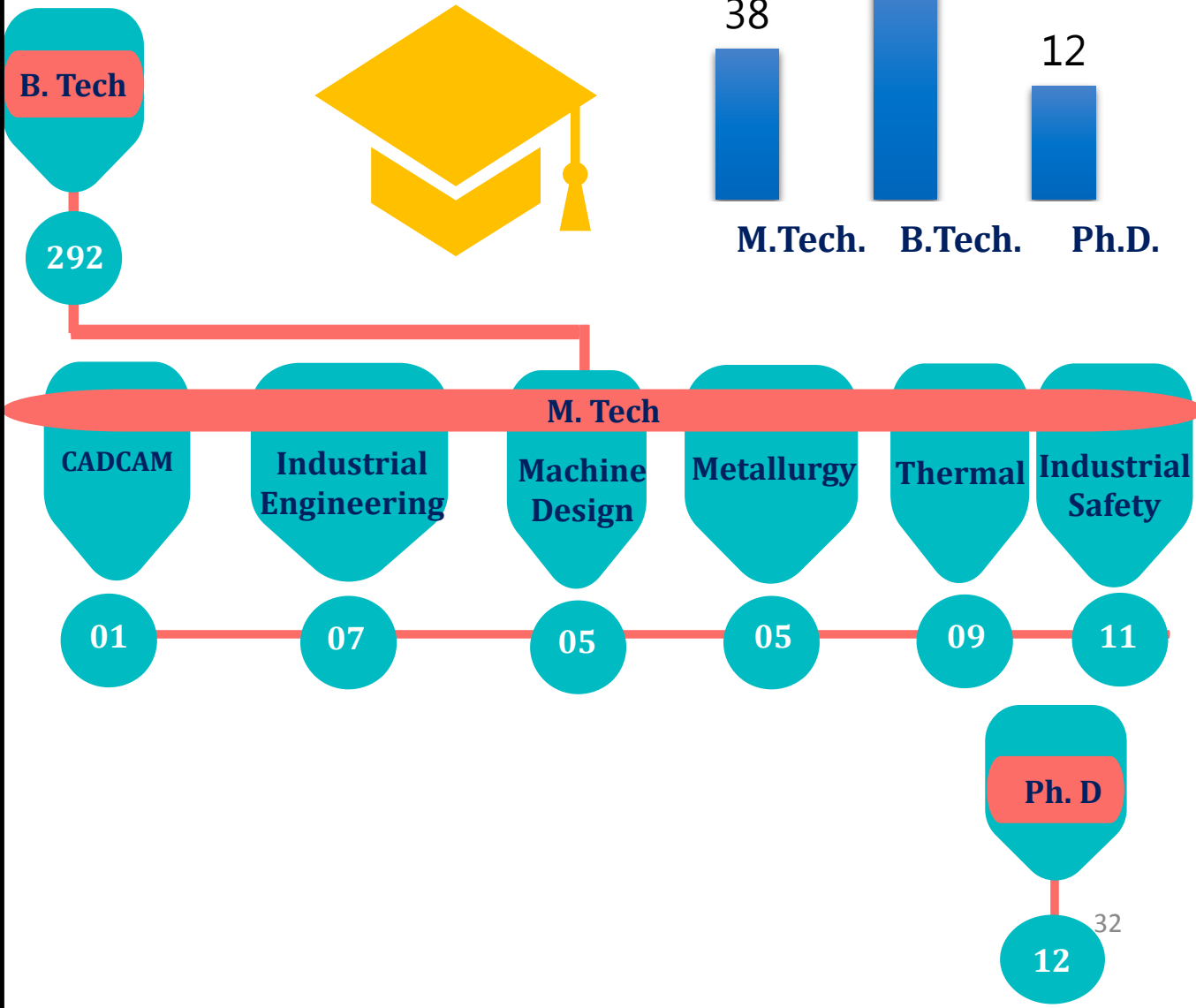
Students diversity State-wise



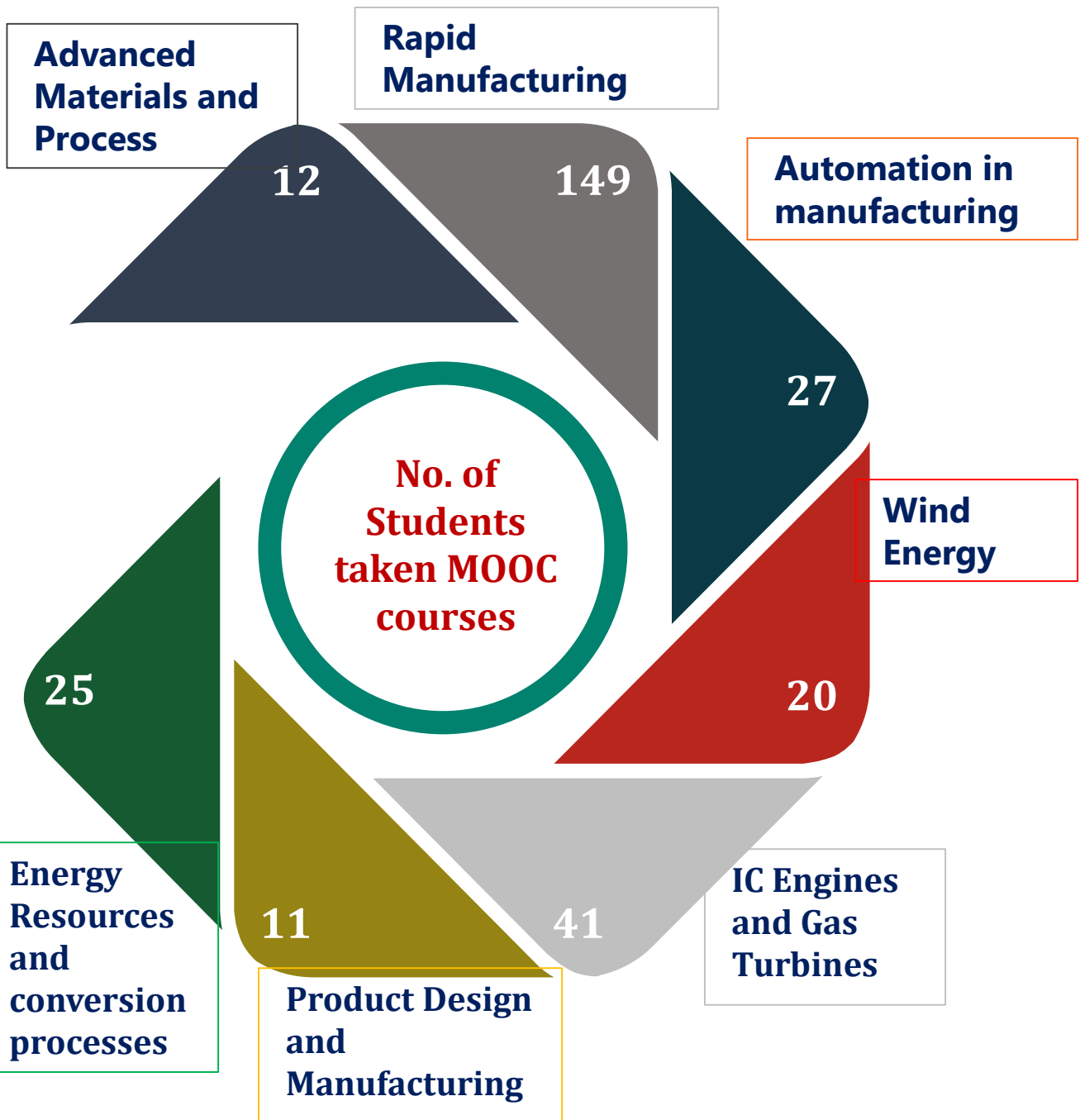
Student Admission & Graduation Details



Graduation Details



MOOC courses taken by Students



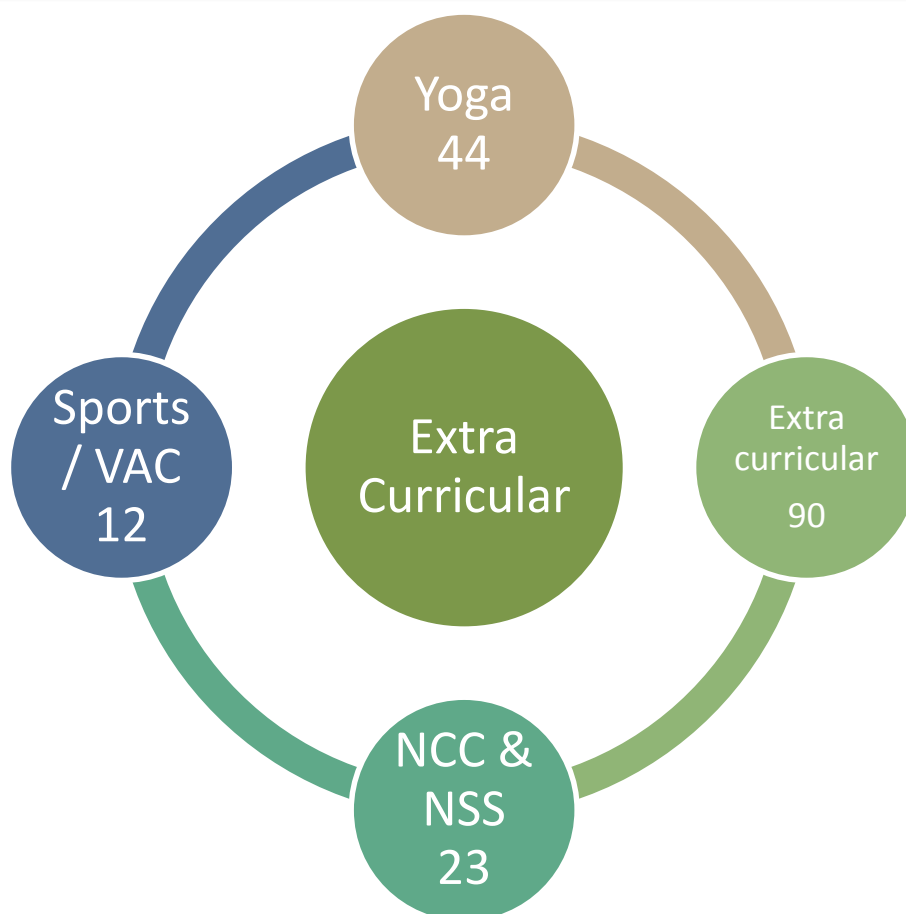
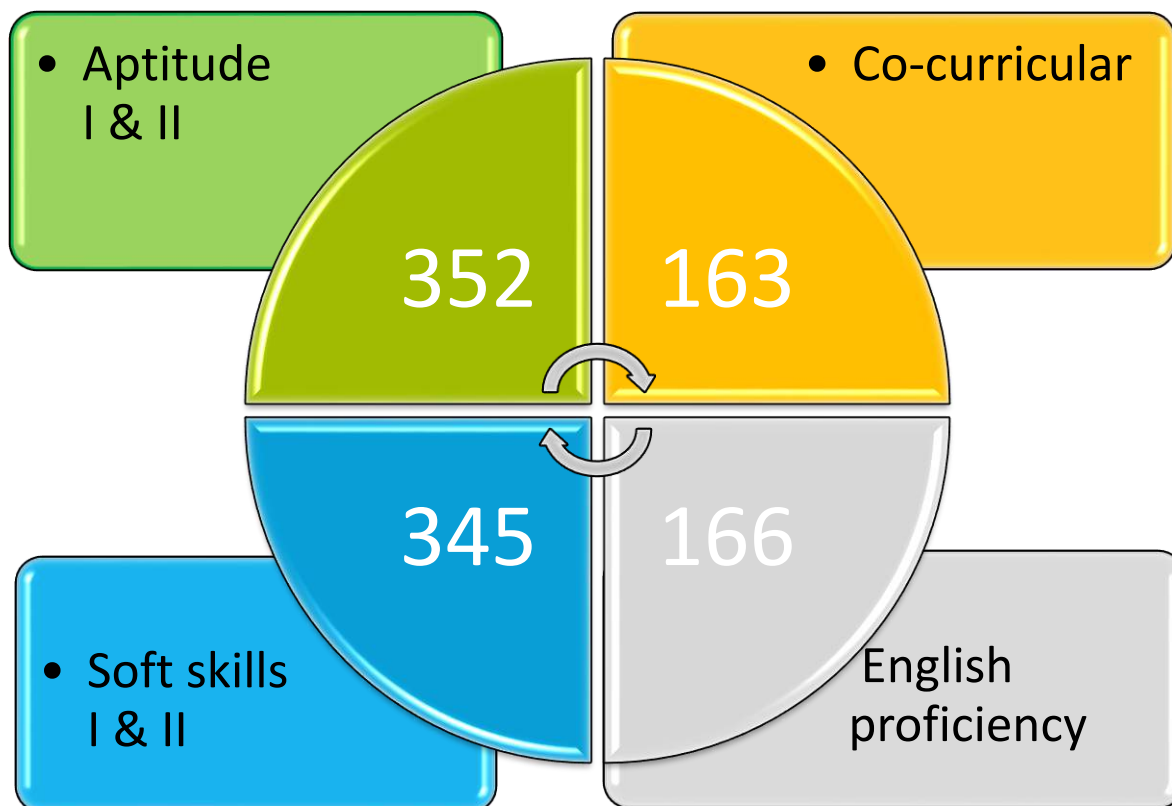
Summer f 2021-2022	Design of Mechatronic Systems	NPTEL	05
Summer 2021-2022	Heat Exchangers-Fundamentals and Design Analysis	NPTEL	04
Summer 2021-2022	Texture in Materials	NPTEL	02
Winter 2021-2022	Introduction to Mechanical Micro Machining	NPTEL	01
Winter 2021-2022	Carbon Materials and Manufacturing	NPTEL	02

Students' Participation in Various activities 2021-2022



Students have actively participated in various events such as Symposium, conference, paper presentation, and other extra curricular activities conducted by reputed Institutions.

Students Co-curricular & Extra curricular Activities



Student Performance - Placement



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
Deemed to be University Est. on 3-1-1996 Act. 1956

SCHOOL OF MECHANICAL AND CONSTRUCTION

Department of Mechanical Engineering

Congratulates

THE STUDENTS OF BATCH 2018-22 WHO GOT PLACEMENT IN



**A.PAVAN KUMAR
REDDY VTU10987**



**K R NITHISH
VTU11092**



**PANDIRI KEDARNATH
VTU11299**



**MOHAMMED IRSHAD
ALI VTU11618**



**SANDU NAGA
DILEEP KUMAR
VTU12785**



**P.R.RUFUS JOEL
VTU12844**



**MAREDLA OMKAR
VTU12940**



**K.SAI KRISHNA
NITISH VTU12984**



**MODALAVALASA
ROHITH
VTU13232**



**Sampathirao
Pavankalyan
VTU13250**



**S MARIYAM BEE
VTU13390**



**RAMAPURAM PAVAN
KUMAR VTU14138**

GREAT CHEERS FOR ACHIEVING YOUR DREAM JOB

Student Performance - Placement



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
Deemed to be University Est. 6/3/2002 (UGC Act, 1956)

SCHOOL OF MECHANICAL AND CONSTRUCTION

Department of Mechanical Engineering

Congratulates

THE STUDENTS OF BATCH 2018-22 WHO GOT PLACEMENT IN



DIVANSH THOMAR
VTU14223



VEMANA BOYINA
VIJAY YADAV
VTU14387



CHEKURU VISHNU
SAIKUMAR VTU14593



N VISHNU VARDHAN
VTU14709



K.TARUN SATYA
NAGA KUMAR
VTU11043



SATHYANARAYANAN.
R.G VTU11670



MALLOJU VIJAY
KUMAR VTU12938



NALLABATHULLA
VTU14258



CHEEKATLA
SATYA DEV
VTU14898



PASUMARTHI
VENKATA
SUDHAKAR
VTU14904



JAGADEESHWAR
KAGITHA
VTU11037



ACHUKATLA AZHAR
MAHAMMAD
VTU11264

GREAT CHEERS FOR ACHIEVING YOUR DREAM JOB

Student Performance - Placement



**KATARI NAVEEN
KUMAR
VTU10937**



**S.M.L.N.MURTHY
VTU15000**



**SATHI RAJU TALURI
VTU14208**



**A.SAITEJA
VTU14235**

Student Performance - Placement



T NARESH
VTU14620



ABHILASH
VTU14542



J. JERIN KENNEDY
VTU11635



T.ANIL
VTU12859



K HRITHIK
VTU12156



MUKUL
VTU11317



MD TAUQUEER
VTU11690



K K HARISH
VTU11174



BENDALE DARSHAN PANDIT
VTU14316



KURMADASU BHASKARA RAMA SRIKRISHNA
VTU12960

Student Performance - Placement



TADITYA REDDY
VTU1171



PRAVEEN.M
VTU11365



E. KARTHI
VTU11628



KUMARAN . S
VTU11238



**B.VAMSI
KRISHNA**
VTU12233



**KANCHARLA
ABHINAV**
VTU12337



K.RATNA SAI
VTU14574



**RUDURU VINAY
KUMAR** VTU13223



M. LOKESH
VTU14553



SAMADHO
VTU11440



VISHAL R
VTU11712



Your technology partner



KATARI NAVEEN KUMAR
VTU13214



ARAVIND
VTU11641

Student Performance - Placement



RAJAT MATHUR
VTU11703



J.C.SAILESSH
VTU12458



HARSH MISHRA
VTU12453



BHUVANESHWAR REDDY
VTU14296



SAURAV KUMAR
VTU14366



DANESH VADDI
VTU11019



RAVI TEJA D
VTU12800

Student Performance - Placement



Mu Sigma



BALAKRISHNA M
VTU12968



PRAVEEN KUMAR R
VTU13208



SIMHA SS
VTU14302



SANDEEP
VTU14883



JAYAM MANIKANTA
VTU11609



SIVAKISHORE
VTU13193



VISHNU
VTU13336



VENKATESH D
VTU14889



TATA TECHNOLOGIES



MOHAMED YOUSUF
VTU11245



K NAVEEN KUMAR REDDY
VTU14944



AKHILESH BABU
VTU14689



VUTCHA SANGEETH
VTU12363

Student Performance - Placement



D.NAVEEN KUMAR
VTU12465



RAKESH
VTU12268



HEMA SAI PAVAN
VTU11041



ADAVELLKY VENKATESH
VTU14167



ALI BHASKARA SAI GANESH
VTU14681



KAMALAPURAM DHAN SHUBHAKAR
VTU14938



S. HARI SAI PAVAN REDDY
VTU12293



B.PAVAN KUMAR
VTU14608



AKKUMALA VINAY
VTU13368



BORRA GURUVARAPRASAD
VTU11017



HIMAJHA
VTU11051



MOHAMMED NAYEEM
VTU13233

Student Performance - Placement

Zelf Studie



DINESH
VTU11194



DIPAN SKINDER
VTU11164



**ANDE DURGA VENKATA
SAI**
VTU11369



ABDUL RAZAAK
VTU11346



KARTHIKEYAN . R
VTU11661



**CHNDRA BABU
NAIDU**
VTU12089



BVSG NAVEEN KUMAR
VTU14389



SUMIT
VTU11785

**IOHBORLANG
MYNSONG**
VTU11723

**N H D S
SAIKUMAR**
VTU10988

**R NAGA VINOD
BABU**
VTU12436

Student Performance - Placement



EASA SALEH AL GURG GROUP



MANOJ KUMAR
VTU11378



G V CHAITANYA
VTU12879



SHIVAM SINGH
VTU14365



CHAKRADHAR
VTU14742



HARSHA KARUMANCHI
VTU14181



MURALI MANOHAR
VTU11457



Capgemini



SUBRAMANYAM U
VTU11397



KONJERI BHANU PRAKASH REDDY
VTU11131



NETURI MANOJ KUMAR
VTU 13149



CH BALA SAI
VTU12132

Student Performance - Placement



NIKHIL
VTU11399



GEETHA RAMESH
VTU14989



LAKSHMAN K
VTU11430



MULA NAGENDRA
REDDY
VTU14619



BALE SUSANTH
VTU11044



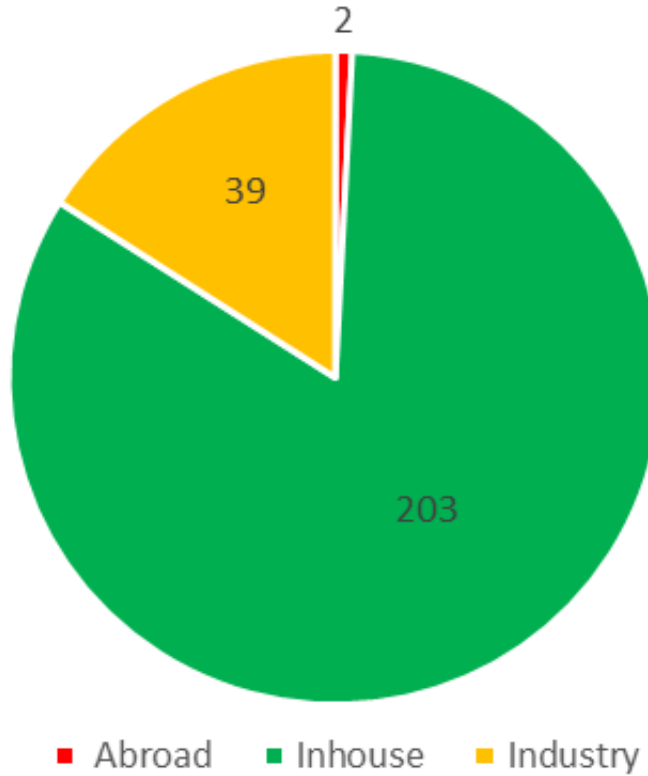
VISHAL KUMAR SINGH
VTU11398

Products developed by Students

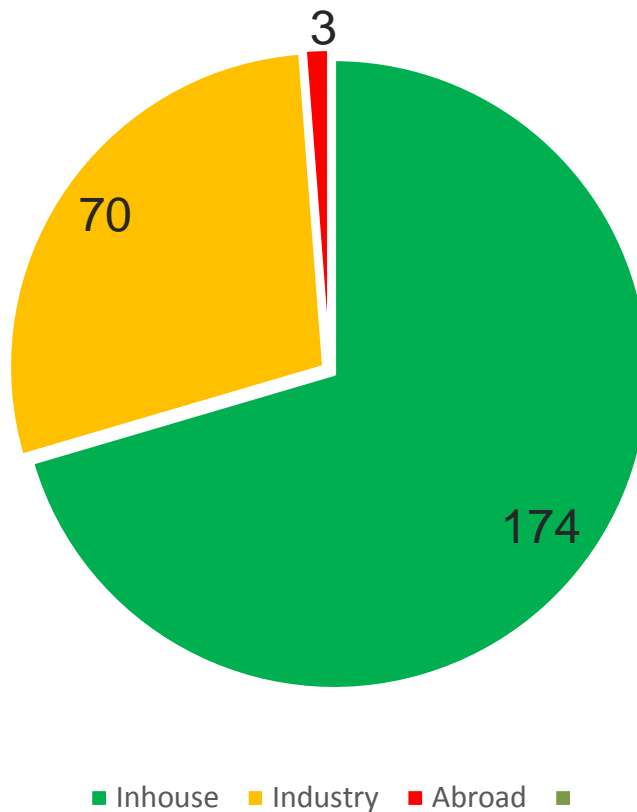


Minor and Major Projects

No.of students completed mini project

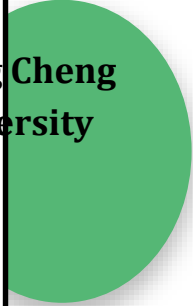


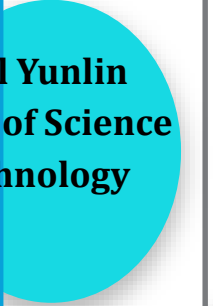




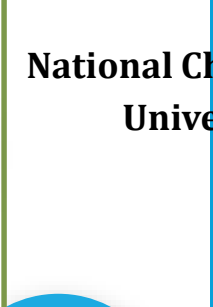


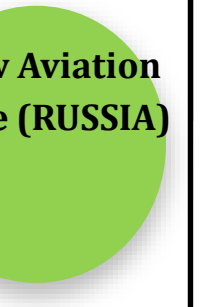
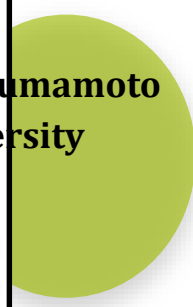







No.of Students completed Major Projects

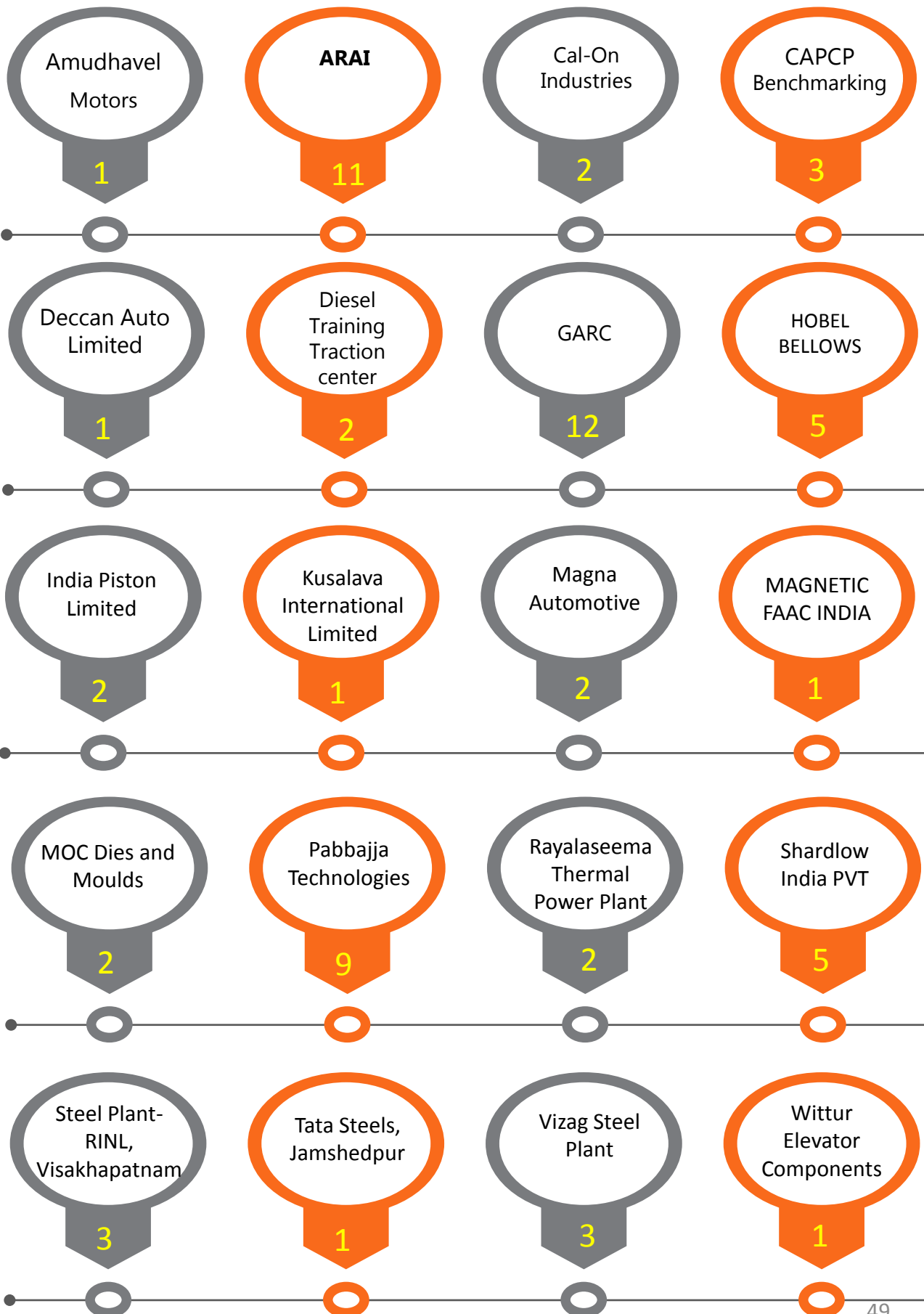


6. Industry Institute Interaction

MoU's with Foreign Universities for Student's Internship

<p>Chung Cheng University</p>  	<p>National Yunlin University of Science and Technology</p> 	<p>National Chung Kung University</p> 	<p>University of Kuala Lumpur</p> 	<p>National Taipei University of Technology</p> 
<p>Tamkang University, Taipei</p>  	<p>National Chung Hsing University</p> 	<p>Moscow Aviation Institute (RUSSIA)</p> 	<p>Southern Taiwan University of Science and Technology</p> 	<p>Jung-Tang Huang in Taipei Tech</p> 
<p>IROAST, Kumamoto University</p>  	<p>University de Tours, France</p>  	<p>Hochschule Dusseldorf Germany</p> 		

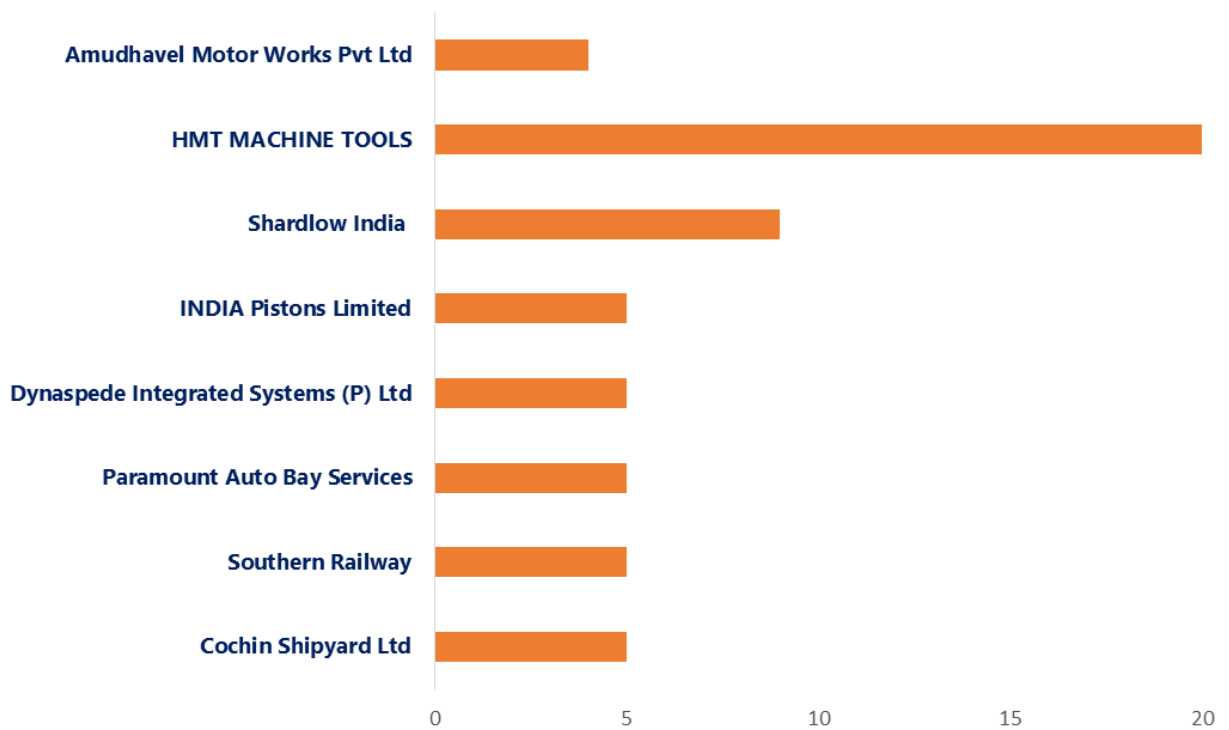
6. Industry Institute Interaction



Students Internship at various Industries

In-plant training and Internship

No. of Students undergone In-plant training at various industries



Mr. SWAGAT DEVADAS PATIL
B.Tech. - Mech
VTU 12882
Batch : 2018 -2022

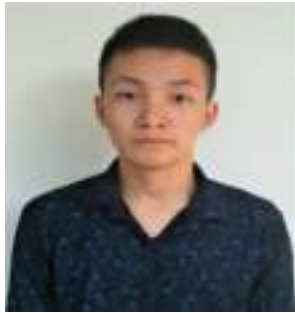


Mr. ROHAN THOKCHOM
B.Tech. - Mech
VTU 11732
Batch : 2018 -2022

Title: To Study and Analyze the Roughness of 3D Printed Inner Surface of the wind tunnel

Supervisor: Prof. Dr. -Ing. habil. Ali Cemal Benim,
Professor - Faculty of Mechanical and Process Engineering,
Head - Center of Flow Simulation (CFS),
University of Applied Sciences Düsseldorf, Germany

Students opted Higher Studies at Foreign universities (2021-2022)



Rohan Thokchom
VTU1732
Country: Germany



Swagat Devadas Patil
VTU12882
country: Germany

SEMESTER ABROAD PROGRAM (2021-2022)

VIRTUAL INTERNSHIP PROGRAM (2021-2022)



**Atharva Milind
Kulkarni**
VTU12353
Country: Canada



Tsering Wangmo
VTU11705
Country: Singapore



Swagat Devadas Patil
VTU12882
Country: Singapore



**NANYANG
TECHNOLOGICAL
UNIVERSITY**
SINGAPORE



6. Events Organized



Project Expo 2021- 22

6. Events Organized

 **Vel Tech**
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Est. in 5 of UGC Act, 1956)

 **IN ASSOCIATION WITH**

SCHOOL OF MECHANICAL AND CONSTRUCTION
DEPARTMENT OF MECHANICAL ENGINEERING

Cordially invites you for three days expert lecture on

Fatigue Deformation, Fracture and Its Importance in the Design of Equipment

(under Distinguished Visiting Professorship (DVP) scheme)

Date: 28.03.2022 to 30.03.2022 Time: 10:00 am – 12:00 Noon

RESOURCE PERSON

 **Dr. S.L. Mannan**
Former Director - Materials and Metallurgy Group,
IGCAR-Kalpakkam and Former Consultant -
GTRE, DRDO-Bangalore

IN THE PRESENCE OF

Col. Prof. Vel. Dr. R.Rangarajan
Chancellor & Founder President

Dr.Sagunthala Rangarajan
Foundress President

Dr.S.Salivahanan
Vice Chancellor

CONVENOR
Dr.N.Lenin
HoD-Mech.

Mode: Offline

All faculty members and students are cordially invited to participate



Link for online registration: 

<https://forms.gle/6GpxPTbNZpPUTLG7A>

 No.42, Avadi-Vel Tech Road, Vel Nagar, Avadi, Chennai - 600062

 www.veltech.edu.in  1800 212 7669

6. Events Organized



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Est. n° 5 of UGC Act, 1956)

IN ASSOCIATION WITH

SCHOOL OF MECHANICAL AND CONSTRUCTION
DEPARTMENT OF MECHANICAL ENGINEERING

Cordially invites you for three days expert lecture on

Materials for High Temperature Applications

(under Distinguished Visiting Professorship (DVP) scheme)
Date: 18.04.2022 to 20.04.2022 Time: 10:30 am - 12:30 pm
Venue: Wright Brothers Engineering Hive (1722)

RESOURCE PERSON



Dr. S.L. Mannan
Former Director - Materials and Metallurgy Group,
IGCAR-Kalpakkam and Former Consultant -
GTRE, DRDO-Bangalore

IN THE PRESENCE OF

Col. Prof. Vel. Dr. R.Rangarajan
Chancellor & Founder President

Dr.Sagunthala Rangarajan
Foundress President

Dr.S.Salivahanan
Vice Chancellor

CONVENOR
Dr.N.Lenin
HoD-Mech.

Mode:
Offline

All faculty members
and students are
cordially invited to
participate



Link for online registration: 

<https://forms.gle/PRGZTU3WX8sz1Np17>

No.42, Avadi-Vel Tech Road, Vel Nagar, Avadi, Chennai - 600062
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6. Events Organized



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Est. on 8 of UGC Act, 1956)



Cordially invites you for the inauguration of

IDAD'22

5th INTERNATIONAL CONFERENCE ON

*Innovative Design, Analysis & Development Practices in
Aerospace and Automotive Engineering*

24th February, 2022

Jointly Organized by

**SCHOOL OF MECHANICAL AND CONSTRUCTION
&
OFFICE OF RESEARCH & DEVELOPMENT**

On 24th February, 2022, 9:30 a.m. through Virtual Mode



Chief Guest

Prof. Lung-Jieh Yang

Department of Mechanical and Electro-Mechanical Engineering,
Tamkang University, Taiwan

Presided by

Col. Prof. Vel. Dr. R. Rangarajan
Chancellor & Founder President

Dr. Sagunthala Rangarajan
Foundress President

In the Presence of

Prof. Dr. S. Salivahanan
Vice Chancellor

Dr. S. Irudayaraj
Dean – SoMC

Dr. E. Balasubramanian
Dean – R&D

6. Events Organized



Vel Tech
Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Encl. to UGC Act, 1956)

SCHOOL OF MECHANICAL AND CONSTRUCTION
DEPARTMENT OF MECHANICAL ENGINEERING



One Day Hands on Training on
"CATIA V5 R20 version-Training on Drafting, Simulation and Code Generation"
25th APRIL 2022

INVITATION



DEPARTMENT OF MECHANICAL ENGINEERING
SCHOOL OF MECHANICAL AND CONSTRUCTION

One Day Hands on training
On

"CATIA V5 R20 - Drafting, Simulation and Code Generation"

Organized by



On 25th April, 2022, 10.00 a.m.
Venue: Computer Aided simulation and Analysis Laboratory



Resource Person

Dr. R. RAMESH KUMAR
Assistant Professor
Mechanical Engineering

Presided by

Col. Prof. Vel Dr. R. Rangarajan
Founder Chancellor & President
Dr. Sagunthala Rangarajan
Foundress President

In the presence of

Prof. Dr. S. Sathishkaran
Vice-Chancellor
Prof. Dr. S. Brudayaraj
Dean - SoMC
Prof. Dr. M. Lenin
HoD - Mechanical Engineering

No.42, Avadi-Vel Tech Road, Vel Nagar, Avadi Chennai-600 062

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6. Events Organized

PHOTOGRAPHY CONTEST

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MECHANICAL ENGINEERING
STUDENTS ASSOCIATION

in association with

DEPARTMENT OF MECHANICAL ENGINEERING
SCHOOL OF MECHANICAL AND CONSTRUCTION



Vel Tech

Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s of UGC Act, 1956)

Event held on 12 May 2022



Prize winner



Vel Tech

Rangarajan Dr. Sagunthala
R&D Institute of Science and Technology
(Deemed to be University Estd. u/s 3 of UGC Act, 1956)



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by MHRD, Govt. of India



The Association
of Commonwealth
Universities



**400 feet Outer Ring Road, Avadi,
Chennai - 600 062,
Tamil Nadu, India.**

Toll Free : 1800 2127 669

Email : admission@veltech.edu.in