

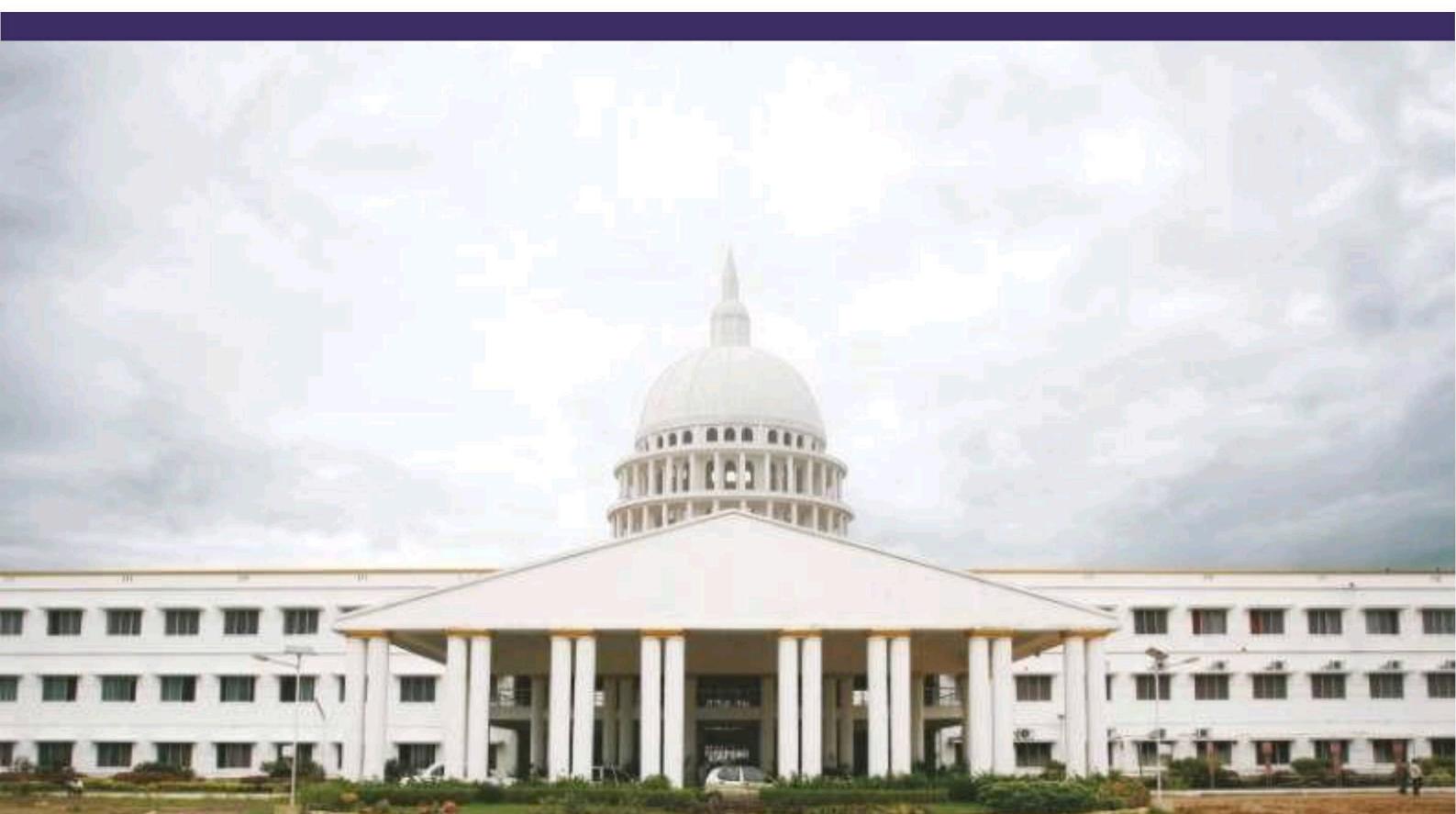


VINAYAKA MISSION'S RESEARCH FOUNDATION

(Deemed to be University under section 3 of the UGC Act 1956)



Accredited by



INTERNATIONAL QUALITY
EDUCATION
WITH A MULTI-SPECIALISATION



AVIT

AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY
Paiyanoor, Chennai
Approved by AICTE, New Delhi





AVIT

AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY
Paiyanoor, Chennai



Approved by AICTE,
New Delhi

Engineering | Technology | Management | Architecture



Vinayaka Mission was established in the year 1981 in Salem. In the year 2001 the University status was conferred on Vinayaka Mission's by the Ministry of Human Resource Development, Govt. of India, with the recommendations by the University Grants Commission as an acknowledgment of its excellence in education, meeting the highest level of academic standards and the best infra-structural facilities provided to achieve pioneering in education. By the virtue of this recognition Vinayaka Mission's transcended to Vinayaka Mission's Research Foundation - Deemed to be University (VMRF-DU)

Why to choose **AVIT** "

ONE NAME MANY REASONS



The Campus - Green and Serene atmosphere providing perfect ambience for peaceful and creative learning.



Faculty - Student friendly faculty strongly supported by list of eminent adjunct faculty from industries and reputed foreign universities for handling specialised courses and to mentor specific activities.



Research - State of the art research facilities like Bosch Automotive Lab, Intel Artificial Intelligence Lab, Intel Intelligence Systems IoT Lab, SIEMENS Process Engineering and Design Lab, Plant Tissue Culture Lab, Concrete Research and Testing Lab, Renewable Energy Lab, Nano Technology Lab.



Consultancy - Industrial Consultancy.



Internship - Tie-ups with leading Industries for Internship.



Motivation - Entrepreneurship skills through a dedicated Innovation and Product Development Cell.



Placement - Excellent placement record in diverse core industries.

Facts & Figures

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PRESTIGIOUS COLLABORATIONS



AWARDS & RECOGNITION

- AICTE-ECI-ISTE Chhatra Vishwakarma Award
 - L & T Techgium Innovation Award
 - Best Project Team - National Science Fest 2020
 - MSME Incubation Centre
 - ARIIA Ranking for Institutional Innovation
 - Best IEEE Chapter Award
 - ISTE - Best Student Awards
 - ISTE Appreciation Award
 - Dalal Street Magazine - Best Engineering Institute Award
 - IETE Student Forum Award
 - Education Expo TV (EET) Award
 - Best student Project Award by TNSCST
 - Nodal Centre - SWAYAM - NPTEL, IIT - Madras
 - Nodal Resource Centre - IIT - B - SRC
 - Best Rotaract Club Award
- Member Institution**
- ICT Academy
 - NASSCOM
 - Computer Society of India
 - Confederation of Indian Industry (CII)
 - Automotive Component Manufacturers Association (ACMA)
 - CROMA HR
 - Federation of Indian Chambers of commerce and Industry (FICCI)

Universities

- Arkansas State University, USA
- Oakland University, USA
- University of North Texas, USA
- Edinburg Napier University, UK
- Naresuan University, Thailand
- NPI, Bangladesh
- Technological University (Hmawbi), Myanmar
- IYF - South Korea
- Society for Electronic Transactions and Security (SETS)
- NIT, Nagaland

Industries

- INTEL FICE
- Infosys Campus Connect
- Bosch
- Siemens
- Hitachi Automative Pvt. Ltd, Japan
- Tech Mahindra
- Eureka Forbes
- Salcomp

CONFERENCE AND PUBLICATIONS



- 22 International Conferences Organised
- 622 Journal Publications
- 473 Conference Publications
- 24 Books Published
- ₹ 36 Lakhs Research funding from Govt. funding Agencies
- 18 patents filed

INDUSTRY



INSTITUTE INTERACTION

- 79 MoU's signed
- Curriculum development by Industry experts
- Industry offered Electives
- Internship



COMMUNITY ACTIVITIES

- 207 Toilets constructed and donated to the nearby Paiyanoor village
- 5 Villages adopted and implemented 3 projects under Unnat Bharat Abhiyan, MHRD, Govt. of India, New Delhi
- Fabrication and Installation of seed balls production equipment
- Solar power to Street Light and common utilities for villages
 - Digital marketing App for Rural people
- Safety, Environment, Health Awareness programmes in collaboration with Government agencies
- Installed Smart class rooms in nearby rural Govt. Schools

Skill

Development



Skill Development and Vocational Programmes through B.VoC and PMKVY - TI

STUDENT

SCHOLARSHIP



A V Higher Education Scholarship up to ₹ 3.22 crores



India's Pioneering University

Engineering

Courses offered

UG Programmes - B.E / B.Tech. (Regular - 4 years)

Programmes

Specialisation

B.Tech - Biotechnology

- Genome Engineering and Technology
- Drug Engineering
- Industrial Biotechnology
- Medical and Pharmaceutical Biotechnology
- Nano Biotechnology
- Marine Biotechnology
- Agricultural Biotechnology

B.E - Artificial Intelligence and Data Science *

B.E - Bio Medical Engineering

- Hospital Management
- Implants and Rehabilitation Engineering
- Clinical Engineering

B.E - Civil Engineering

- 3D Printing
- Smart Cities
- Sustainable Construction Technologies
- Environmental Engineering
- Water and Resource Management
- Disaster Mitigation and Recovery
- Urban Infrastructure
- ERP in Construction
- Mass Transport Systems
- RE Valuation and Costing

B.E - Computer Science and Engineering

- Internet of Things (IoT)
- Augmented and Virtual Reality
- Big Data and Business Analytics
- Artificial Intelligence and Smart Systems
- Cyber Security and Cryptology
- Multimedia and Animations
- High Performance Computing
- Cloud Computing and Virtualisation
- Human Computer Interactions and IoT
- Open Source Software and Open Standards
- Block Chain Technology

B.E - Computer Science and Engineering - Cyber Security *

B.E - Electronics and Communication Engineering

- Data Science
- Artificial Intelligence and Machine Learning
- Virtual Reality and Augmented Reality
- Wireless Communication Technology
- RF Communications and Microwave
- Sensors and Smart Systems
- MEMS and Nanotechnology
- Gaming Technology
- Under Water Communication

B.E - Electrical and Electronics Engineering

- Electric Vehicles
- Renewable Energy Technologies
- Power Systems and Smart Grid
- Automation and Control
- Energy Audit

B.E - Mechanical Engineering

- Robotics
- 3D Printing
- Electric Vehicles
- Product Life Cycle Management
- Energy Engineering
- Materials and Manufacturing Technology
- Automotive Technology
- Total Quality Management

B.E - Mechatronics

B.E - Pharmaceutical Engineering *

to launch various stream
with multi-specialisation

To obtain specialisation
in emerging areas

To obtain dual specialisation in
an inter-disciplinary field

Engineering



Courses offered

UG Programmes

B.E / B.Tech

(Lateral - 3 years)

- B.Tech - Biotechnology
- B.E - Automobile Engineering
- B.E - Bio Medical Engineering
- B.E - Civil Engineering
- B.E - Computer Science and Engineering
- B.E - Electronics and Communication Engineering
- B.E - Electrical and Electronics Engineering
- B.E - Mechanical Engineering
- B.E - Mechatronics

B.E

(Part Time - 3 1/2 years)

- B.E - Civil Engineering
- B.E - Computer Science and Engineering
- B.E - Electronics and Communication Engineering
- B.E - Electrical and Electronics Engineering
- B.E - Mechanical Engineering

M.E / M.Tech

(Regular - 2 years)

- M.Tech - Biotechnology
- M.E - Artificial Intelligence and Data Science *
- M.E - Construction Engineering and Management
- M.E - Embedded System Technology
- M.E - Manufacturing Engineering
- M.E - Power Systems Engineering

M.E / M.Tech

(Part Time - 3 years)

- M.Tech - Biotechnology
- M.E - Artificial Intelligence and Data Science *
- M.E - Construction Engineering and Management
- M.E - Embedded System Technology
- M.E - Manufacturing Engineering
- M.E - Power Systems Engineering

Eligibility :

As per AICTE Norms



- Academic Merit
- Sports
- Ex-Servicemen
- Differently Abled
- First Generation Graduate*
- Alumni

* Only for Tamilnadu Students



Management

MBA (Regular - 2 years)
Dual Specialisation

Specialisations

Human Resource Management
Finance
Marketing
Logistics Management
Business Analytics
E- Commerce
Systems
Hospital Administration
International Business

Entrepreneurship
Real Estate Management
Real Estate Valuation
Property Management
Retail Management
Operations Management
Environment Management
Agri Business Management
Airport and Airlines Management

MBA - Innovation, Entrepreneurship and Venture Development *
(Regular - 2 years)

Eligibility :
As per AICTE Norms

* Proposed New Courses (awaiting approval)

Bachelor of Vocation (B.Voc)

Doctoral Programmes - Ph.D

Engineering
Technology
Management
Humanities
Science



Architecture

Approved by Council of Architecture, New Delhi
Approved by AICTE, New Delhi
Ranked in GHRDC Architecture colleges survey 2019

B.Arch (Regular - 5 years)

Eligibility :

visit www.nata.in / www.coa.gov.in / www.jeemain.nta.nic.in

VINAYAKA MISSION'S RESEARCH FOUNDATION AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY (AVIT)

SALIENT FEATURES

1. MHRD, AICTE approved Interdisciplinary Innovation Cell.
2. MSME, GoI approved Multidisciplinary Incubation Centre.
3. Prestigious and strategic GoI institutes-DRDO, DBT, MHRD, UGC-DAE funded projects.
4. Focussed initiatives on multidisciplinary patent development and publishing.
5. Intel, BOSCH, Siemens sponsored exclusive research centres.
6. Students project funding from IEEE, TNSCST, AICTE etc.,
7. New Central computing facility with Linux machines with more than 200 open source application software.
8. AVIT - a nodal resource centre - Spoken Tutorials by IIT Bombay, NPTEL - SWAYAM, local chapter by IIT Madras.
9. Students placed in IIT Madras as Research Project Associates.
10. UC Berkeley-Intel FICE micro innovation acceleration group for entrepreneurship development.
11. Exclusive Artificial Intelligence lab for multidisciplinary health sciences centric projects for early disease detection and disease management.
12. Focus on foreign language training with established Japanese Learning Centre (JLC).
13. Multiple research centres including Nanotechnology research lab, IoT Research lab for interdisciplinary innovations.
14. Supported student progression for international studies, higher education, entrepreneurship, government competitive examinations and placements.
15. Collaboration with core industries for paid student internship.
16. Ongoing Institutional-Industry initiatives including professional society activities, corporate trainings, research sponsorships, Guest Lectures by international faculty, industry workshops etc.,
17. Student / Faculty exchange programs with NIT and Naresuan University, Thailand.

AVIT

Research Centre

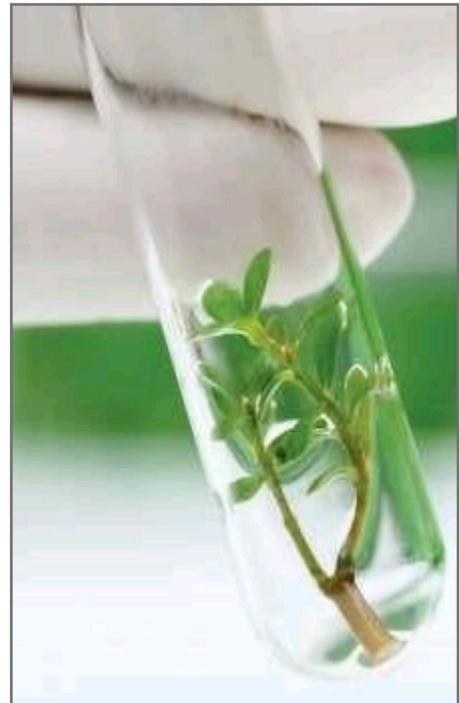
CENTRE FOR NANOTECHNOLOGY RESEARCH



Centre for Nanotechnology Research (CNR) was established to accelerate R&D activities in various Nano engineering fields. Currently, the research centre CNR operates a state-of-the-art research program in the field of Nanomaterials, Nanoporous materials, Nanocoatings and thin films supported by cutting edge facilities for materials synthesis and characterisation.

CENTRE FOR PLANT TISSUE CULTURE

Worldwide Plant tissue culture technique is being utilized as an essential tool to meet green economy of the country. Plantlets are grown in large number from isolated cells or tissues under sterile and controlled conditions outside the parent plant. Plant Tissue Culture centre provides the facility of growing large number of isolated cells or tissues under sterile and controlled conditions obtained from any part of the plant like stem, root, leaf etc. which are encouraged to produce more cells in culture and to express their totipotency (i.e., their genetic ability to produce more plants). Cells or tissues are grown in different types of glass vials containing a medium with mineral nutrients, vitamins and phyto-hormones. Tissue Culture techniques are being exploited in this laboratory to multiply plants which are difficult to propagate by conventional means. The Centre was established funding from Department of Biotechnology, Govt. of India.



SIEMENS DCS, COMOS INTEGRATED ENGINEERING AND SIMULATION LAB



The COMOS Automation support Electrical engineering for the plant through full automation covering all process relevant to Electrical, Instrumentation and control Engineering by specialized solutions. The integration of COMOS and SIMATIC, PCST (DCS) process control system make it possible to combine data from concurrent work processes and operation. At the press of a button, the entire plant structure is generated from the control system engineering. Based on this data, virtual commissioning can also be performed through the seamless connection with SIMIT.

RESEARCH CENTRE FOR ALTERNATE FUEL TESTING

The Centre is established to test various bio fuels. The setup consists of single cylinder, four stroke, CRDI VCR (Variable Compression Ratio) engine connected to eddy current dynamometer. It is provided with necessary instruments for combustion pressure, crank-angle, airflow, fuel flow, temperatures and load measurements. These signals are interfaced to computer through high speed data acquisition device. The setup has stand alone panel box consisting of air box, twin fuel tank, manometer, fuel measuring unit, transmitters for air and fuel flow measurements, process indicator and piezo powering unit. Rotameters are provided for engine cooling water and calorimeter water flow measurement. CRDI VCR engine works with programmable Open ECU for Diesel injection, fuel injector, and common rail with rail pressure sensor and pressure regulating valve, crank position sensor, fuel pump and wiring harness. The setup enables study of CRDI VCR engine performance with programmable ECU at different compression ratios and with different EGR. Engine performance study includes brake power, indicated power, frictional power, BMEP, IMEP, brake thermal efficiency, indicated thermal efficiency, Mechanical efficiency, volumetric efficiency, specific fuel consumption, Air fuel ratio, heat balance and combustion analysis.



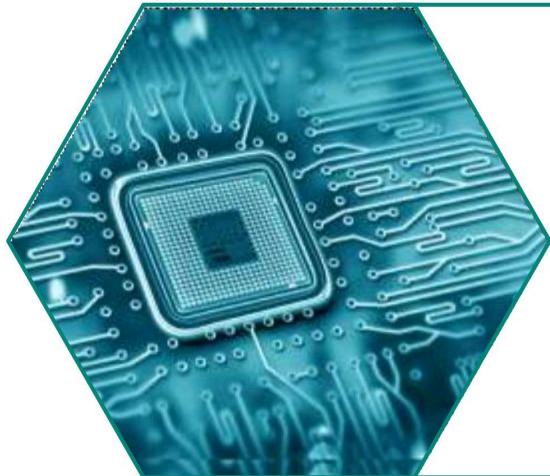
CENTRE FOR CONCRETE RESEARCH AND TESTING

The centre provides technical support to all projects related to special subjects of testing of materials, structural components, and field assessments. It is consistently providing the services to various construction companies and conducts material testing. The centre also offers solutions and bridges gaps in implementation of new technologies in construction. The centre inspires the young engineers to conduct innovation works, imparts training and adopt best quality standards and motivates them to address challenging tasks in innovation of new construction materials. Concrete Research and Testing Laboratory has significantly advanced the performance of concrete and driven the creation of new, innovative and cost-effective solutions that are making an impact



today. The department has engineered superior concrete mixes using alternative cement materials. These new mixes not only outperform traditional concrete mixes relative to set times and early strength, but significantly reduce the products carbon footprint. Many of these products have sprung from our Environmentally-Friendly Initiative. Mission of the Centre is to initiate and work with partners on fundamental research and then pursue and develop commercially viable solutions that address the needs of owners, developers, architects and engineers. AVIT established an academic-industrial partnership with teams at Dalmia and Ramco cements to develop alternative building materials.

RESEARCH CENTRE IN HARDWARE SECURITY



- The research centre setup in the department focuses primarily to conduct high quality research in state of the art areas such as cyber security, hardware security solutions for strategic organizations like DRDO, ISRO.
- The Centre has successfully completed the funded project sponsored by Defence Research Development Organisation-SAG, New Delhi titled “Comprehensive study on Hardware Trojans- Challenges and Solutions”.

CENTRE FOR RENEWABLE ENERGY TECHNOLOGY



The 126 KW power grid connected solar power plant commissioned in the campus catering the power demand of the institutions and it helps the students and scholars to study about the designs and operations of a PV system, Inverters and energy management systems. The facility emphasises all aspects of innovations in renewable energy systems, in solar PV system, grid tied polar PV system, grid tied wind energy system to analyse various parameter for research and developments.



RESEARCH CENTRE FOR ARTIFICIAL INTELLIGENCE



Artificial Intelligence & High Performance Computing Research Centre was established in collaboration with INTEL-FICE in August 2019. The research centre is equipped with high performance computing server with hardware and software packages like Neural boards – Movidius for AI at Edge computing, (Intel® Studio XE Cluster Edition for Linux,) Pi 3+ (64 bit) board, Pi 3 camera version 2.0, Tensor flow, Scikit, Intel® Open VINO tool kit, NAUTA - Deep Learning Platform, PLIADML – Deep Learning framework etc. The research centre is mainly concentrating on multidisciplinary research in the area of health science.

RESEARCH CENTRE FOR INTERNET OF THINGS (IoT)

The Research Centre for IoT – Intel Intelligent Systems Lab was established to accelerate R&D activities in the field of Internet of Things (IoT). The cloud enabled smart energy management systems developed in this lab has won Chhatra Vishwakarma award. Smart irrigation using IoT is developed and nominated for Chhatra Vishwakarma award.



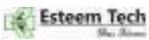
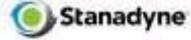
RESEARCH CENTRE FOR BOSCH AUTOMOTIVE RESEARCH



Bosch Limited, the German Automaker established training centre for joint certification programme for students, technicians, service personnel and educational institutions. Training courses from the group offer knowledge in the evolving technologies and provides hands on experience with latest equipments.

Placement & Training

Our Prestigious Recruiters

Placement (2019-20) - 91%

How to Apply”

Get your applications

- ▶ Engineering / Technology / Architecture / Management:
visit: www.avit.ac.in / www.vinayakamission.com (online)
visit: Admission office at Chennai / AVIT Campus (Offline Application forms)
- ▶ Arts & Science:
visit: www.avtas.ac.in / www.vinayakamission.com (online)
visit: Admission office at Chennai / AVIT Campus (Offline Application forms)



Student Testimonials”

College experience



I am Pasang Norbooz currently working as one of the Managers in the only Power utility company in Bhutan. I graduated from AVIT in EEE in June 2012. AVIT was known to me through one of my friends. From the day I was admitted in AVIT I felt home away from home. The College has excellent teaching faculty with enough labs and awesome learning materials and spacious Hostels with friendly

Panang Norbooz

B.E., EEE



I still remember the very first day of AVIT but I don't want to recollect the last day of it because it will make me cry now. All four years were golden days that I will cherish throughout of my life because it gave me so many friends and best teachers.

Dibyashree Chhetri

B.Tech, Bio. Tech.



The campus is filled with positive energy and exuberance. My first visit left me awestruck after looking at the infrastructure and maintenance of the college. The campus is full of limitless opportunities if you want to discover yourself. Besides that, this college gave me sweet memories, faithful friends and a sense of confidence to face the challenges and turbulence in life.

Vijayakumar

B.E., ECE



It has been wonderful 4 years at AVIT. Things could have been different if AVIT had not nurtured us in all respect, be it be developing a sense of leadership, to be innovative in our ideas, building our courage and sense to be in Corporate world, learning work ethics to name a few.

Sridhar

B.E., EEE



When I found out I got admission here, I was on cloud 9. This university has been nothing less than what I had hoped for. Supportive seniors and faculty, beautiful campus, quality education, real world experiences, and amazing friends. Its everything one needs from a college, and a network developed for life.

Vandhana

B.E., EEE



It gives me great pleasure to say with pride that I have completed my post-graduation from AVIT and another pride is that am working as a faculty now in AVIT. The two years I spent here was golden days and it has helped me to grow better professionally and personally. The thing I admire the most about AVIT is the support I received from everyone in college which helps me to become a college topper. AVIT has taught me things far beyond bookish knowledge and helped me broaden my horizons.

Saranya

MBA - Gold Medalist



VINAYAKA MISSION'S RESEARCH FOUNDATION

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- ▶ Aarupadai Veedu Medical College and Hospitals - Puducherry
- ▶ Aarupadai Veedu Institute of Technology, Paiyanoor - Chennai
- ▶ Vinayaka Mission's Kirupananda Variyar Medical College and Hospitals - Salem
- ▶ Vinayaka Mission's Medical College and Hospitals - Karaikal
- ▶ Vinayaka Mission's Kirupananda Variyar Engineering College - Salem
- ▶ Vinayaka Mission's Annapoorana College of Nursing - Salem
- ▶ Vinayaka Mission's College of Nursing - Karaikal
- ▶ Vinayaka Mission's College of Nursing - Puducherry
- ▶ Vinayaka Mission's Sankarachariyar Dental College - Salem
- ▶ Vinayaka Mission's College of Pharmacy- Salem
- ▶ Vinayaka Mission's Homoeopathic Medical College and Hospital - Salem
- ▶ Vinayaka Mission's College of Physiotherapy - Salem
- ▶ Vinayaka Mission's College of Arts and Science - Salem

Contact Details:

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• AVIT Campus

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