















Vignan at a glance...



46 years of Excellence in Education



NAAC A+, NIRF **NBA** Accredited University



Earn doctorate with your work experience



Tel: 0863 2344700



Blended mode support (external and internal)



As a corollary, Vignan's Doctoral Studies Program encourages, challenges, and equips you to be inquisitive, think innovatively, and explore the most happening ideas. At university, you will be having the chance and flexibility vying for a place by dint of thought, cooperation, and research. So, when the opportunity arises... YOU AFFIRM, YOU ARE WELL PREPARED.

Vignan's University, as a body of prudent knowledge hub, is building the twenty-firstcentury multidisciplinary research culture and offering assistance to all professional researchers from diverse schools in order to execute, preserve a thriving research environment and to be an explorer of theories with collective perspectives in search of solving all the problems.

With a long history of industry and academia's bond, Vignan's Doctoral Studies imbibes a value system; commits to growing opportunities by creating an exemplary model for research excellence. Furthermore. we are rapidly improving our research abilities and outcomes through multifaceted global collaborations, capacity-building activities, and industry professionals realtime research challenges and solutions. Our doctoral studies programs not only contributes to the quantum of research but also, more importantly, ensures impactful high quality research. All this comes with an unshaking promise of career growth.

Vignan invites experienced professionals with corporate experience and research ambitions. Whether you wish a research career or a strategic consultancy role, the doctoral program at Vignan provides vou broad academic development and the specific needs of research to create a potential for creation of knowledge. Through specialized research training, mentoring and intercontinental relationships, the program will equip the scholars to create the output that matches global standards. In a nutshell, your research experience adds to your profile of being a professional and positions you among the elite.





- Research projects that the university undertook were sanctioned by the Department of Science and Technology, the Government of India, the DRDO, the Ministry of Defense (MoD), the MoEFCC, and others. Forty-four of those projects were completed successfully.
- Our collaborators include National Technical University of Singapore, Koreatech University of South Korea and Bharat Biotech, Hyderabad, India and other organizations of high repute. With this collaboration, 970 projects have been finished by us so far.
- Research in Vignan developed National Design patents, Australian patents, International US patents, and others. We have patents granted and published that enumerates to 105.
- MoUs with prestigious universities, corporate in India and overseas
  for internships to improve job training, project work, student and
  teacher exchange, and collaborative research. With a total of 125
  functional MoUs, our renowned corporate partners include Keysight
  Technology India Pvt Ltd, Efftronics, Netsoft Infotech, and others.

# Road map for coming five years

### **Publications:**

Target for faculty publications at 1500 per year:
The faculty will always strive to publish their papers exclusively in reputed, highly indexed journals with a great quality impact. The varsity intends to increase the number of publications by the faculty members to 1500 per year.

## Startups, CoE's & Research Centers:

Focus on establishing CoE's, new startups and research centers: The university fosters an entrepreneurial culture by establishing 10 CoEs, expanding its research area in emerging fields such as AI and machine learning, smart grids, electric mobility, site-specific crop management, ergonomics, nanotechnology, immunodiagnostics and others. The university supports 30 startups through its Incubation Center.

YEAR

# Scholars:

The statistics of prevalent Ph.D. recipients and university partnerships: Collaboration process will be initiated with 30 more academic and research universities located abroad. In the end of 2023, about 60 research scholars will have successfully completed their Ph.D. In coming five years, another set of around 250 to 300 researchers will obtain their Ph.D.

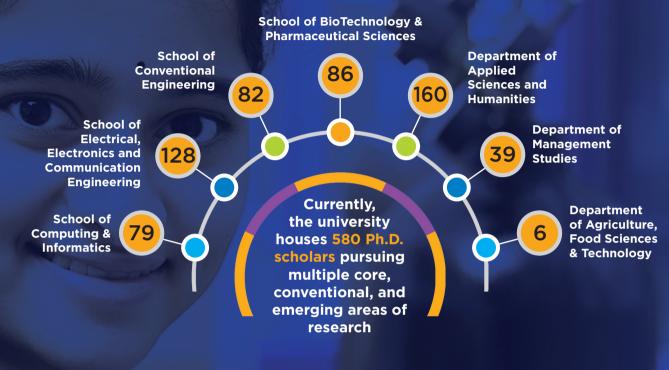
### **Projects & Patents:**

Projects worth 40-50 crores in pipeline and there is a focus on more patents: With an ambition of having 40 to 50 crores of projects approved and acquiring 20 more patents on cutting-edge technology, we have 25 international patents awarded and will work to accelerate growth and create a conducive environment for research. Positively, project proposals totaling 32 crores of rupees have been submitted, and there are many in the pipeline.

### Faculty:

100% of faculty on campus hold a doctorate degree: We intend to hire 75 to 100 PhDs from National and Central universities. As the faculty of the university conclude their research, an additional 200 doctorates are expected to add to Vignan's human resource pool in the next two years. The university aims to have 100% of teaching faculty on campus as doctorates to fulfill the ideal Teacher – Researcher combination.

# Scholars and Schools



# Faculty Highlights



Dr. Ambati Ranga Rao Dept. of Biotechnology



Dr. P B Kavi Kishore Dept. of Biotechnology



Dr. K. Venkata Rao Dept. of Mechanical



Dr. Anandarup Goswami Dept. of Chemical

- Vignan professors have secured in the list of World's Top 2% Scientist (2022).
- Our professors have demonstrated significant and broad influence, as reflected in thier research publications of multiple highly cited papers over the last decade.
- Professors have an H-Index of 30 on average, which is truly exceptional.
- Our faculty are capable of and can collaborate with a variety of elite institutions and organizations to provide adequate assistance to all Ph.D students at the university, with a total of 162 Ph.D members in strength.
- We have published over 520 papers in reputed high indexed journals and conferences which manifest in the SCI/Scopus-indexed.
- In practice, the institute has a policy of sponsoring student projects worth Rs. 5 lakhs, under faculty supervision. Faculty researchers will receive an amount of Rs. 72 lakhs in startup financing.
- The university funded many such faculty-led innovative projects. Some of them, namely solar automobiles and a dustless duster, have culminated in publications and patents.

# Abiding benefits of pursuing Ph.D at Vignan

### **Professional Education Strategy**

We employ dynamic learning approaches, transdisciplinary education and strategic use of technological tools. We collaborate with a committed and continuing community of professionals, students, alumni, and partners to enhance our research.

### Research Scholars' Contentment

Vignan promotes rational decision-making and extends opportunities for professionals to personalize their learning experience. A transparent, unbiased, and innovative evaluation system in which individuals gain learner-centered instruction and an inclusive learning experience.

### **Conducive Environment**

Scholars are constantly honed in their research to be presentable and to develop a positive outlook. Furthermore, our program evaluates and demonstrates self-esteem among students by instilling a positive approach.

### **Excellence in Research**

Research at Vignan will increase learner's cognitive abilities and skills in dealing with data as part of their studies. Information that can be assimilated and processed in numerous ways to generate multiple interpretations. As an outcome, the findings are sound.

### **Corporate Career Advancement**

Pursuing a Ph.D facilitates professional advancement, referring to an individual's competence and productivity that the industry expects. This results in a significant improvement in designation and income. The Doctorates stay relevant in advancements related to their specific industries or fields, as well as anticipated reforms necessary to flourish in their realm.

### **Faculty**

A steady team-based approach will work collaboratively with you in an effort to identify and establish win-win partnerships. Our faculty are stimulated and refine their research skills through first-hand exposure to cutting-edge science and technology that is revolutionizing the world.

## Supervision

Vignan ensures that mentoring is outcome based and acts synergistically toward professional development. Supervisors are experts in their fields who have a proven track record of research and offer a novel curriculum that best suits scholars and mold them into leaders.

	Mode	Duration	Stipend - Full time
B.Tech	Part time / Full time	Minimum - 3 1/2 years	1st year- Rs 24000, 2nd year - Rs. 26000 (accumulates every year)
M.Tech	Part time / Full time	Minimum - 2 1/2 years	1st year - Rs. 26000, 2 <sup>nd</sup> year - Rs. 28000 (accumulates every year)

# **Contingency Plan**

After one year, honorable exit option with PG Diploma certificate is provided as a rational conclusion to the breakdown of research work because of unforeseen exigencies.

Candidates, irrespective of their employment status seeking admission, can enroll in the Ph.D program as internal or external scholars.





# Research Infrastructure

At Vignan, research is integrated into the teachinglearning process. This significantly improves professionals' inventiveness and propensity for research.



## **CENTERS OF EXCELLENCE**

The Center of Excellence in Material manufacturing, processing and characterization is wholly funded by the Institute to procure equipment worth around Rs. 3 crores.

The Center of Excellence in Bio Resource Management is a joint venture of institute and DST-FIST, the Government of India, causing them to procure equipment above Rs. 50 lakhs.

The Center of Excellence on Composite Materials is wholly funded by the institute to procure equipment worth above Rs. 25 lakhs.

The Center of Excellence in Advanced RF, Microwave and Wireless Communication has been a joint venture to which Keysight Technologies has contributed nearly Rs 9.5 crore in addition to this to Rs 1.5 crore by the Institute.

All these Centers of Excellence with state-of-the art facilities assist in conducting inter-disciplinary research.

## **RESEARCH CENTERS**

The University has sixteen dedicated research centers focus on specific research areas like VLSI, Biofortification, robotics, tool diagnostics, hybrid vehicles, asymmetric reactions, thin films, Signal and Image Processing and Downstream Processing

These Research Centers stimulate research activity beyond the scope of single disciplines and promote interdisciplinary work.

### **ACUMEN PUBLICATIONS**

The CoE enhanced our research growth, research funding, publications (which grew thrice), citations (which increased twenty-five times-WoS), and student enrolment in Ph.D programmes. Our University's H-index stands at 30. We've published 963 journal articles and 1066 conference papers. 87% of articles published in indexed journals in WOS/SCOPUS.

### **OUR PATENTS**

The CoEs facilities aided us to obtain patents. A few of them are from the CoE of Advanced Materials Manufacturing, Processing, and Characterization - National patent granted for Novel Process for the Preparation of Pyridine and Triazole Derivatives, and International Australian patent granted from the CoE of Composite Materials - Methodology for Solving Issues in the Textile Industry. We have a total of 28 granted and 76 published patents.



## **HIGHLIGHTS**

**Our CoE-CM** augments engineering expertise with specialist composites capabilities such as design, analysis and production, testing, repair, and lifecycle management.

 Students integrate the laboratory facilities, information management, solutions, and training to enable the Institution to swiftly answer real-life engineering difficulties by generating the proof of concept and moving to the rapid prototyping stage.

Our CoE-BM assisted the scholars by using biology and process engineering concepts to manufacture bioproducts and cell culture techniques to improve diagnostic abilities.

 Students use computational tools and molecular approaches to find solutions for environmental and health sustainability.

### Our ARMWC CoE is

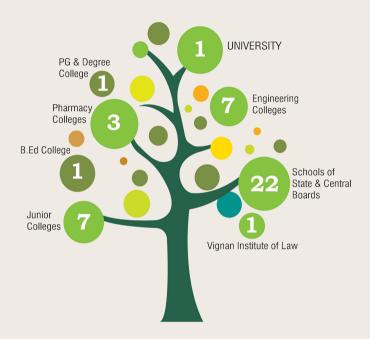
an academic-industry collaboration in wireless communication that provides design and test house capacity in RF, Microwave, and Wireless Communication systems.

 Our center assists with communication systems, RF components, circuit, antenna and fabrication design and testing lab.

### Varsity's CoE-AMMPC

equipment, SCANNING ELECTRON MICROSCOPE (SEM), is now an evolving technology that is widely used in a broad range of scientific applications. SEM is a sophisticated tool for examining materials, metallurgy, geology, biology, and medicine.

# Symbolising 46 years of honest growth





Building young India



