



VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

-Estd u/s 3 of UGC Act 1956



Ignite. Inspire.. Innovate...



Prospectus 2019

discover more



Follow Vignan



Blogs

Read Vignan's students' blogs to find out what life at the College is really like



Tweets

Follow @VFSTRUniversity for campus highlights and @vignanuniversity for the latest research news



YouTube

Watch videos showcasing all aspects of campus life



Flickr

Explore the photostream of College pictures by staff and students



Facebook

Interact with current vignan students through Facebook groups



Instagram

Interact with current vignan students through Instagram groups

www.vignan.ac.in

Attend an open day

Vignan Campus

The UG programme will hold an open day for all prospective students at the Vignan University campus.

Each department will be represented and will be able to advise on research opportunities and taught Master's programmes available at Vignan. You will also be able to obtain advice on the application process, accommodation, fees and funding.

There will be a talk to introduce Vignan and provide information on accommodation, student life and careers after Vignan and a question and answer session.

Contact us

If you have any questions about the course you are interested in please contact the appropriate department via the correct details given in the relevant section of this prospectus.

Details of course may change following publication. Further details and the most up-to-date information about courses can be found online at :

www.vignan.ac.in

For admission enquiries see :
www.vignan.ac.in

Vignan's Deemed to be University
Vadlamudi, Guntur - 522 213
Andhra Pradesh

+91 863 2344700, 777

→ Contents

Life at Vignan

- 03 Welcome to Vignan's Deemed to be University
- 04 Vision & Mission
- 05 Awards and Accolades
- 06 Chairman's Desk
Others saw the problem, he sought the solution
- 08 Chancellor's Desk
- 09 Vice Chancellor's Desk
- 10 Transforming education
- 12 Invigorating environment
- 14 A rich repository for learning
- 16 Keeping pace with industry
- 18 Chalking out a career of choice
- 20 Join the ranks of the highest cadre in the country
- 22 How our system works
- 24 Training for an extra edge
- 26 Pillars supporting the edifice
- 28 Study abroad
- 30 Support and welfare

What can you study?

- 32 Choose the one
- 34 Scholarships.. Fee structure and Reservation Policy
- 36 Encouraging Merit
- 38 Department of Sciences and Humanities
- 40 Department of Biotechnology
- 44 Department of Chemical Engineering
- 48 Department of Civil Engineering
- 52 Department of Computing
- 56 Department of Electronics
- 60 Department of Electrical and Electronics Engineering
- 64 Department of Mechanical Engineering
- 68 Department of Applied Engineering
- 72 Department of Management Studies
- 76 Department of Pharmaceutical Sciences
- 80 Department of Placements
- 82 Leading on all fronts always in the News
- 84 Sports & Optional Clubs
- 86 Convocation

Welcome to **Vignan's Deemed to be University**

Vignan's Foundation for Science, Technology and Research (VFSTR) Deemed to be University provides quality education in a diverse and intellectually stimulating environment. It imparts value addition training to students to make them competent and inspired engineers. The institute celebrates the power of knowledge, cultivates vision and encourages new ideas, as well as aims to inculcate human values and build awareness about the self and society around. The institute is well known for its dedicated faculty, state-of art infrastructure and excellent placement record. As a Deemed to be University, it is in the process of improving its standards to the level of a global technical institution. The latest curriculum has been prepared after consulting the institute's illustrious alumni working across the world, veterans from industry and distinguished academicians possessing a rich teaching and research background.



VISION

To evolve into a Centre of Excellence in Science & Technology

through creative and innovative practices in teaching – learning, towards promoting academic achievement and research excellence to produce internationally accepted, competitive and world class professionals who are psychologically strong & emotionally balanced, imbued with social consciousness & ethical values.

MISSION

To provide high quality

academic programmes, training activities, research facilities and opportunities supported by continuous industry - institute interaction aimed at promoting employability, entrepreneurship, leadership and research aptitude among students and contribute to the economic and technological development of the region, state and nation.









“Human resources, especially trained and professionally qualified are the strength and wealth of any country. This was the thought that prompted me to start Vignan. If today Vignan is successful, it only means that we are moving in the right direction. My desire is to see India at the pinnacle of glory, it once enjoyed during the evolution of human civilization in the glorious era of Takshila and Nalanda.”

Others saw the problem, he sought the solution

The difference between dreamers and innovators is that a dreamer just dreams and does nothing to realize it, while an innovator charts his own path and breathes life into his ideas. That streak of originality is the distinct quality that makes innovators a breed apart from the ordinary people of this world. Dr. L. Rathaiiah, Chairman of Vignan group of institutions, was destined to be different, or should we say, he chose to be different. He was not content with just teaching. He spotted the chinks in the education system of the state and went about changing it to make it more effective, productive and powerful. He successfully altered the education scenario in Andhra Pradesh and brought about a socio-economic revolution of sorts. The education fraternity was so persuaded by the strength of this alternate model that they adopted the new system of imparting education without any reservation. The system initiated by this illustrious educationist, became instrumental in affecting a paradigm shift in the whole education scenario of the state. This novel model had the desired impact of enhancing the employability of the youth and shaping them into successful professionals capable of donning top leadership roles in their chosen field of interest.

Today the state of Andhra Pradesh is an acknowledged hub for education. It has especially become famous for its technical education. Dr. Rathaiiah has indeed set the benchmark in the field of higher education and been the guiding light for many others in the state. Truly, Dr. Lavu. Rathaiiah, with his relentless efforts and dedication has changed the educational landscape of the state of Andhra Pradesh.

Dr. L. Rathaiiah
Chairman, Vignan Group



Chancellor's desk

I am delighted to invite prospecting students to VFSTR University. Please take time to explore the prospectus. We consider each student as a unique individual with his or her own interests and aspirations. Recognizing this, we have been working with our students to discover their talents, pursue their passions and in the process develop qualities and skills that will give them undisputed leverage in getting employment opportunities in coveted organizations as well as avenues for higher education in premier institutions.

We have been privileged to have a large pool of highly qualified faculty members. They have been chosen for their strong passion for academics. This team has been striving hard to transform the education system to meet the emerging challenges of access and quality. We are determined to produce highly skilled and knowledgeable human capital and meet our societal commitments.

At VFSTR University you will discover an intellectually stimulating environment with open ended and free flow of academic and professional enquiry, co-curricular and extra-curricular activities. Our students live and learn together in a culturally vibrant environment to explore subjects of global importance. Here, you will experience a truly rich and diverse educational journey.

I welcome you all to our Deemed to be University.

Dr. K. Ramamurthy Naidu
Chancellor,
Vignan's Deemed to be University



Vice Chancellor's desk

VFSTR (Deemed to be University), located in a rural setting of Guntur District of Andhra Pradesh, has a philosophy to offer technical education along with Indian traditions and value systems. While focusing on the high quality education, it puts great emphasis on freedom of thought, expression and action.

The Vision of building VIGNAN as a Centre of Excellence is embedded in the courses it offers. The curriculum design is suited to satisfy every individual looking for knowledge in his/her areas of choice. In aspiring to be an international player in the field of technical education, the University plans to achieve the same through its contribution to local and regional needs. It is positioning itself to be one of the major contributors for national development by developing individuals who are technically competent and socially conscious. Its past achievements stand testimony to this effect.

The present generation of students are born into fast changing world. Hence, they have to be adaptive in addition to being very good in professional content. They must acquire skills and be conversant with the latest technologies that are making life more comfortable. Students should use advanced technology for positive growth and development and avoid their negative impacts.

I welcome every individual to come and acquire knowledge and skills through VFSTR (Deemed to be University).

Dr. M.Y.S. Prasad
Vice-Chancellor,
Vignan's Deemed to be University

Transforming Education



Dr. K. Satya Prasad
Rector

By 2020 our country's average age is going to be less than 30, which means large chunk of youth will be available to cater to the needs of entire world. To happen this, the youth have to be trained in different skills of Science and Technology. In this aspect VFSTR is providing all the training and opportunities to the budding Engineers and Scientists and with all its ethical values that are followed make them very good human beings. VFSTR encourages all its fraternity (Students & Faculty) to create new ideas and develop innovative things/skills. This provides research mentality, which makes the student going out of the portal's of VFSTR, a lifelong learner. This way they will be helping the mentioned throughout their life.



Dr. V. Ravi Kumar
Dean, Admissions

VFSTR University lays great emphasis on holistic education that goes beyond the class-rooms, books and examinations. It offers a cultural and social milieu that is unmatched among institutions of higher learning. It provides serene environment for study and offers umpteen opportunities for students to excel in other fields. The University also has a scholarship scheme ranging between 10% to 75% in tuition fee based on academic merit, achievement in sports, economic and social background. Every year it is offering scholarships worth Rs. 3 to 4 crores at the entry level.



Cmde. Dr. M.S. Raghunathan (Retd)
Registrar

The University has been taking giant strides in providing quality education to the students in tune with the rapid changes in technology. The curriculum is being enriched with inputs from industry, academia and research organizations with technical skill component as the centre stage of tuning knowledge from theoretical concepts to pragmatic applications. Besides, English Proficiency and Communication skills aimed at strengthening the language skills as well as soft skills is being imparted to equip the student with the competence required for undergoing the teaching-learning process in their chosen discipline. With many best practices and greater emphasis on student-centric learning, the University is poised for an exciting phase of growth in the very near future.



Dr. P. M. V. Rao
Dean, Academic Registration & Evaluation

The continuous evaluation consists of periodic tests, mid tests, assignments, presentations and report writing thus covering both quantitative and qualitative techniques. This continuous comprehensive evaluation helps the student to effectively learn and demonstrate the course content. The institute regularly updates its evaluation methods, to realize the objectives of outcome based education. The steps taken to ensure quality, transparency and confidentiality are on par with the best practices adopted by premier institutions in the country.



Dr. V. Madhusudhan Rao
Dean, Engineering & Management

Students work in an environment where they are motivated and challenged to achieve demands and targets. Our success is a result of the partnership between institution, the students and parents. We are proud of our extremely talented teaching staff. Student leadership is ingrained in the very fabric of the University. The Students Activity Council (SAC) thrives to ensure that the views of our students are represented in management. Optional clubs like Literary Club, Cultural Club NSS, NCC, Eco-Clubs etc., inculcate love for social service, discipline and compassion for society, nature and culture.



Dr. D. Vijaya Ramu
Dean, Academics & International Collaborations

We have introduced Project Based Learning approach to enable students gain in-depth concepts in the chosen area of their study. The curriculum is meticulously designed with projects arising from a combination of different courses (intra disciplinary projects), projects from different departments (inter-departmental) and Societal Centric projects from I to IV year of the program in addition to a semester-long industry internship. Also, emphasis is placed on credits for physical fitness, sports and games. All the aforementioned salient features have successfully fortified our curriculum which enables higher percentage of placements and improve opportunities to pursue higher education in premier institutes in India and abroad. The office of International Affairs facilitates international exchange programs for aspiring students to pursue their internship in premier universities abroad.

Transforming Education



Dr. M. Ramakrishna
Dean, IQAC

IQAC acts as a nodal agency of the Institution for coordinating quality-related activities, including adoption and dissemination of best practices. Right from the inception of VFSTR, Quality Assurance & Enhancement has been a thrust area. A team of experienced professionals ensures that the best systems are implemented in all departments, sections and preparation of the Annual Quality Assurance Report (AQAR) of the Institution. It is evolving mechanisms for ensuring timely, efficient and progressive performance of academic, administrative and financial tasks, procedures for optimization and integration of modern methods of teaching and learning and the credibility of evaluation procedures. The main objective of the IQAC is to develop the Quality culture of the institution as per the guidelines and parameters of NAAC and participation in various surveys conducted by NIRF.



Dr. M. S. S. Rukmini
Dean, Students Affairs

The Student Welfare Committee (SWC) helps the students in academic, emotional and psychological progression. The IAS Academy, E-cell and GATE Academy trains students to crack national level competitive exams. This is aimed at helping students to become entrepreneurs, to grab employment opportunities available in the public sector as well as plan for post-graduate studies and research.



Dr. K.V. Krishna Kishore
Dean, Library & IT Services

The artistically designed octagonal shaped library with more than 65,500 volumes, plenty of audio-visual materials and above 3,500 national & international journals, is indeed a rich repository of knowledge facilitating prospects for future research. IT services in the University provides the core IT systems, tools and services, internet, WiFi facilities that keep the University running day-to-day in support of teaching, learning and research.



Mr. D. Vijay Krishna
Dean, Training & Placements

The Training & Placements Department of the University gives training and career counseling to the students. Meticulously designed training programs aimed at improving communication, technical and leadership skills are spread through the entire course curriculum so that the students are continuously trained for both placements and for higher studies. The main objective of the Department is to help students in obtaining internships and placements in reputed companies across various industrial sectors.



Dr. G. Srinivasa Rao
Dean, Research & Development

The VFSTR University has a Board of Research and Development with an objective to promote research activities among the faculty members to attain academic excellence. It is our endeavor to make our system effective and sensitive to the needs of all stakeholders by undertaking collaboration with the industry to foster engineering research which is an integral part of the quality of technical education.



Dr. S. Krupanidhi
Dean, Planning and Monitoring

VFSTR, being placed in rural vicinity, is attracting students and faculty from various regions and abroad primarily because of the strong foundations laid in culture, curriculum, teaching and learning, infrastructure and placements. To foster and sustain the aforementioned events and to make students excel in their own discipline, day to day monitoring of events are under continuous surveillance by the Office of the Dean, Planning and Monitoring that has come into existence in the month of January, 2017.

Invigorating environment

Vignan's Deemed to be University provides a stimulating ambience in pursuit of higher studies in a multi cultural campus environment.

Stimulating ambience

It is an established fact that human behaviour is influenced by the surroundings. The serene atmosphere of a temple has an elevating effect on all of us. Guided by this fact, meticulous care has been taken in the design of the University campus. The beautifully landscaped campus has green tree lined avenues, lush green lawns, spacious classrooms, open corridors, and large playgrounds. All this creates a pleasant and stress free atmosphere for students to learn and develop.

Our welcoming campus has a friendly, close knit appeal that makes it easy to build the kind of relationships and contacts for life that can be difficult in a

larger institution. The quintuplet complex of towering building consists of well-defined laboratories, industrial workshops, multimedia classrooms, seminar halls and library. This elaborate academic infrastructure forges a conducive environment for learning.

Sports is an integral part of Vignan and there are large playgrounds for football, cricket, volleyball, basketball, tennis and badminton. The indoor sports complex offers facilities for table tennis, chess, carroms etc.

Separate hostel complexes for boys and girls are equipped with state of the art facilities like community centres, study halls and round the clock Wi-Fi Internet service. It is like a home away from home.

Strategic location

Located along the Guntur-Tenali highway, just 35 kms from Vijayawada, the institution is well connected to all the three towns through public transport.

It is also well connected by rail and air. The biggest railway Junction in South India, namely Vijayawada is just 45 minutes drive from the University campus. The Gannavaram airport is about an hour's drive from the campus and it provides daily flights to major cities like Bangalore, Mumbai, Chennai, Hyderabad and Delhi.





A rich repository for learning

Studying at Vignan means you will enjoy some of the best academic facilities and resources available. Whichever stream you choose, you will have access to the latest learning resources to realize your desired outcome.



NTR Library

It is an air conditioned and aesthetically designed facility with indoor greenery, modern furniture and reprographic conveniences. Separate enclaves for individual and group study help students to use the library for longer hours. Apart from books relevant to the curriculum, a rich collection of books and journals useful for general study and research activities are also accessible.

The central library stocks more than 72026 volumes, examination papers, and books for research and plenty of audio and visual material apart from about 280 national referred journals. Also available are preparation materials for GRE, TOEFL, IELTS, GATE, etc.

Each department has its own library to serve as a quick reference center. The department library holds around 400 books, journals, project reports, recorded lectures etc. for advanced learning.

E-Learning

Vignan offers its students a good range of e-learning tools that provide access to lecture notes, study materials and opportunities for online discussions with fellow students and tutors. The web based resources in text, video, audio and image formats, online tests and assignments facilitates a thorough assimilation of the subject.

Internet - Access to NKN

Vignan's Deemed to be University is one of the three universities from the state of Andhra Pradesh to become a member of National Mission on Education through ICT, MHRD. This allows us to provide 1 Gbps internet connectivity to access e-journals and books from the National Knowledge Network (NKN).

→ LIBRARY RESOURCES

Number of titles	25,288
Number of volumes	72,026
National / International Journals	280
Online Journals	3,748



Keeping pace with Industry

The course structure has been designed to cater to the diverse career aspirations of the student community. Our undergraduate curriculum offers a range of options that enables a student to pursue his / her own areas of interest and become employable.

The UG programme offers a dual degree with a major and a minor. The major offers courses in engineering disciplines, while the minor offers courses in Management, Humanities or other Engineering Subjects like IT and Electronics.



Flexible Curriculum

Information Technology

For students of non-computer programmes, a minor course in IT is offered to develop competencies to pursue jobs in IT & ITES industries.

Electronics

Automation being the order of the day in every engineering sector, a functional knowledge of electronics is a must. Hence, a minor in Electronics is offered.

Management

After graduation, most engineers pursue an MBA programme to move into executive jobs. A minor in Management gives an early start to such aspirants.

Humanities

For students aspiring to make a career in public services, the Humanities programme helps to get a broad exposure on a wide range of subjects from polity to data interpretation.

Contemporary Courses

At Vignan, we appreciate the fact that technical education is on the cusp of a revolutionary change.

The need for innovative and hybrid technologies motivated us to design courses in emerging areas such as Textile Engineering, Automobile Engineering and Petroleum Engineering to cater to regional and global needs.

In designing these courses, we have taken inputs from industry and senior faculty of premier institutions like IITs & NITs. A balanced curriculum with add-on courses aims to equip students with industry relevant skills. It provides opportunities for diverse learning, to enhance student employability and continuous learning.



Chalking out a career of choice

Vignan's Deemed to be University periodically revises its curriculum to be in step with the changing industry requirements. However, technologies are so dynamic that it is not always possible to revamp curriculum at the same pace. To bridge this gap we send our students for both short and long term industry internships.

Incubation Centers

The University seeks to create an ecosystem for industries to take up the development or testing of particular technologies on campus using the expertise / skills of the faculty and students. Those with research aptitude work in these centers to test and convert their innovative ideas into commercially viable products. The University supports them by providing the seed money and facilities to incubate their ideas.

- An incubation centre is set up by INDO-NACOP Chemicals Ltd, on campus to develop processes for extraction of natural colours.
- AAS Technologies on campus provides opportunities for students to develop projects on embedded systems.
- Ministry of Small and Medium Scale Enterprises (MSME) has recommended the Central Government to establish an Incubation Center at the University.

Black Buck Engineers and Company, Hyderabad has setup an incubation center to top the innovative ideas of students and guide them on technical aspects in the field of Information Technology. A project for Nagarjuna Fertilizers and Chemicals Ltd., titled development of web application for customer interaction center worth Rs. 2.7 lakhs was completed by the interns of CSE & IT departments.

Entrepreneurship Development

At Vignan, students are imparted managerial skills besides being enabled technical competencies. The University

encourages students to develop entrepreneurial skills and start their own enterprises. Students are motivated to become employers and create jobs rather than to seek for jobs.

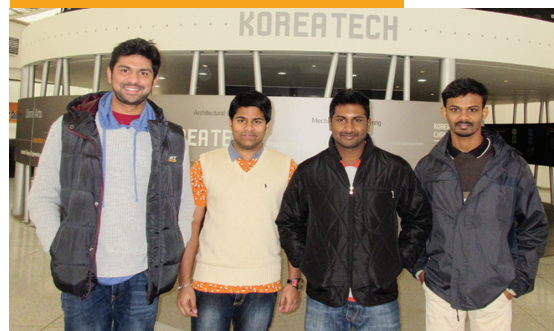
The University has an understanding with the Ministry of Small and Medium Scale Enterprises (a Government of India organization). MSME helps fresh graduate to set-up their own ventures. Every year, an Idea-Carnival is conducted on campus to simulate the generation of fresh ideas. Through its tie-up with MSME, the University offers a Business Skill Development Programme (BSDP) to promote entrepreneurial skills among the students. Aspiring students get an opportunity to interact with successful entrepreneurs and get mentored by them.

Industrial Exposure

By working on live projects with regular employees and understanding day to day organizational issues, our students are transformed into budding professionals. They get well equipped with current tools and know how they become ready for employability.

Students take up short term internship of two months as well as long term internship of six months to carry out a number of mini and major projects as a part of course completion. Some of the reputed organizations which regularly accept our students apprentices are TCS, Comptec, Amron, TVS, Bitapps India, Bajaj, GMR, ISRO, DRDO, BSNL, BHEL, HAL, VSP, BSCPL, VTPS and 40 other industries across the country.

→ REFLECTIONS



It's a dream of everyone who are into academics, to pursue their Masters abroad. Thank you Vignan for facilitating it. - G. Arundar Sai

Our University 'Student Exchange Program provided us with a golden opportunity to take up an internship in South Korea. - J. Sai Trinadh

South Korea has some of the outstanding laboratories where cutting edge research work is going on. I am working in Solar Cell laboratory and my aim is to provide affordable electricity to villages in India. - S. Pavan Kumar



Andhra Pradesh State Skill Development Corporation (APSSDC) - Technical Skill Development Institute (tSDI) :

APSSDC-tSDI , an initiative as part of SKILL INDIA and Andhra Pradesh State Government's vision of training, retraining, skill up gradation of unemployed and under employed youth, came into existence at Vignan's Deemed to be University.

Vignan's Deemed to be University is among the select few identified by APSSDC in this region to impart training to the youth in seven different technical areas. The training will be provided by trainers recruited by M/S Siemens Corporation.

- Computer based simulation & tutorials lab
- CNC Machines lab (Vertical milling m/c & lathe)
- Welding lab (8 different kinds of welding)
- Refrigeration & Air conditioning lab
- Home Electronics
- Office & ICT Electronics Lab
- Home Electrical lab

Equipment worth approximately Rs. 2.5 crores has been sanctioned by the Govt. of Andhra Pradesh.

- Students will undergo training in all the seven laboratories that have been setup during their course work of four years irrespective of branch/ specialization.

Join the ranks of the highest cadre in the country

As an endeavour to contribute civil servants of the highest integrity to the nation, the deemed to be university has undertaken a unique initiative to offer an integrated B.Tech+Civil Services Programme from the first year itself. The programme is structured to help students complete all the segments of the Civil Services Examination (UPSC) by the time they graduate with their engineering degree. At the end of the programme, students will get a minor degree in humanities along with their major in B.Tech.



Focus on UPSC

The modified pattern of UPSC presents a plethora of opportunities for people with a logical outlook, possessing an understanding of social and economic aspects of the nation.

Students aspiring to join the cadre of future IAS, IPS, IRS etc. must possess decision making skills of the highest order. They require a set of academic attributes not demanded by regular engineering jobs or other services.

Vignan seeks to prepare socially conscious professionals who have a passion for civil services and for cracking high-level competitive exams. Apart from providing excellent technical education and life skills, Vignan offers a separate minor degree in Humanities.

The minor degree in Humanities is tailored to suit the preparation for UPSC exam. It covers all the topics tested in civil service examinations :

- General Studies
- Indian Economy
- Indian Contemporary Issues
- Indian History
- Geography and Environmental Issues
- Indian Polity
- Quantitative Aptitude
- Critical Reasoning

Students are given regular opportunities to observe the functioning of the judiciary, collectorate and offices of other public

servants. Seminars, panel discussions and debates, provide students a platform to interact with subject experts and peer groups. News reading and analysis of contemporary events are a part of the curriculum. Expert resources from across the country are associated with the programme.

Students devote 20-30% of their time preparing for the exam. This is perhaps the first initiation of its kind in the entire country.

The goal is to enable at least five to ten youngsters to qualify for coveted positions every year. Vignan has already produced an IAS 5th ranker Mr. A. Sridhar Babu in the year 2007. After serving as the District Collector of Uttarakhand, he is currently serving as Secretary, Tobacco Board, Guntur, Ministry of Commerce & Industry, Govt. of India.



Addanki Sridhar Babu, IAS
Secretary, Tobacco Board, Guntur
Ministry of Commerce & Industry,
Govt. of India.
Alumnus of 1998 CSE Batch.

I feel proud to say that I am an
alumnus of the 2nd batch of
Vignan Vadlamudi campus.

I am grateful to the Chairman
of Vignan Group, Dr. L. Rathaiah
who motivated me to pursue Civil
Services and ensured that we
had all the materials required for
serious preparation.

I went on to secure all India 5th
rank in IAS in 2007. Thanks to my
alma mater, Vignan.

How our system works

At Vignan you have the opportunity to learn and shape your own future. We provide you the right support through qualified and competent faculty with rich teaching and research experience. Transparency of administration through promotion of equal opportunities, collaborative effort and challenging convention make Vignan a great place for every student.



Well Planned Academic Schedule

The Academic Calendar is planned well in advance, well before the commencement of the course work with fixed dates for opening and closing of instruction, public holidays, examination schedules and co-curricular activities. Lecture schedules indicating day wise-plan of course coverage are distributed to students. Course Monitoring Committee (CMC) of each department ensures that the course work is carried out as per the planned schedule.

Continuous Evaluation System

Vignan believes that the efficacy of teaching-learning depends upon effective evaluation systems. All the facets of the students are tested through a comprehensive evaluation by assignments, group discussions, problem solving assessment, quiz, seminar sessions and weekend examinations.

It takes students away from the traditional learning system and enables them to apply the skills learnt. It indirectly enhances the students' learning potential.

Project based Method

Students gain hands-on experience on theory learnt through projects. While going through the stages of data collection, compilation, analysis and inference, students enhance their competencies like communication, critical thinking, management and interpersonal skills.

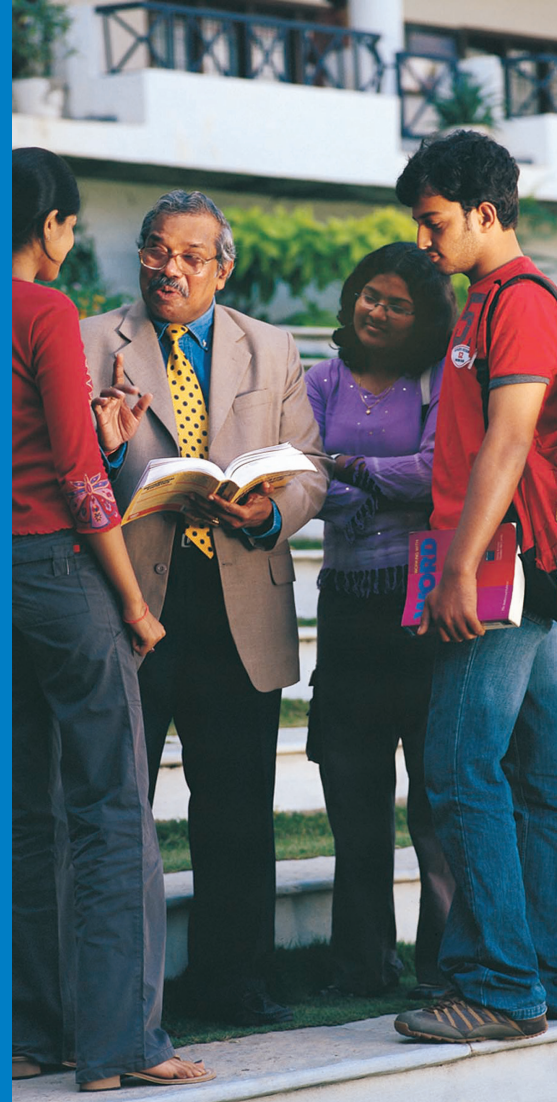
Attendance

As all the UG programmes offered in the University are full time, students are expected to meet the minimum requirement of 80% attendance of the instructional period.

Management Information System

Automation of student information systems enables close monitoring of student performance, attendance and helps in passing on the same information to parents.

The information managed through this process is used for generating category-wise result analysis, credit reports, total marks scored by the students of a particular year, section wise and branch wise. The system also enables the college administration to monitor student related matters effectively. Several committees oversee the effective functioning of the above services.



Faculty

The major strength of Vignan's Deemed to be University is its human resources, especially the well-qualified and committed faculty. Faculty members drawn from industry, premier academic and research institutions support student development.

The minimum qualification for taking up faculty position at the University is M.Tech. A unique aspect worth mentioning is that more than 25% of the faculty hails from reputed institutions like IITs and NITs.

To keep themselves abreast of the emerging trends in the industry and research, faculty members participate in national/international conferences, seminars, training programmes etc. Conferences and workshops are conducted on campus every year to attract experts from frontier areas.

Collaboration with international consortiums like IUCEE, give faculty opportunities for improving instructional techniques for teaching complex subjects requiring interdisciplinary applications.



Training for an extra edge

Vignan's Training and Placement Cell caters to the needs of students in developing their skill-set in different domains and make them Industry ready, through regular training and counseling by in-house trainers, professional trainers, HR consultants and Industry personnel. The University grooms its students into employable graduates. The cell enjoys a good rapport with industry, and facilitates maximum number of students to find jobs in top product based and service companies.



Moulding professionals with Human Face

As a Center of Higher Learning, we feel, it is our responsibility not only to impart technical knowledge but also to prepare complete professionals by equipping our graduates with required traits :

- Communication and leadership skills
- Psychological strength
- Emotional balance
- Social consciousness
- Professional ethics

Enhancing Employment

Success in helping students to find their career path determines the public perception of the institution. At Vignan's Deemed to be University, a range of well structured programmes are offered throughout the four years of study to suit the students' diverse learning needs and improve their job prospects.

Campus Recruitment Training (CRT)

A 200 hour programme is offered to motivate students and get them into the rigorous mode of preparation for campus placement drives. 'Quantitative Ability, Verbal Ability, Reasoning Skills and Soft Skills, Mock interview sessions are conducted by in-house and external trainers for promoting placements.

PET and BEC

Vignan's Deemed to be University has signed an MoU with Cambridge English Language Assessment of Cambridge University. The University, in collaboration with Cambridge, offers two exams, Preliminary English Test (PET) for I B.Tech students and Business English Certificate (BEC) for III year students. The programmes enable students to earn proficiency in both written and oral communication skills and explore better career opportunities.

Semester Long Internships

Students at the University gain hands-on experience through working on live projects in industries which enhance their employability skills. The close rapport that the institution enjoys with industries makes it easy for students to secure internships with leading industries. Students can opt for summer internship of six weeks or a semester long internship of six months duration.



Glimpse of other Training Activities

The cell conducts exclusive training sessions during winter and summer semester breaks as well as during regular class hours. Some of them are:

- Orientation to engineering
- Career counseling & guidance sessions
- Self management and self development
- Art of speaking
- Professional Communication
- Soft skills
- Mock Interviews
- Company Specific Training



Pillars Supporting the Edifice





Trained on latest Pedagogy

Responding to the great revolution that has taken place in the teaching practices of higher institutions of learning, Vignan has adopted Student -Centered Teaching methods that involve the use of a variety of interactive methods in the classrooms as well as in the laboratory. Working on mini & major projects in the curriculum further enhance the student learning.

A unique mix of senior professors distinguished by their research and industry experience together with young, energetic faculty members contribute to the vibrant and learner-centric culture that prevails at Vignan. Teachers strive to maintain a close rapport with students. A harmonious relationship between the teachers and the taught is an integral part of personalizing the learning experience to meet the needs of individual students. Faculty members also make effective use of digital sources and technology to support their teaching methodologies.

Faculty are recruited through special drives at reputed national institutions like the IITs and NITs. 25% of the faculty possess Ph.Ds from reputed institutions like IITs and NITs, while 50% of the faculty have done their masters from IITs and NITs. Besides teaching, all faculty members extend their continuous support to students by engaging in counselling and mentoring activities.

Faculty enjoy abundant opportunities for continuous upgradation and development. All the engineering departments have designated mentors from leading IITs of Madras, Mumbai, Kharagpur, Kanpur etc., These mentors frequently visit the University to offer their guidance on teaching and research. Short term faculty training programmes through International consortiums like IUCEE, tie-up with organizations like TCS, Infosys, IBM, IEEE, ISTE etc., help faculty to keep pace with current developments in their respective fields.

Study abroad

One world, 193 countries, 6,912 languages, countless cultures - How much have you experienced? Discover the differences and similarities first hand by opting to study abroad as a part of your Vignan degree programme. You can gain valuable exposure to diverse cultures, learn new languages and most importantly experience the day-to-day challenges of the new world by taking up twinning programmes to study at reputed institutions abroad.

The University has MoUs with foreign universities for students to excel in terms of academics and research through exchange programmes.

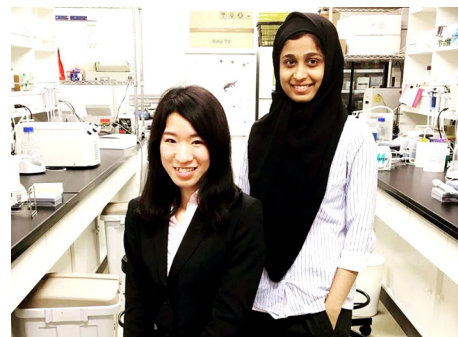
- Jeju National University, Jeju, South Korea
- Dongseo University, Busan, South Korea
- Daegu University, Gyeongbuk, South Korea
- Soongsil University, Seoul, South Korea
- Koreatech, Cheonan, South Korea
- Hannam University, Daejeon, South Korea
- University of Pitesti, Romania
- Tomsk Polytechnic University, Russia
- Ecole Centrale De Nantes, France
- I-Shou University, Taiwan
- Nanobmat Research Company, Hamburg, Germany
- Edinburgh Napier University, UK
- University of Massachusetts, Lowell, USA
- University of Bedfordshire, UK
- National College of Ireland, Ireland
- University of South Alabama, USA
- Cambridge Language Assessment, UK

→ REFLECTIONS

Shaik Shaheena

Vignan's University provided me a platform to pursue a yearlong internship during my M.Tech program at the Department of Molecular Biosciences, Kyoto Sangyo University, Japan. I worked as an intern on "Membrane trafficking of Golgi apparatus and the role of YIPE proteins in both anterograde and retrograde transport of proteins". The outcome of the work led me to pursue my PhD with full financial assistance at Kyoto Sangyo University, Japan.

Thank you VIGNAN!!!



Shahid Alikhan Mohammed and Kiran Kumar Reddy Yampada

IV Year Mechanical students pursuing internship at Koreatech (March, 2018-June, 2018), South Korea

Studying at Vignan is one of the best assets that a student can acquire. The dedicated team of faculties and the well-structured program provides a holistic exposure to the technical world of science which a newbie Engineer should get in this era. One of the added advantages for bright students is an opportunity to get trained at a reputed foreign University for at least six months, which, I guess is a dream of many. Here at Vignan, this dream comes true! Although it's no way less to get a six month internship at reputed organizations in India itself, but, to get a chance for the same at a foreign organization such as Koreatech University, South Korea is helping us to explore added versatility in the work style as well in getting to know the cultural diversities practiced here. Since we are pursuing internship here, we are also getting an opportunity to visit Korean Automobile industries such as Hyundai and KIA in South Korea to practically know the latest advancements in the field. I sincerely thank Vignan for providing me with this golden opportunity which is helping us further to polish our skills and understand as an Engineer.





Support and Welfare

At Vignan we appreciate that in order to focus on studies, a student needs to be free from other concerns in life. While you may never need to call on the full range of welfare and support services that the university offers, it can be reassuring to know that help and advice is available when you require it.



Hostels Facility - AC and Non-AC

Your first year stay at the University will be full of exciting challenges. Our on-campus hostels for boys and girls provide a home away from home with all comforts and amenities. They accommodate 1300 boys and 1200 girls. Each hostel has its own management team to take care of your welfare. The hostel dispensary is attended by a doctor and a nurse. It has facilities for first-aid and minor ailments. And ambulance facility is available round the clock.

Catering facility

Hygienically maintained spacious dining halls serve wholesome meals with a capacity to accommodate 500 students at a time.

Costs

The price you will pay for accommodation will vary depending on facilities like AC and Non-AC.

For further information log onto : www.vignan.ac.in/accommodation

Grievance redressal

A committee attends to both the academic and personal problems of the students such as academic functioning, lab facilities, access to information, unfair evaluation in exams (if any), discrimination shown against gender and social status.

Internet

1Gbps internet facility enables students to access the e-learning materials for carrying out their assignments, project work and self study. Three internet centres in the academic blocks and library allow students to use internet for their multifarious activities. The WiFi facility allows students to avail internet anywhere on the campus.

Canteen

To take a break from routine, you would sometimes want to hang out with your friends during lunch, or over a cup of coffee. For this, there is an on-campus canteen which can accommodate more than 200 students at a time.

Transport

A fleet of 40 buses ply between Guntur, University campus, Tenali and Vijayawada to transport you with comfort at an affordable cost.





Choose the one

With the advance of science and technology, the study of engineering has also undergone a sea change over the years. With discovery and new developments, boundaries are being redrawn. The scope of engineering is limitless, be it in the construction of a simple home or harnessing renewable energy. The challenge in such a scenario of rapid progress is not just to identify the courses that are of interest but also those in perennial demand by industry. The courses at Vignan are designed to equip students with requisite knowledge and practical experience, necessary to meet the needs of industry and society at large.



SPECIAL FEATURES

- Every Vignanite has an opportunity to study abroad through the twinning programme option.
 - The University has MoUs with
Jeju National University, Jeju, South Korea
Dongseo University, Busan, South Korea
Daegu University, Gyeongbuk, South Korea
Soongsil University, Seoul, South Korea
Koreatech, Cheonan, South Korea
Hannam University, Daejeon, South Korea
University of Pitesti, Romania
Tomsk Polytechnic University, Russia
Ecole Centrale De Nantes, France
I-Shou University, Taiwan
Nanobmat Research Company, Hamburg, Germany
Edinburgh Napier University, UK
University of Massachusetts, Lowell, USA
University of Bedfordshire, UK
National College of Ireland, Ireland
University of South Alabama, USA
Cambridge Language Assessment, UK
 - Course content at Vignan's University is designed with the involvement of senior faculty from premier Institutes like IITs and NIITs and experts from industry.
- Single discipline degree such as B.Tech in ECE, where most of the courses of study will be within that discipline area.
 - In the combined studies degree, two specific discipline areas are studied. This may be in equal combination. e.g. B.Tech ECE and Management courses, where about two thirds of the courses are in the major subject area.
 - Inter disciplinary degree in which a combination of courses across a variety of disciplines are offered in the degree programme with the combination of a core subject, e.g., B.Tech ECE with subjects from Computer Science, Information Technology, etc.
 - Major & Minor Dual Degree Programme in which a student enrolling for the UG programme has the unique opportunity to pursue the major programme with an option to select a minor programme in an area of choice like IT, Electronics, Management and Humanities.

COURSES OFFERED

Undergraduate Courses

- B.Tech - Agriculture Engineering
- B.Tech - Automobile Engineering
- B.Tech - **Bioinformatics***
- B.Tech - **Biomedical Engineering***
- B.Tech - **Biotechnology***
- B.Tech - Chemical Engineering
- B.Tech - Civil Engineering
- B.Tech - Computer Science Engineering
- B.Tech - Electrical and Electronics Engineering
- B.Tech - Electronics and Communication Engg.
- B.Tech - **Food Technology***
- B.Tech - Information Technology
- B.Tech - Mechanical Engineering
- B.Tech - Petroleum Engineering
- B.Tech - Textile Technology
- BBA - Bachelor of Business Administration
- BCA - Bachelor of Computer Applications
- BSc - Bachelor of Science (MSCs)
- B.Pharm- **Bachelor of Pharmacy***

**Bi.P.C Candidates are also eligible for admission.*

Post-Graduate Courses

- M.Tech - Embedded Systems
- M.Tech - VLSI
- M.Tech - Power Electronics and Drives
- M.Tech - Food Processing Technology
- M.Tech - Computer Science and Engineering
- M.Tech - Machine Design
- M.Tech - Farm Machinery
- M.Tech - Structural Engineering
- M.Tech - Biotechnology
- Master of Business Administration (MBA)
- Master of Computer Applications (MCA)

Ph.D Programmes

- Ph.D - Biotechnology
- Ph.D - Chemical Engineering
- Ph.D - Civil Engineering
- Ph.D - Computer Science and Engineering
- Ph.D - Electronics and Communication Engineering
- Ph.D - Electrical and Electronics Engineering
- Ph.D - Mechanical Engineering
- Ph.D - Management Studies
- Ph.D - Physics
- Ph.D - Mathematics
- Ph.D - Chemistry
- Ph.D - English
- Ph.D - Computer Applications





Scholarships.. Fee Structure and Reservation

Money is a concern for all students: there is tuition fee to be paid and living expenses to be covered. A little research into how much money you will need to cover your living expenses and the scholarships available can help you enormously in managing your finances.

ELIGIBILITY FOR ADMISSION INTO UG PROGRAMMES

Course	State	Category A	Category B
B.Tech / B.Pharm	AP	CGPA of 7.0 in intermediate and qualified in V-SAT/EAMCET/JEE	Open for candidates who have at least CGPA of 7.0 in intermediate
	TS	Above 60% aggregate marks in intermediate and qualified in V-SAT/EAMCET/JEE	Above 60% aggregate marks in intermediate
B.Sc	AP	CGPA of 8.0 in intermediate	Minimum CGPA of 6.0 in intermediate
	TS	Above 70% aggregate marks in intermediate	Above 55% aggregate marks in intermediate
BBA / BCA	AP	V-JET (Vignana's Joint Entrance Test) with minimum CGPA of 7.0 in intermediate	Minimum CGPA of 6.0 in intermediate
	TS	V-JET (Vignana's Joint Entrance Test) with above 60% aggregate marks in intermediate	Above 55% aggregate marks in intermediate

Category 'A' - Admission through V-SAT / EAMCET / JEE **Category 'B'** open for candidates who do not appear for any engineering entrance test with a minimum of CGPA of 7.0 in AP or above 60% aggregate marks in TS in the qualifying examination

B.Tech. / B.PHARMACY MERIT SCHOLARSHIPS

Scholarships*	75%	50%	25%	10%
V-SAT (Rank)	1 - 50	51 - 100	101 - 200	201 - 2000
JEE Mains (Marks)*	30 Marks \geq Qualifying mark	15 Marks \geq Qualifying mark	10 Marks \geq Qualifying mark	20 Marks \leq Qualifying mark
EAMCET (Rank) (AP & TS)	Below 10000	10001-20000	20001-35000	35001-40000
CBSE + 2	Above 450	426 - 450	401 - 425	350 - 400
AP Inter (CGPA)	Civil / EEE / Mech	-	10	9.83
	All other branches	-	-	10
Telangana Inter(Marks)	Civil / EEE / Mech	≥ 975	960 - 974	930 - 959
	All other branches	≥ 975	960 - 974	940 - 959

- Preference in allotment of scholarship seats will be given to V-SAT'19 qualified candidates.
- 25% of the total seats in each Department are reserved for scholarships. Out of that 5% seats with 75% scholarship, 10% seats with 50% scholarship and 10% seats with 25% scholarship. (For Example, out of 60 seats, 3 seats with 75% scholarship, 6 seats with 50% scholarship and 6 seats with 25% scholarship).
- The scholarship seats are allotted in all programmes on the basis of merit, availability of seats and first come first served basis.
- The scholarship is applicable for four years of study subject to maintaining a minimum of 70% of marks in the preceding year(s) without any backlogs.

LOANS

Those who have scored more than 60% in board exams in a single attempt are eligible to apply for a loan to meet their tuition fee, hostel fee, transport and purchase of books. The UCO Bank located on the campus offers this loan facility. Students can repay their loans after graduation. Other guidelines are as per RBI directions.

** For more information contact UCO Bank, Vadlamudi, Andhra Pradesh.*

ADMISSION PROCEDURE

- The admission into B.Tech / B. Pharm will be on the basis of the performance in the V-SAT /EAMCET/JEE-2019.
- The merit position of the candidate for admission will be based on the RANK obtained in V-SAT /EAMCET/JEE-2019, provided if he/she gets minimum 60% aggregate marks or CGPA 7.0 in the qualifying examination as per the eligibility criteria. Admissions will be purely on merit and by following the reservation policy applicable to Vignana's University.
- A common merit list will be prepared based on the performance in the entrance test and they will be called for the counseling to be held at the Vignana's Deemed to be University premises at Vadlamudi, Guntur District through common ranking.
- It is the responsibility of the candidates to ascertain whether they possess the requisite qualification for admission. Having been appeared for the competitive examination or called for counseling does not necessarily mean acceptance of the eligibility for admission.
- The admission offered to a candidate who has been provisionally admitted to a programme will stand cancelled if he/she does not submit the relevant documents in original pertaining to admission (such as marks statements, transfer certificate, conduct certificate etc.) for verification to the Dean-Admissions before the date stipulated in the admission offer.
- Admissions to various programmes will, however, be subject to verification of facts from the original certificates/documents of the candidates. In case any discrepancy is noticed even at a later point of time after admission, the management reserves the right to cancel the admission and such a decision shall be final and binding on the candidate.

SCHOLARSHIPS * FOR BCA / BBA / B.SC PROGRAMMES

State	75%	50%	25%	10%
AP (Inter CGPA)	10	9.83	Above 9.5	9.33
Telangana (Inter Marks)	Above 950	930 - 949	900 - 929	880 - 899
CBSE +2 / ICSE	> 90%	85% - 89.9%	80% - 84.9%	70% - 79.9%

ELIGIBILITY FOR ADMISSION INTO PG PROGRAMMES

Course	Category A	Category B
M.Tech	Qualified in GATE/PGE CET/VUGATE with 50% aggregate marks in B.Tech.	50% aggregate marks in B.Tech.
M.B.A	"55% in any Bachelor's Degree and qualified in ICET /MAT. Score above 500 / Min. 70 percentile in CAT (OR) 60% in B.Tech.	Minimum 50% aggregate marks in any Bachelor's Degree
M.C.A	Qualified in ICET with 50% aggregate marks in qualifying exam.	A pass in the qualified examination with minimum 50% aggregate marks

SCHOLARSHIPS * FOR PG PROGRAMMES

Programme	100%	50%	25%
M.Tech	GATE qualified (or) $\geq 80\%$ in B.Tech	Top 20% PGE CET'19 ranker (or) 70 - 79% in B.Tech	60 - 69% in B.Tech
MBA	ICET'19 Rank < 1000 & $\geq 70\%$ in qualifying exam	ICET'19 Rank 1001 - 5000 (or) $\geq 80\%$ in B.Tech (or) qualifying exam (or) MAT/CAT Score above 7 on 10 point scale	ICET'19 Rank 5001 - 20000 (or) $\geq 70\%$ in B.Tech (or) qualifying exam (or) MAT/CAT Score above 6 on 10 point scale
MCA	—	ICET'19 Rank ≤ 5000 with $> 60\%$ in qualifying exam	ICET'19 Rank 5001 - 7500 with $\geq 60\%$ in qualifying exam

Bihar, Jharkhand, Odisha, West Bengal, U.P and other North Indian States Board Scholarships for B.Tech / B.Pharm programmes:

Scholarship	75%	70%	65%	55%	45%	40%
% percentage	Above 80	75.1 - 80	65.1 - 75	60.1 - 65	55.1 - 60	50 - 55

Scholarships for CBSE Students from Bihar, Jharkhand, Odisha, West Bengal, U.P and other North Indian States:

Scholarship	75 %	50 %	25 %	10 %
CBSE +2 (Marks)	Above 400	375 - 399	350 - 374	325 - 349

Kerala Scholarships for B.Tech / B.Pharm programmes

Scholarship	75 %	50 %	25 %	10 %
Plus Two Kerala Board	Above 95%	90% - 94.9%	85% - 89.9%	80% - 84.9%
CBSE +2 (Marks)	Above 450	426 - 450	401 - 425	350 - 400
JEE (Mains) Marks	30 Marks above Qualifying mark	15 Marks above Qualifying mark	10 Marks Below Qualifying mark	20 Marks Below Qualifying mark
NEET (Rank)	Below 6000	6001-14000	14001-20000	20001-30000

RESERVATION POLICY

VFSTR has evolved a reservation policy where by a percentage of seats are reserved for helping the socially and educationally backward sections of society and help them enjoy opportunities for development. In accordance with it 15% of the seats are reserved for scheduled castes (SC), and 7.5% of the seats are reserved for scheduled tribes (ST) and other 27% has been reserved for the other backward classes (OBC) comprising 49.5% reserved to OBC, SC & ST categories. In addition to this, 10% of the total intake in each programme will be reserved for Economically Weaker Sections (EWSs) from the academic year 2019-20 and the total reservations for OBC, SC, ST and EWSs will be 59.5% of the permitted strength in each programme. In each of these categories horizontal reservation is given for special categories viz., Physically Handicapped – PH (3%), Children of Armed Forces Personnel – CAP (2%), National Cadet Corps – NCC (1%), Sports and Games (1/4%). In addition, a reservation of 33 1/3% of seats is in favour of women candidates in each category (OC/SC/ST/OBC). Reservation for women shall not be applicable if women candidates selected on merit in each category exceed 33 1/3%.

If there is any vacancy available in the seats that are allocated to fill via special categories of a particular reserved category, the opportunity will be passed to the candidates of that reserved category and then to the general candidates. All reservation category candidates are required to submit certificate in respect of their claims from the authorized officers as notified by the Government of India for the purpose from time to time.

In addition to that Reservation policy 10 seats are reserved under sports quota with 75% scholarship for 4 years of study who represented individual/track events at the state or university level. Another 10 seats are reserved with 50% scholarship for 4 years of study who represented individual/track events at the District level.

In each branch 60% of the seats are allotted for VSAT rankers, 20% of the seats to Inter merit/EAMCET rankers, 10% to JEE(mains)/(Adv) rankers and remaining 10% will be allocated in category B.

Relaxation in cut off percentage up to 10 % subject to minimum eligibility requirements and reservation of one seat in merit quota for the wards of Kashmir migrants as per the direction of MHRD, Govt. of India.

There is no relaxation on any criteria specified, whether it is in passing of the exams or graduating a course. The candidates admitted through the reservation policy subjected to the same criteria as the general candidates in terms of fee structure and graduation policy.

Students can be admitted in VFSTR in any course mentioned above, if he/she meets the eligibility criteria and pay the prescribed fee.

FEE STRUCTURE FOR THE ACADEMIC YEAR 2019-20

Offered Programmes	Category-A**			Category-B***		
	Admission Fee (1st yr.) (Non refundable)	Tuition Fee (Per year)		Admission Fee (1st yr.) (Non refundable)	Tuition Fee (Per year)	
		1st Semester	2nd Semester		1st Semester	2nd Semester
CIVIL / CSE / ECE / EEE / INFORMATION TECHNOLOGY / MECHANICAL ENGG.	Rs. 20,000/-	Rs. 1,00,000/-	Rs. 1,00,000/-	Rs. 20,000/-	Rs. 1,50,000/-	Rs. 1,50,000/-
AGRICULTURE / AUTOMOBILE / BIOTECHNOLOGY* / BIOMEDICAL* / BIOINFORMATICS* / FOOD TECHNOLOGY* / B PHARMACY*	Rs. 20,000/-	Rs. 60,000/-	Rs. 60,000/-	Rs. 20,000/-	Rs. 1,00,000/-	Rs. 1,00,000/-
CHEMICAL / PETROLEUM / TEXTILE TECHNOLOGY	Rs. 20,000/-	Rs. 30,000/-	Rs. 30,000/-	Rs. 20,000/-	Rs. 60,000/-	Rs. 60,000/-
BBA	Rs. 10,000/-	Rs. 50,000/-	Rs. 50,000/-	Rs. 10,000/-	Rs. 1,00,000/-	Rs. 1,00,000/-
BCA	Rs. 10,000/-	Rs. 30,000/-	Rs. 30,000/-	Rs. 20,000/-	Rs. 30,000/-	Rs. 30,000/-
B.Sc	Rs. 10,000/-	Rs. 30,000/-	Rs. 30,000/-	Rs. 20,000/-	Rs. 30,000/-	Rs. 30,000/-
M.Tech	Rs. 10,000/-	Rs. 50,000/-	Rs. 50,000/-	Rs. 20,000/-	Rs. 1,00,000/-	Rs. 1,00,000/-
MBA	Rs. 10,000/-	Rs. 65,000/-	Rs. 65,000/-	Rs. 20,000/-	Rs. 85,000/-	Rs. 85,000/-
MCA	Rs. 10,000/-	Rs. 15,000/-	Rs. 15,000/-	Rs. 20,000/-	Rs. 15,000/-	Rs. 15,000/-
Ph.D	Rs. 10,000/-	Rs. 60,000/-		NA	NA	

* Bi.PC Candidates are also eligible for admission. ** Category 'A' - Admission through V-SAT / EAMCET / JEE

*** Category 'B' open for candidates who do not appear for any engineering entrance test with a minimum of CGPA of 7.0 in AP or above 60% aggregate marks in TS in the qualifying examination.

FEE TO BE PAID PER YEAR WITH SCHOLARSHIPS FOR THE ACADEMIC YEAR 2019-20

Branch	Admission Fee (1st yr.) (Non refundable)	Scholarship			
		75%	50%	25%	10%
Civil / CSE / ECE / EEE / Information Technology / MECH	Rs. 20,000/-	Rs. 50,000/-	Rs. 1,00,000/-	Rs. 1,50,000/-	Rs. 1,80,000/-
Agriculture / Automobile / Biotechnology* / Biomedical* / Bioinformatics* / Food Technology* / B. Pharmacy*	Rs. 20,000/-	Rs. 30,000/-	Rs. 60,000/-	Rs. 90,000/-	Rs. 1,08,000/-
Chemical / Petroleum / Textile Technology	Rs. 20,000/-	Rs. 15,000/-	Rs. 30,000/-	Rs. 45,000/-	Rs. 54,000/-
BBA	Rs. 10,000/-	Rs. 25000/-	Rs. 50000/-	Rs. 75000/-	Rs. 90000/-
BCA	Rs. 10,000/-	Rs. 15000/-	Rs. 30000/-	Rs. 45000/-	Rs. 54000/-
B.Sc	Rs. 10,000/-	Rs. 15000/-	Rs. 30000/-	Rs. 45000/-	Rs. 54000/-

* BiPC candidates are also eligible for admission.

WORKING ON CAMPUS

Post graduate students can opt for working part time on campus to meet their expenses. University offers Teaching Assistantships.

HTRA FELLOWSHIPS*

For selected full time Ph.D. Scholars, a uniform Half Time Research Assistantships (HTRA) / stipend of Rs.25,000/- per month for Engineering and Rs.18,000/- for Science, Management and Humanities streams will be provided from the date of admission for a duration of four years or till the date of submission of thesis, whichever is earlier.

* Conditions apply.

SCHOLARSHIP FOR SC / ST CANDIDATES

10% of tuition fee is offered as scholarship to all the SC / ST admitted students as part of social responsibility of the institution towards the society.

SCHOLARSHIP FOR SPOUSE / SON / DAUGHTER OF VIGNAN UNIVERSITY STAFF

20% scholarship in tuition fee in all years of the UG / PG programmes for those students who is a spouse / son / daughter of an employee of Vignan's University.

SCHOLARSHIP FOR VIGNAN ALUMNI

10% scholarship in tuition fee in all years of the UG / PG programmes for those students who studied the qualifying course in Vignan institutions.

10% Scholarship for own brother / sister studying in Vignan

SCHOLARSHIP FOR WARDS OF CHILDREN OF ARMED PERSONNEL (CAP)

10% of tuition fee is offered as scholarship in all years of the UG / PG programmes for the wards of Children of Armed Personnel.

Note : A Student is eligible to avail only one type of Scholarship mentioned above.



Encouraging Merit

Vignan's Deemed to be University strongly believes that financial constraints should not be an obstacle for meritorious / socially or economically backward students to enjoy access to high quality education.

The institution offers scholarships to meritorious students based on their performance in

- V-SAT
- JEE
- EAMCET
- Intermediate / +2 Marks

Academic Scholarships to the extent of Rs. 84 lakhs are provided to 2nd, 3rd and 4th year students, who constitute the top 5 percent of their respective branch in the present academic year.

Scholarships offered during the academic year 2018-19

100% SCHOLARSHIPS ...

CSE	: 10
ECE	: 16
EEE	: 02
MECH	: 01
IT	: 01
FOOD TECH	: 01
BIOTECH	: 03
AGRICULTURE	: 02
BIOINFORMATICS	: 02

**TOTAL
38**

50% SCHOLARSHIPS ...

CSE	: 54
ECE	: 52
EEE	: 12
IT	: 04
MECH	: 04
CIVIL	: 03
CHEM	: 01
AGRICULTURE	: 01
FOOD TECH	: 14
BIOTECH	: 23
BIOMEDICAL	: 01
BIOINFORMATICS	: 04

**TOTAL
153**

25% SCHOLARSHIPS ...

CSE	: 90
ECE	: 62
BIOTECH	: 24
IT	: 07
EEE	: 07
BIOMEDICAL	: 08
MECH	: 12
CIVIL	: 06
CHEM	: 06
AGRICULTURE	: 01
BIOINFORMATICS	: 04
TEXTILE	: 01
FOOD TECH	: 15
PETROLEUM	: 01
AUTOMOBILE	: 02

**TOTAL
246**

Reflections of meritorious students



B. Swathi
IV Year B.Tech CSE

A peaceful environment on the campus, reputed faculty and the well equipped central library provides me rich to ponder over and vital experience for examinations. I also joined a special course on personality development. This programme has greatly improved my personality. Another extracurricular activity which I enjoyed is the English Proficiency Course which helped me develop my English competency. This is a University where we can achieve our goals, become successful through campus placements and other value added courses like civil services coaching, GATE, GRE etc.



A. Sailaja
IV Year B.Tech EEE

I am happy to be a member of Vignan's family. What differentiates my University from other institutions is the qualitative education and good training. To become an industry ready engineer, I require good communication skills, an ability to express thoughts besides an awareness about society. I can get all these aspects from my University. I have the opportunity to undergo international certifications courses like Cambridge, PET and BEC towards improving my communication skills. Coming to placements, at Vignan, I have opportunities of employment from top IT companies like TCS, Infosys etc.



K. Hemalatha
IV Year ECE

Though I could get a seat in NIT, I opted Vignan because of good infrastructure, experienced and dedicated faculty and facilities like Civil Service, training, Incubation centers, helping hand for startups, encouragement in extracurricular activities etc. Here I am availing 100% fee waiver owing to my JEE rank.

It means a lot to me, as it is a reward for my academic accomplishments and recognition of my perseverance.



T. Mythily
IV Year B.Tech ECE

We have a scope to participate in many extracurricular activities. We are provided with special programmes on public speaking, Personality development, workshops and debating competitions. These programmes help us in improving our soft skills and developing ourselves into all round personalities.

→ Overview



Head of the Department
Dr. N. Srinivasu
Tel : 0863-2344757 / 58
hodsh@vignan.ac.in

HoD Message

The Department of Science and Humanities welcomes the first year engineering students. The department comprises of four divisions namely, Humanities, Physics, Chemistry and Mathematics and each division is supervised by a senior faculty member. All the divisions are however, headed by Head of the Department Dr.N.Srinivasu. It also offers B.Sc and Ph.D Courses. The division of humanities offers coaching for Cambridge PET and BEC and has under it, an independent testing centre of Cambridge. The coaching offered certainly makes a great deal of difference in the communication skills of the students.

The department has a good number of faculty with doctorates who did their research in prestigious national institutions (IITs and NITs), central and state Universities. The faculty have a good number of citations and their works are published in reputed journals with good impact factor. There are five faculty members with H Index more than 10 and eighteen faculty members with Index factor which is more than three. The department is currently running four research projects worth Rs.100 lakhs.

About the Department

The Department of Sciences & Humanities caters to the needs of engineering aspirants towards enhancing knowledge and expertise for the betterment of their life and of the nation. It also promotes cultural competency within the student community by hosting activities and events. The Department comprises five disciplines - English, Mathematics, Physics, Chemistry and Environmental Sciences.

Add-on Courses Offered

Success in life depends on effective communication skills, more so in one's professional career. Communication, encompassing listening, speaking, reading and writing, is an essential soft skill for an engineer. With the literature on latest advances in engineering domain being available only in English, Proficiency in English is essential for an engineering student to take part in the academic discourse of the class room. The hundred hour English Proficiency Course (EPC) has been introduced at I B.Tech level since academic year 2013-14, to equip students with functional English skills.

At the end of EPC (English Proficiency Courses) the students appear for the international exams offered by Cambridge, like Preliminary English Test (PET) in I B.Tech and Business English Certificate (BEC-Vantage) at the end of III B.Tech. These Certifications on English Communication, add value to students and improves their employment prospects in the job market.

Learning Outcomes

- Students become competent to crack competitive exams from GRE to UPSC
- They develop critical reasoning in solving engineering issues
- Their communication skills are enhanced for real world interactions
- Their leadership and life skills are honed
- Sensitized to the industry needs and set path towards its fulfillment
- Students develop heightened social awareness.

MoU with CELTA, Cambridge University

The Department has signed an MoU with Cambridge University Press of TESOL (Teaching English to Speakers of Other Language) examination



RESEARCH PROGRAMS

Ph.D

The Department has a vibrant research culture and offers doctoral research under the guidance of 17 research supervisors.

Publications

The Department has nearly 282 journal publications: 270 conference papers; and six book publications till now.

Projects

The Department has three research Centres namely Thin film, Asymmetric reactions and biofortification and one Centre of Excellence in Advanced Materials and has secured. DST projects worth Rs. 125.62 lakhs.

- DST Fast Track Electrochromic Devices based on Nano Crystalline WO₃ thin films" worth Rs. 26.82 lakhs.
- DST SEED (Women & Nutrition) Fortification and biofortification of tomatoes to produce iron rich tomato powder and tablets to curb anemia in children and pregnant women in selected villages at Guntur (Dt), A.P. worth Rs. 46.87 lakhs.
- DST SERB, Fast Track Cascade reactions of Baylis-Hillman Adducts Using Bifunctional Organocatalysis worth Rs. 28.01 lakhs.
- Design, Synthesis and Applications of novel Super hydrophobic Nano porous coordination polymers. Worth Rs. 25.31 lakhs.

SALIENT FEATURES ..

- Bridge course to provide students with necessary inputs to cope up with Engineering Curricula.
- English Proficiency Course, to enrich communication skills.
- Optional Clubs to explore and hone student talent and creativity.
- Co-curricular and Extra curricular activities to enable students to exhibit their talent.
- Celebration of National and International days to improve the managerial skills of students
- Motivational lectures for personality development of students in goal setting.
- Basic foundation for UPSC & other competitive examinations.



Student Reflection

Kantamaneni Jahnvi

"The training for Cambridge exams helped me develop my proficiency in English and my capabilities were assessed at international standards. This certification improves my future prospects."



Biotechnology

→ Year by Year

YEAR 1

The courses are designed to offer basic knowledge on subjects such as Mathematics for Biotechnologists, Engineering Physics, Engineering Mechanics, and Computer Programming. These courses would lay the foundation to study advanced courses during the later years. Bioproducts & Bioentrepreneurship course has been offered to provide the essence of entrepreneurship.

YEAR 2

Core courses of the department like Microbiology, Biochemistry, Cell Biology, Process Engineering principles, Molecular Phylogenetics are given emphasis in addition to Probability and Statistics. The minor streams namely Management, Humanities and Sciences and Information Technology are given as options for the students to choose any one as per their choice. Elective streams pertaining to three domains viz. plant, animal and microbial biotechnology for Biotechnology students and two domains viz. genomes and drugs are offered for Bioinformatics students where there exists ample scope for job opportunities.

YEAR 3

Advanced courses: namely Molecular Biology, Biochemical Reaction Engineering, Genetic Engineering & Epigenetics, Bioprocess Engineering, Animal Cell Science Technology, Object oriented programming through Java, Unix operating system programming, Bioethics and Intellectual Property Rights are placed aptly in the penultimate year of the program to hone students towards internship and projects in the final year.

YEAR 4

The courses such as Bioinformatics, Immunology, Down Stream processing, Biosensors and Bioelectronics, Genomics and Proteomics, Nanobiotechnology, Biomedical Informatics are provided in the final year. A semester long industrial internship is also a part of the final year which provides opportunities for students to gain exposure of corporate environment.

The Department

Biotechnology is a relatively new discipline and its applications are rapidly percolating in trade markets of India and abroad. It plays an important role in the application of science and technology that applies biological systems, living organisms or their derivatives to make beneficial products for mankind. Exponential growth of population has raised serious concerns over food production; medical and health care facilities; as well as pharmaceutical and therapeutics. High-throughput technologies play a huge role in improving crop productivity and curbing diseases, However, there are a lot of food and health related issues that are yet to be addressed.

Why Biotechnology At Vignan?

- The B.Tech. programme of department is oriented towards imparting skills that are required in areas such as Fermentation, Microbial Technology, Immunotechniques, Molecular Biology, Genetic Engineering, Plant Tissue Culture and Advanced Cell Science Technology.
- Curriculum has been designed to emphasize on the domains such as plant, animal and microbial biotechnology by offering core and elective courses to make them industry ready. Programs are well tuned to provide skill based knowledge right from basic to advanced level of understanding and learning. Modular courses are exclusively offered by industry personnel.
- The department is accorded for publishing high quality research papers in Science Citation Indexed journals by involving students in research projects.
- Students are exposed to biotech industries through semester-long internship. Hetero Drugs, Shantha Biotechnics, Biocon, Advanta seeds, Virchow Biotech, Bharat Biotech, IgY etc., are some of the companies where students undergo their internship. They are also imparted internship training in national labs including, but not limited to, CCMB, DFRL, DRDO labs etc. Such trainings not only enable students to complete their internship but also provide ample opportunities to them with employment.
- Bio-entrepreneurship cell is actively working on campus. The students with support of faculty work to transform students ideas into industrial products.



Offered programs

Currently the department is running courses at both undergraduate and postgraduate levels. The department is housing state of the art laboratories to pursue active research by Doctoral (Ph.D), M.Tech and B.Tech (Biotechnology, Bioinformatics) students. National sponsored research projects and consultancy work for industrial problems are also being handled.

Employment Prospects

- Biotech industries in India contribute substantially to India's GDP. As a sun rise sector, Biotechnology is growing at a fast pace and is poised to become India's leading industrial sector in the near future. Modern management techniques, highly – trained personnel, market demand in both food and health sectors, and significant scientific innovations serve as key factors for the growth of Biotechnology sectors in India. There are currently 360 different Biotech companies within India, generating annual revenue of US \$2 billion.
- The Indian Biotechnology sector holds a strong share in the Asia-Pacific Region, and is currently the world's largest producer of BT cotton, herbal products and vaccines. Primarily the U.S. Bio-economy has in recent years surpassed \$350 billion in revenue (equivalent to about 2.5% of GDP), and Chinese life scientists estimate that China's Biotechnology industry output will hit two trillion Yuan or 5 percent of the national GDP in 2020. Thus, there exists a huge scope for the development of the India's Biotech industry.
- Our trained biotechnologists hold outstanding employment opportunities as process engineers, technical leads, product developers, quality assurance and quality control managers, or research associates. Biotechnologists are also employed in chemical, food, agriculture, medical diagnostics and other allied industries.



BoS, Reflections

The course curriculum of Biotechnology and Curriculum of Bioinformatics is designed in such a way that it is on par with the curriculum of other premier institutes & universities across the globe. The core biotechnology courses are neatly planned along with engineering courses so as to orient students towards focusing on engineering principles. This will enable students to thrive in Biotech, Pharma and IT industries.

- Prof. Gummadi Satyanarayana, IIT Madras (Member of Bos, Vignan's University)





B.Tech – BIOTECHNOLOGY

Bachelor of Technology in Biotechnology is a four year program and is an amalgamation of biology and technology that covers a wide spectrum of subjects including Genetics, Biochemistry, Microbial technology, Bioprocess Engineering, Molecular Biology, Genetic Engineering, Downstream processing and Bioinformatics.

Outcomes and scope

- After successful completion of degree from Vignan's University, students would be able to work for industries in areas pertaining to R & D, product development, optimization of process control and validation of protocols or quality assurance and quality control.
- IT-enabled teaching, learning practices, counseling procedures and hands-on training with sophisticated equipment really do open up unique opportunities for our students.

B.Tech – BIOINFORMATICS

Use of software tools is quintessential in biological research. In consonance with the recent developments in computational biology, the B.Tech program in Bioinformatics is oriented towards imparting essential training

for analyzing the vast amounts of data generated by modern high-thought technologies such as genome sequencing, next-generation sequencing and microarray profiling. Today's computer technology with advanced servers has given us high-capacity analysis of genes and proteins which makes it necessary to integrate informatics while solving biological problems. Thus, the subject of bioinformatics has become the prime focus for industry, particularly in pharma, diagnostics, pharmacogenomics and forensics in the post-genomic era. Our curriculum has been designed to emphasize domains such as genomes and drugs by offering core and elective courses. It is designed to provide skill based knowledge right from basic level of understanding to advanced level of learning.

Outcomes and scope

- Students after successful completion of the program will be able to identify and resolve issues associated with bioinformatics softwares.
- They will be able to perform in silico drug modeling experiments for various therapeutic applications.
- They will be able to play a major role in big data analysis and other IT related applications.

M.Tech – BIOTECHNOLOGY

The two year M.Tech program in Biotechnology is designed to impart skills at an advanced level to make them industry ready. In this line, the following courses such as Upstream and Downstream Processing, Advanced Fermentation Technology, Plant Design & Economics, rDNA Technology, Immunotechnology, Industrial Biotechnology and Metabolic Engineering are introduced. One year long internship is exclusively offered in the final year to orient students towards industry needs.

Outcomes and scope

- Post graduates will apply knowledge acquired in the core subjects and engineering concepts to solve problems related to bioprocess industries.
- Students will be able to analyze the lacunae persisting in various specializations of biotechnology and thereby find valid solutions.

Ph.D PROGRAMME

The infrastructure of the department is the highest standard, simulating students to opt for Vignan's University for their higher studies and research programme. 34 students are enrolled for the Ph.D program in various disciplines such as

Molecular phylogeny, Plant tissue culture, Drug design, Therapeutics development etc.

RESEARCH PROGRESS

- The Department of Biotechnology at Vignan's University has been attracting competitive grants from external funding agencies such as DST, DBT & other industries with a total worth of Rs. 1.44 crore.
- The department with the funding from DST, DBT and industries has carried out more than 40 nationally important research projects over the last 20 years.

MAJOR FUNDED RESEARCH PROJECTS

- Dr. D. Vijaya Ramu received a grant worth Rs. 28,77,760 from DST on "Molecular cloning, expression and functional characterization of splice variants in the guinea pig model" (Duration: 2016-2019)
- Prof. S. Krupanidhi received a grant worth of Rs. 41,12,000 from the DST-Major research project: 'Studies on Molecular Heterogeneity of Hemocyanins of Endemic Blue Blooded Invertebrates' (Duration:2013-16).
- DST-FIST-The Department of Science and Technology, Government of India recognized the Department of Biotechnology under the FIST scheme where-in funds were subsequently provided for improving the infrastructural facilities in Science and Technology. The total value of the grants reached Rs. 42.50 lakhs with 50% of the matching grant provided by the university.
- Research proposals of Dr. M. S. Shivkiran and Dr. T. S. Gopinath have been approved by DST. In addition to this, Vignan's University has encouraged the department by initiating the Center of Excellence in the area of 'Bio resource Management' with a supporting fund of Rs. 30 Lakh.



STUDENT REFLECTION

M.S.L.S. Harika

It is beyond words to thank VFSTR for bringing about such a transformation in a person like me. The opportunities, exposure and interactions at this university was of profound help in bringing clarity and confidence in me, which eventually got me grab two job opportunities on campus. I would specially like to thank my Biotech department for an outstanding support and motivation. The guidance from my teachers in imparting knowledge from theoretical classes and detailed exposure in labs for practical applicability were the foundations for me to fulfill my dreams. An opportunity to work on biosimilars and the efforts of Vijaya Ramu Sir to bring core companies onto campus has given me a dream job in Hetero Biologics. My sincere efforts would never have been fruitful if not for the platform I received at Vignan.

→ Overview

Programmes Offered

B.Tech
Biotechnology
Bioinformatics

M.Tech
Biotechnology

Ph.D. Programme



Head of the Department
Prof. S. Krupanidhi
Tel : 0863-2344700 / 158
E-mail : hodbt@vignan.ac.in

HoD Message

The Department of Biotechnology offers two Under-graduate programs viz., B.Tech Biotechnology and B.Tech Bioinformatics, one Post-graduate program viz., M.Tech Biotechnology and Ph.D. program. As a policy of VFSTR, the department revises its curriculum once in three years incorporating the latest trends in the discipline and avoiding the obsolete topics. The unique attribute of R-19 curriculum that is in vogue is that there is a provision for students to undertake the project work since 2 (1) to 4 (1) ultimately leading to a semester long industrial internship coupled with the preparation of the project report. With this, the Vignan's system of education is allowing students thinking process coupled with hands-on-experience in technical skills to reach the society. The faculty in the Department of Biotechnology with their rich experience in varied disciplines has made a list of projects comprising nearly 200 topics with which students would really obtain a grip in the subject in a wider perspective. The Department of Biotechnology is very well equipped with modern lab facilities, additionally the department is supported by several funded research projects from national funding agencies like DST and NMBP. A majority of our students are placed in industry, and also opted for higher education in abroad.

Chemical Engineering

CHEMICAL | TEXTILE TECHNOLOGY | PETROLEUM ENGINEERING | FOOD TECHNOLOGY

→ Year by Year

YEAR 1

Along with basic sciences and engineering courses, you will be introduced to the C- language, English Proficiency Course for soft skill development and an introductory core course in their chosen program.

YEAR 2

Chemical Engineering: Fundamental subjects like Chemical process calculations, Momentum Transfer, Thermodynamics, Heat Transfer will be covered.

Textile Technology: Introduction of textile technology from fiber to fabric manufacturing and basics of fashion design and illustration will be covered.

Food Technology: Students will take courses such as Food Chemistry, Food Microbiology, Food Preservation, Biochemistry, Nutrition, Fluid Mechanics and Unit Operations etc.

Petroleum Engineering: Students will take courses such as Geophysics, Drilling Technology, Drilling fluids and cementing Technology, Heat transfer etc.,

YEAR 3

Chemical Engineering: Core courses like Chemical Reaction Engineering, Mass Transfer Operations are covered.

Textile Technology: Students will study Testing and Calculations of textiles from fibre to garment and manufacturing of apparels including dyeing, printing embroidery etc.

Food Technology: Students will learn about Bakery Technology, Dairy Technology, Cereals and Legumes Processing Technology etc.

Petroleum Engineering: Students of Petroleum Engineering go through various courses like reservoir engineering, drilling operation, well logging, petroleum production operations etc.,

YEAR 4

Along with advanced core courses, students are required to undertake research work in an industry of their choice, for one full semester, and get trained in solving and understanding real life problems through application of engineering principles under the guidance of University faculty and industrial experts.

The Department

Chemical Engineering was founded in 1997, with a four year B.Tech program and later in the year 2004 a two year M.Tech program in chemical engineering was introduced. With 30 current, full-time faculty members, primarily recruited from prestigious institutions such as IIT's and NIT's, four of whom hold international institutions doctorates, the department is also offering four year B.Tech programs in Textile and Fashion Technology, Food Technology and Petroleum Engineering from the years 2011, 2014 and 2015 respectively. The department has state of the art equipment like HPLC, GC, Incubator, Cascade Control Trainer, Frame Looms, Garment manufacturing Machines, Yarn and Fabric Testing equipments and many more equipments and simulation softwares.

Why Chemical at Vignan?

The academic program is meticulously designed to offer a wide range of courses, spanning fundamental sciences, complex mathematical relationships, and the engineering design aspects of chemical and biological process technology. At the department, students are rigorously trained and evaluated on a continuous basis in order to ensure that they are well prepared to take on leadership roles in whichever field they choose to pursue, be it academia, industry, technology, management, entrepreneurship or social cause.

Why Textile Technology at Vignan?

Guntur district is famous for the cultivation of cotton. With the annual output of the region exceeding four million tonnes Guntur is fast emerging a major hub for leading textile industries. With the passage of time, many industries have gone through a vertical integration involving an expansion from yarn manufacturing to garment manufacturing and due to insufficient technocrats from this region created huge skill gap and the department is trying to match the gap.

Why Food Technology at Vignan?

This program trains students in the basics of food technology, including food processing, quality control, food testing, and analysis. It provides best preparation for a position in the field of process technology of the food industry. Students are rigorously trained and evaluated on a continuous basis so that they can become industry-ready technocrats to fulfill the nations' mission "Hunger Free, Healthy India".



Why Petroleum Engineering at Vignan?

Petroleum engineering program at Vignan offers a unique curriculum that is highly relevant, domain focused and globally competitive. The curriculum is updated on a regular basis, the procedure for which involves valuable inputs from various leading experts from industry and academic institutions. The faculty are experienced and globally recognized, with majority of them having graduated from prestigious institutions in India (IIT - ISM Dhanbad, UPES - Dehradun) and abroad.

Programs Offered

The department of chemical engineering offers programs at both undergraduate and postgraduate levels and provides excellent facilities to carry out research for Doctor of Philosophy (Ph.D). The department also executes R&D work for sponsored and consultancy projects, including testing and consultancy work for industrial problems. This is in addition to the regular programs of Bachelor of Technology (B.Tech) and Master of Technology (M.Tech) that are a part of the curriculum.

Employment Prospects

Students are regularly absorbed into core sector companies such as, Reliance, ONGC, SYNTHITE, Steel Plant, Brandix, Voltas, Ocean India (TEEJAY, Srilanka), NSL, Shahi exports etc. Students also get selected in campus interviews in IT MNCs such as, TCS, Infosys, IBM, Syntel, GAIL, L&T, Cairn India, and Global DATA etc. Average salary of the fresh graduates ranges from Rs. 3-6 lakhs per annum.



Reflections

The Department has well qualified faculty and most of them are drawn from premier institute like IIT's, NIT's. Expertise of the faculty covers a wide range of areas in Chemical Engineering and they are actively engaged in cutting edge technological research, by themselves and in collaboration with industry. The department has well equipped and modern equipment to facilitate understanding of theoretical inputs on design, analysis, simulation, by the students. Further the student sectional association of chemical engineering is vibrant and organizes a number of co-curricular and extracurricular activities. Student progression is good, some of them receiving selection in campus placements and other opting for higher studies in premier institutes. - *Dr. G. Prabhakar, Prof. & Head, Chemical Engg. SVU, Tirupati. (Member of BoS, Vignan's University)*





B.Tech – CHEMICAL ENGINEERING

Chemical engineers apply core-principles of chemistry, maths and physics to design and operation of large-scale chemical manufacturing processes. They translate processes developed in the lab into practical applications for making of products such as plastics, medicines, detergents, and fuels, design plants to maximize productivity and minimize costs, and evaluate plant operations for performance and product quality.

Outcomes and scope

A chemical engineer's working life may include expanding projects, evaluating new equipment, improving existing equipment and processes and meeting safety, health and environmental regulations. They are employed by the chemical process industry. They work in a variety of fields such as research, design, process control, sales, economic analysis, and management. The curriculum of study for chemical engineering includes course work in engineering-related areas such as thermodynamics, transport operations, reaction engineering, process design and control etc.

B.Tech – TEXTILE TECHNOLOGY

B.Tech in Textile and Fashion Technology program is focussed on fashion designing, garmenting, dyeing, finishing

and textile manufacturing. From this program, students will develop an understanding of the basic concepts of manufacturing and design, related to textile material (for apparel and technical applications). Beyond this, students will study management skills and corporate responsibility related issues including the social, ethical, environmental and personnel aspects of operating in the textile and apparel industries.

Outcomes and scope

Our graduates are experts in the fundamentals of the various technologies involved in fashion designing, garment manufacturing and textile manufacturing. Regardless of their chosen career path, Vignan endeavours to ensure all its students are industry ready and able to design products based on user-end requirements.

B.Tech – FOOD TECHNOLOGY

Food Technology involves the design and maintenance of food plants, and the development of processing and preservation techniques; all with a focus on converting raw materials into wholesome and safe food products for human consumption. This is a discipline that combines knowledge of food chemistry and engineering processes all for the production and preservation of food products.

Outcomes and scope

The food processing industry offering various employment opportunities in different sectors like Dairy, Frozen Food / Refrigeration, Fruits & Vegetables, Fisheries, Meat & Poultry, Packaged / Alcoholic Beverages, Grains etc. This course deals with various applications like preservation, distribution, processing, selection, packaging, etc.

B.Tech – PETROLEUM ENGINEERING

Despite the ups and downs and constant fluctuations in the global energy sector, the demand in hydrocarbons remain exponentially steadily, driven in particular by the transport sector. For this reason, controlling and optimizing oil and gas production have therefore become vitally important areas of study. The professionals of tomorrow will, in order to meet this growing demand and cope with the declines in traditional reservoirs, need to find solutions that optimize production, increase the oil and gas recovery rate, and gain access to new, exploitable resources.

Outcomes and scope

The program will impart knowledge on fundamental principles of science and engineering behind the technology of petroleum engineering, in order to keep their education from becoming outdated and to give them the capability of self-instruction. Petroleum Engineers have excellent career prospects in oil refineries and petroleum exploration industries.

M.Tech - FOOD PROCESSING TECHNOLOGY

Food processing is transformation of raw ingredients into food for the consumption of humans and animals. Processing of food leads to preservation of food, enhances its flavor and reduces the toxins in the food product. At present in India, Food Processing industry has been gaining momentum based on consumer demands. The food is processed, preserved, packaged and stored according to the specifications by industry and Government. The food processing industry is coming of age and it is ranked fifth among the fast growing industries of India.

Outcomes and Scope

Food processing companies and Food research laboratories, Food wholesalers, nutrition or Food services management, Quality control departments, Meat, Poultry, Food cooking machine operators etc. provide job opportunities. Food technology deals with the study of the physical, chemical and the microbiological aspects of food.

Ph.D. PROGRAMME

Our Ph.D. program in Chemical Engineering is highly interdisciplinary and provides students an opportunity to carry out research in the areas such as nano technology, advanced materials, coal gasification, biosorption etc. As a scholar, you will pursue theoretical and experimental studies in the research area determined by student interests and those of faculty research advisor. At Vignan, students will be in the midst of a vibrant high-tech research community where external collaborations with industry Government and other universities are common.

Research Progress

- More than 90 lakhs of funding supplied by external agencies.
- AICTE sponsored project on Analysis of Natural products and Effluents - Lab modernization.
- AICTE sponsored project on Modeling and Simulation of Chemical Processes Lab modernization.
- 16 projects sanctioned by AP State Government under APCOST scheme.
- The department has developed relationships with IIT faculty in order to receive and incorporate research related feedback.
- The department faculty have published 52 papers in reputed National/ International Journals, 25 papers in International Conferences / Seminars and 29 papers in National Conferences / Seminars during the last 3 years.
- The department currently has 10 MoUs with various Chemical and allied industries in order to exchange and develop upon industry breakthroughs.
- The department is offering consultancy to chemical and allied industries in several areas of the region.

→ Overview

Programmes Offered

B.Tech

Chemical Engineering
Textile Technology
Food Technology
Petroleum Engineering

M.Tech

Food Processing Technology

Ph.D. Programme



Head of the Department

Dr. M. Ramesh Naidu
hodchem@vignan.ac.in
Tel:0863-2344700, 746,
Extn : 191

HoD Message

The Chemical Engineering Department at VFSTR is a happening place with an exciting bunch of talented young and dynamic faculties from different states and premium institutes like IIT's, ISM, and reputed state and central universities. This Department is committed to excellence in engineering education in the context of the evolving disciplines. The academic programs of the department are B.Tech, M.Tech and PhD in Chemical engineering, Food Technology, Textile Technology, and Petroleum Engineering which transforms a young student into a responsible and valuable asset to the society. The Department has a strong core curriculum complemented by electives in the important emerging areas. In the last few years, we have seen a dramatic increase in industrial collaboration and consultancy, research projects, research publications and faculty awards. Studying in our department opens to a whole gamut of industries to work for, e.g. food technology, petroleum refining and petrochemicals, non-renewable and renewable energy, textile and fashion technology, environment and pollution control, etc.



Civil Engineering

→ Year by Year

YEAR 1

You will be introduced to the essential components of all Engineering branches, including Engineering Mechanics which is inclusive of the Fundamentals of Civil engineering. Moreover, you will be trained in all aspects of English communication skills.

YEAR 2

You will cover all the relevant courses involved in Civil Engineering, such as Surveying, Building Materials, fluid Mechanics, Strength of Materials, and many more. At this time you will have an opportunity to choose from a selection of minor- stream classes.

YEAR 3

You will focus on the core subjects of Civil Engineering with an increased level of depth and analysis, followed by an individual mini project under the supervision of the department faculty. In this period, you will be encouraged to begin discovering and focusing upon a chosen specialization.

YEAR 4

You will build a portfolio of between 6 to 10 specialized courses that matches your particular interests. In this period, you will undertake an individual research project work in an industry of your interest (internship) and write a dissertation on your chosen topic..

The Department

Working with a learnt creativity, and an extremely detailed technical skill-set, civil engineers plan, design, construct and operate the facilities essential to modern life, including bridges, highway systems, water treatment plants and energy efficient buildings. Civil engineers are expert problem solvers capable of addressing limitless challenges, such as those related to pollution, traffic congestion, drinking water, energy needs, urban development, community planning and climate change.

Why Civil Engineering at Vignan?

- The Department of Civil Engineering was established in 2008 with the aim of producing Industry –ready and highly professional Civil Engineers for tomorrow. Keeping a distinct focus on the Vision and Mission of the University, the Department features world –class infrastructure, State-of-the-art laboratory facilities, and a modern library to enhance the experimental capabilities and research scope of our students.
- The Civil Engineering department has carefully recruited highly skilled faculty from IITs, NITs and from other reputed institutes across the country. This has brought together a collection of educators with diverse backgrounds, in different disciplines of civil engineer, and who collectively offer an unparalleled student experience at Vignan’s University. Through the use of modern teaching methodologies, and educational focus on critical inquiry, our faculty have built an elite reputation for developing confident and socially responsible students. To facilitate this better, the Department has formed a student body RACE (Royal Association of Civil Engineering) with the expressed purpose of unearthing the hidden talents of students, and for working on their holistic development by organizing technical, co-curricular, cultural, and Sports events.
- Above-and-beyond this core education, industrial interaction and hands-on experience with real-life problems is prioritized by the department. This includes industrial internships, industrial training, research guidance and consultancy projects. This is a focus that extends to the Department as a whole, as our faculty offer community outreach programs, and professional advice through consultancy projects, all with a purpose of serving the larger sections of society.



Programs Offered

Presently the department is offering courses at both the undergraduate and the postgraduate levels, and providing excellent facilities to carry out research for Doctor of Philosophy (Ph. D) Degree; R&D work for sponsored and consultancy projects and testing and consultancy work for industrial problems. This is, in addition to the regular courses in Bachelor of Technology (B.Tech) and Master of Technology (M. Tech) that are a part of the curriculum.

Employment Prospects

- Vignan graduates successfully secure job placements as junior engineers (soon after the completion of their internships) in organizations such as GVR Infrastructures, NEC, Samarth Infra Engineering Technocrats Pvt. Ltd., CMR Projects, and many more.
- Our students are continuously recruited into the public sector in areas such as Panchayat Raj Department, R&B Department; and with companies such as HCL, Hinduja Global Services, JMC Projects Pvt. Ltd., Tech Mahendra, TCS and Infosys.



STUDENT REFLECTION

Akula Naga Sai Dilip Kumar

2012-16 batch student

My dream since childhood, to become a Civil Engineer started taking shape the moment I entered the Department of Civil Engineering of Vignan University. Along with studies I was able to develop myself in all aspects through participation in RACE NSS activities, and department magazine. Our Entrepreneurship Cell has helped me to give shape to my ideas, imagination and dreams in the form of start up plans.

I took part in 'Jagriti Yatra' along with 461 participants from 15 countries across the world. Jagriti Yatra is a wonderful train journey of discovery and transformation that helps youth like me to undergo a 15 day, 8000km national odyssey which helps to meet role models as well as social and business entrepreneurs – of the country.

Thanks to my department and my faculty who supported me in the process and helped me to balance my academics along with other works outside the department.



Reflections

Welcome to Department of Civil Engineering. Our aim is to meet global changes in development, innovation and applications of technology in the service of humanity. Here we offer a nationally recognized, integrated civil engineering programme that helps the students meet their professional aspirations.

- Dr. Ramaseshulu, Professor, Civil Department, NIT-Warangal. (Member of BoS, Vignan's Deemed to be University)





B.Tech - CIVIL ENGINEERING

B.Tech - Civil Engineering is a four year program, with enriched curriculum that moulds students into industry-ready professionals by exposing them to relevant fields of civil engineering .They include, Structural Engineering, Construction Planning and Management, Geotechnical Engineering, Environment Engineering, Geoinformatics, Water Resource Engineering, Transportation Engineering and other specialized electives.

Outcomes and scope

- As a country that is gearing-up for an infrastructural revolution, there is an ever-growing demand for civil engineers in India. Such opportunities exist in government departments, PSUs, MNCs, research and teaching institutions.
- Civil engineers are regularly employed in major construction projects carried out by the central government, state governments, and private agencies. Moreover, there is considerable scope in the market for students to set up their own engineering consultancy firms.
- Civil engineering careers are dynamic areas of employment that involve Planning of Projects, Designing, Construction, Supervision ,Quality Control, and Maintenance(all this is in addition to academia and research).

- As a Vignan graduate you will get well versed in all relevant fundamentals, concepts and applications of Civil Engineering.
- You will become capable of planning, designing, executing and monitoring as required for all variant jobs in Civil Engineering.
- You will be well-prepared to write the examinations of IES , PSUs and Research Institutes, as well as the entrance examinations for higher studies such as GATE AND PGECET.
- You will be shaped into a confident professional with necessary skills, leadership qualities and the ability to face any challenge that might present itself.

M.Tech – STRUCTURAL ENGINEERING

Our Master of Technology in Structural Engineering is a two year program that focuses specially on the areas of advanced structural analysis, advanced reinforced concrete and steel structures, innovative construction materials, plates and shells bridges etc. Our M.Tech students undertake a rigorous education that involves both in-depth research and consultancy activities where key principles of design, analysis, and problem-solving are applied to practical challenges. Adding to this, in their second year, Vignan

students undergo direct industrial training to help them get a better grasp on career opportunities.

Outcomes and scope

- Once graduated, structural engineers tend to primarily focus on the design of both frameworks and foundations for buildings and/or structures to ensure their stability.
- After the completion of Masters at Vignan you will develop a proven ability to design, conduct, analyse and interpret civil structural engineering experiments and the associated data.
- Graduates will be industry-ready professionals, capable of immediately contributing to their selective companies or agencies.
- Through internships and industrial training, our students will graduate with an employment relevant tools and experience.

Ph.D. PROGRAMME

- Our Ph.D. programme provides both post – bachelor's and post master's applicants the opportunity to study and undertake research in a wide range of subjects in Civil Engineering. All Ph.D. students are guided by our world-class faculty, adjunct professors, and experts from both industries and external institutes.
- To facilitate the best possible research standards, the department is equipped with advanced laboratories, the latest computer systems, and a newly modernized library. Moreover, we recently launched the 'Center of Excellence for Composite Smart Materials' for performing advanced experimental investigating in the field of concrete technology.
- A successfully completed Ph.D. from Vignan University will open a series of unique opportunities in independent research, official research, consultancy, academia, laboratory development, industry, government and entrepreneurship.

INDUSTRIAL INTERACTIONS

- The Department has developed links with various research organizations, as well as public and private sector units for the expressed purpose of securing the best available industrial internships for our students.
- Vignan Students undertake internships in research institutes such as SERC, Chennai, CRRRI (CSIR), Delhi and government departments such as the Roads & Building Department (Vijayawada), Railways (Guntur) and with construction giants such as L&T Ltd., IVRCL, GVR Infrastructure, Nagarjuna Construction Company,

Navayuga Engineering Construction, Vijaya Nirman Company Pvt. Ltd., and Lanco hills, Dilip Buildcon Limited and SRR Projects.

- Our students have also participated in world-class internships abroad with companies that include: Diplomat Doha (Dubai) and Yarab Construction Pvt. Ltd. (Bhutan).

RESEARCH PROGRESS

- The Department of Science and Technology of the Government of India, specifically identified the Department of Civil Engineering of Vignan University as a potential national centre for research, and subsequently approved a fast-track research project entitled 'Assessment of Ground Watershed in Drought Prone Areas of Anantapur Region' (Duration: 2013-16; worth Rs. 25.4 Lakhs).
- The Department of Civil Engineering has signed MoU with the Structural Engineering Research Center in Chennai (Council for Scientific and Industrial Research) and IEC academy, Hyderabad for mutual cooperation in research.
- The Department of Civil Engineering has an MoU with the University of Colorado (USA) for offering advanced 'additional' courses and for facilitating research grants.
- Our faculty have creditable publications in SCI, SCOPUS and other peer-reviewed journals/conferences.
- Central Government agencies such as Indian Railways and NHAI; and State Government agencies such as Panchayat Raj, Roads and Building, Public Health, Municipalities, Irrigation, VGTM-UDA as well as various private agencies are all clients of Vignan.

→ Overview

Programmes Offered

B.Tech
Civil Engineering

M.Tech
Structural Engineering

Ph.D. Programme



Head of the Department

Dr. N. Ruben
hodcivil@vignan.ac.in
0863-2344700, Extn : 131

HoD Message

"It is a pleasure to head the department of Civil Engineering. The department offers B-Tech (CE), M-Tech(Structural) and Ph.D., Programs. The department has a team of highly experienced and motivated faculty members recruited from NIT's and IIT's, who are in process of tuning the young minds to make them emotionally balanced and globally competitive. Our institution provides a platform for the students to enhance their employability skills through Industry Institute Collaboration".



→ Year by Year

Transformation of a student as a talented IT Professional

YEAR 1

You will begin to learn C – Programming, Data Structures, Basic Sciences, and supplementary courses offered by our structural engineering branches. You will undergo intensive training in English communication and writing skills.

YEAR 2

You begin to cover the key aspects of Computer Architecture Design and Operating System Concepts. In addition, GATE courses such as Database Systems, Design, and Analysis of Algorithms, etc; will also be rigorously covered. To better impart an understanding of problem-solving skills and to empower coding skills, object oriented programming via JAVA with a focus on real-world scenarios is also offered in the same year. At this stage, you can also select from an interdisciplinary minor-stream to help expand your career prospects.

YEAR 3

Your studies will become more focused, with a choice of eight courses. However, all students will undertake Mobile App Development with an attached research project based upon teaching methodology. Industry oriented courses like Open Source Web Technologies and Middleware Technologies are used to address societal problems through the implementation of mini projects.

YEAR 4

You will become a well-rounded, industry –ready professional by focusing on courses such as the Internet of Things, J2EE, NET and Data Warehousing, etc. (all expounded through practical demonstrations). In this period, you will carry out an industry-oriented project under internship or individual project.

The Department

Computer engineering has become the soul and psyche of most engineering branches today. Computer Science has been instrumental in bringing the world to where it is today. Computer professionals are high in demand in different environments such as industry, government, research, academia and other industry domains. The department of CSE at Vignan has good number of faculty members working across diverse and emerging areas such as Cloud Computing, Big Data Analysis, Wireless Networks, IOT, AI, Soft Computing etc.

Why Computing at Vignan?

- The Department has a good mix of experienced faculty members.
- A six month internship is offered in tier-1 companies such as TCS, Mahendra Tech, HCL, Cap Gemini, NIC, Tackyr Root, Symbiosis etc.
- Sponsored / consultancy projects worth of Rs. 120 lakhs are in different execution phases to serve the needs of society.
- To impart necessary technical knowledge, and make the students industry ready, Workshops, Guest Lectures and Seminars are frequently organized by the Department.
- We were ranked in the top 30 among IBM's Great Mind Challenge four times consecutively in nation wide competition.
- As part of industry and institute interaction, we have MOU's with Finland Labs, DhyanaHita, and Open Kite, amongst others.
- Students of CSE launched successful start-ups such as E-medi help, Pocket Grocery, Allightec etc.
- The Department has successfully organized an International Conference on Networks & Soft Computing with IEEE Sponsorship in 2014.
- The Department has an IIT BOMBAY Spoken Tutorials Remote Centre. Under this scheme our students are empowered through Open Source Technologies.
- Good number of faculty from premier institutions like NIT, Central University and IITs. Faculty of CSE have qualified in NET and GATE examinations also.
- Some of our students cleared CODEVITA exam conducted by TCS and got placed with attractive salary package.



Programs Offered

The Department is currently offering programs at both undergraduate and postgraduate levels and is equipped with state-of-the-art laboratories. Moreover, our highly qualified faculty undertake industry oriented research that opens up the floor for our students to pursue research across various streams of the M.Tech and Doctor of Philosophy programmes.

To serve industrial and research needs better, the Department is offering postgraduate programs in niche areas such as Machine Learning, Data Science, and Computer Networks & Information Security.

Employment Prospects

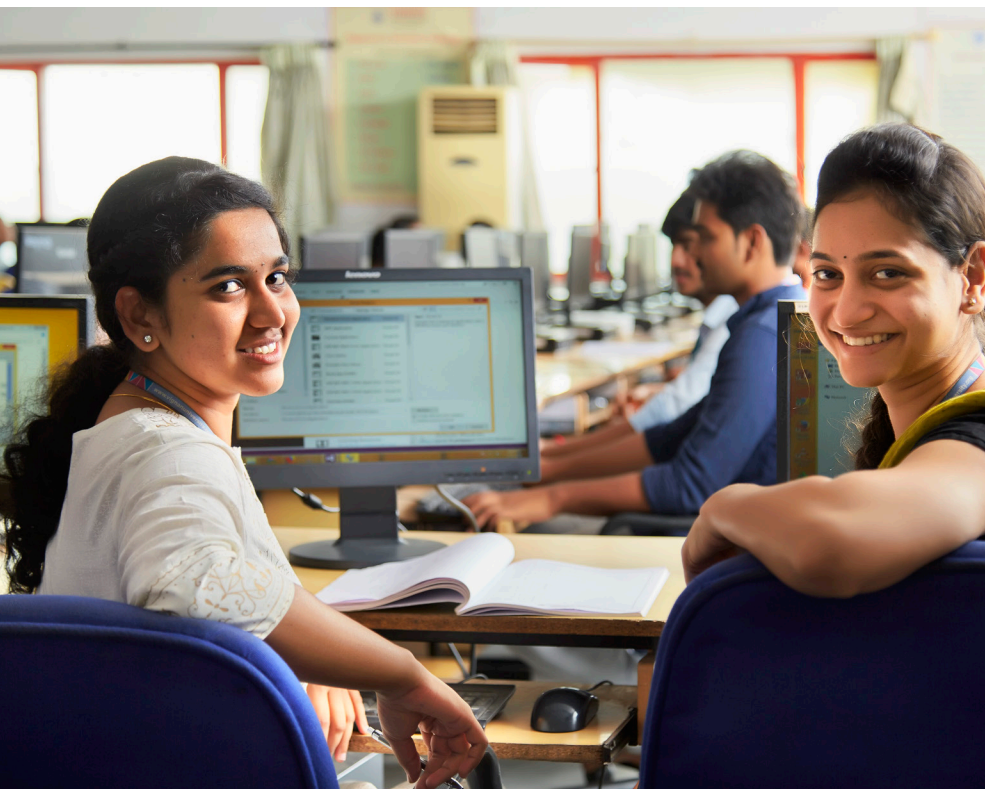
- The Bachelor's and Master's of computing programs provide students with the knowledge and skills that are essential to become multi-skilled IT professionals. Our graduates are capable of contributing to high demand areas such as applications on emerging technologies verification and validation of Apps.
- The budding Engineers of the Department got their placements in various MNCs like TCS, Infosys, IBM, Open Text, Virtusa, Cognizant, Mind tree, Capgemini, Hyundai mobis, Net Stat etc.; with an average salary package in the range of Rs. 3-8 Lakhs.
- The Department of Computing provides internship opportunities in MNC's such as Amazon, TCS, Imagine, Plumsoft, Capgemini, etc.



Reflections

I have two years of association with the CSE department of Vignan's University. Being an active member of Board of Studies of the department, I found that the Course Syllabi enable the students to become industry ready professionals. BoS perused the feedback of all the stakeholders in the Curriculum revision and introduced unique features like Six-Month Internship and Modular programs into the curriculum. Faculty commitment and their innovative teaching methodologies, use of Moodle in teaching and learning practice with the State of art laboratories help to transform the student into a successful IT professional and researcher VIGNAN is one of the premiere institution of India. — [Aravind Azad Yarra, Lead Architect, Wipro Technologies, Bangalore. \(Member of BoS, Vignan's University\)](#)





Student Reflection

Varsha Thanooj Byrapaneni
Batch 2014-2018



Life is not the same before and after entering Vignan, It changed a lot towards the positive end. Vignan helped me to explore myself, find out my passion and interests. It gave me multiple platforms to explore and exhibit different capabilities and potencies of mine. The English Proficiency Course and exams conducted by Cambridge English helped students to enhance their language skills. Various student bodies in the university will be functioning effectively with diversified interests. Being elected as a member of SAC I closely observed the work and gave my minuscule contribution to it. All our faculty were extremely supportive all the time, without their support the total B.Tech journey wouldn't have been this smooth. The continuous support from the department in encouraging us to enhance and leverage our technical skill set by participating and organizing various national level events keeps us motivated all the time. A dedicated semester for internship is the part I loved the most, It gave me an opportunity to have the industry exposure before I actually started working. I am happy that because of internship opportunity I was placed in Nestaway Technologies with 8 lacs per annum and TCS (on campus) as well.

'Thank You Vignan for shaping me up the way I want'

B.Tech – COMPUTER SCIENCE & ENGINEERING

Our Bachelor's Degree in Computer Science & engineering is a four-year program focusing on the basic, core and specialised courses of Computer Science. This program provides students with unique and specially engineered opportunities across various industry domains, higher studies, and entrepreneurship. The curriculum is meticulously designed to produce employable industrial aspirants by including courses such as DBMS and open Systems for web Technologies. Further, to instill technical proficiency in our graduates, the Department offers six-month internships with reputed organizations such as HCL, Hitachi, Efftronics, etc.

B.Tech – INFORMATION TECHNOLOGY

Bachelor in Information Technology is a four year program aimed at preparing Computer professionals for research, academics, design and development in hardware, software and co-design technologies. This program emphasizes on developing strong learning skills and imparts knowledge in key subject areas relevant to current scenario in the field of Information Technology through Industry - Oriented Internship.

Outcomes and scope

- Develop both a theoretical and practical knowledge in the fundamental areas of Computer Science.
- Be equipped to forge a career in Research and Development, either in Industry or academia.
- Be able to analyze, design, implement, and test object-oriented software solutions to address "real world" problems
- Cultivate the ability to work as a team player to accomplish a common goal.
- Graduates of the program are well-placed and properly trained so that they can enjoy careers that are punctuated by ethical decision-making, integrity, leadership and social responsibility.

BCA – BACHELOR OF COMPUTER APPLICATIONS

Bachelor of Computer Applications is a three year undergraduate academic degree in Computer Applications offered from the academic year 2015-16. The program imparts comprehensive knowledge with equal emphasis on theory and practice in the field of information technology. A BCA graduate would be able to demonstrate advanced skills in the effective analysis, design and realization of business systems utilizing contemporary information technology.

M.Tech – COMPUTER SCIENCE & ENGINEERING

The Masters program provides theoretical learning combined with hands-on problem-solving experiences in the areas of Advanced Operating Systems, advanced RDBMS, Algorithms, Networks, and Embedded Systems, amongst others.

Students get the opportunity to enrich their research skills with a host of electives such as Wireless Sensor Networks, Artificial Intelligence, Cloud computing, Big Data, etc. In the second year of the program every student will undergo a one year research oriented project. This experience helps explore new career pathways in R&D, S/W Development, and education.

MCA- MASTER OF COMPUTER APPLICATIONS

MCA is a unique multi-utility course. It is a good option for non-technical graduates of any discipline who have basic knowledge in Mathematics. It is an extremely balanced course with special emphasis on designing and implementation of application and commercial software. The course gives importance to functional knowledge in various areas. This course is aimed at grooming a student into a complete IT professional.

RESEARCH PROGRESS

- DST SEED division sanctioned Rs.53 Lakhs towards the “Development of an educational suite for training visually impaired students in computer programming and information technology skills”.
- DST SEED division has sanctioned an amount of Rs. 63,15,000 for Women Technology Park at Vadlamudi.
- DST seed division sanctioned Rs. 6 Lakhs towards organizing of workshop on Big Data Analytics.
- AICTE Sponsored Project on “Modernization of Real- time Computing Lab”.
- The faculty published more than 250 research articles in reputed national and International journals/ conferences.
- First IEEE International Conference on Networks & Soft Computing was conducted with the financial support of DST, Govt. of India.
- Being IBM Center of Excellence; Vignan received top 30 IBM COE award for four consecutive years.
- The Department has conducted Rs. 25 Lakhs worth of consultancy work with external agencies and sister institutions.
- Our curriculum is oriented towards promoting entrepreneurship. Accordingly our students have launched Start-Ups such as E-medi help, Alightech, Kissan Market, Pocket Grocery, etc.



STUDENT REFLECTION

Sarath Podduturi, Batch 2011-15

Vignan moulded me as a good human being with professional ethics & human values. My faculty enabled me to hone my technical abilities to the maximum extent : I also received encouragement to participate in various co-curricular and extracurricular activities at national and international events. The semester long internship gave me a rich industry exposure and hands on experience before I started working. The Students Activities Council [SAC] of our university supports the diverse section of students to get involved in various university level extension activities. I also got a good training on various aspects like presentation and leadership skills, performing arts etc. I will always proudly say that “I am a Vignanite” wherever I go.

→ Overview

Programmes Offered

B .Tech

Computer Science and Engineering
Information Technology

BCA – Bachelor of Computer Applications

M.Tech

Computer Science & Engineering

MCA – Master of Computer Applications

Ph.D – Programme



Head of the Department

Dr. D. Venkatesulu
hodcse@vignan.ac.in
0863-2344700, Extn : 476



Head of the Department

Dr. K. V. Krishna Kishore
hodit@vignan.ac.in
0863-2344700, Extn : 152

HoD Message

Department of Computer Science is well equipped with the-state of art laboratories that will promote the students to do good programming and get rapid exposure to various programming languages, tools and latest technologies. Faculty is one of the core strengths of the department of Computer Science who are from higher learning institutes such as IIT/NIT/CU/IITs.

HOD, CSE received his Ph.D degree from Department of Computer science and Engineering, IIT, Chennai in 1999. He worked in Wipro Technologies for about 18 years. During his stay in Wipro, he worked for global customers such as Cisco systems, Motorola, Free scale Semiconductor, Alcatel etc.

Electronics and Communication Engineering

→ Year by Year

YEAR 1

You will be introduced to the courses that cover engineering blend of basic sciences like Mathematics, Computers and Internet etc, and their implementation using Matlab. Engineering Products and Solutions course is introduced to understand the basic engineering products and systems belonging to electronics, electrical, civil and mechanical. Courses like Technical English, Programming and Drawing etc, help to enhance communication, logical and visualization skills.

YEAR 2

You will be taught with the relevant courses related to electronics and communication engineering, so that you will be able to design and test the basic electronic gadgets like AM and FM radio, Amplifiers, Regulators, Stabilizers. You will also be offered some minor and add-on and elective courses which impart analytical and life skills.

YEAR 3

Your study will be more focused to the areas such as Digital Communications, Linear IC Design, Antenna Propagation, Digital Signal Processing and VLSI Design. You will be able to design various filters, interfacing of micro controllers, simulation of Digital modulation techniques using Matlab, advanced RF antennae design. Minor and Elective courses are also offered along with mini projects.

YEAR 4

You will start building a career of your choice by choosing electives in more advanced courses such as Nano Electronics, VLSI, Embedded Systems, High Speed Networks, Robotics and Automation, IoT, MEMS and NEMS etc. You will be industry ready by under going six month industry internship along with modular courses offered by core industries.

The Department

The modus operandi of communication has evolved from lamp light used in stone age to the fifth generation Li-Fi, where the same light is used with utmost comfort and solitude. The predominant availability of moderate means of communication has been one of the electronics' greatest benefactions to the society. Electronics play a vital role in developing cutting edge technologies that support the growth of production and agriculture sectors.

Moreover, health care, (one of the largest sectors in the world) quintessentially relies on the medical and biomedical electronics. Being the core ideology, the communication sector has grown exponentially up to 5G technology. Furthermore IoT, the heart of today's advancement in automation and artificial intelligence, is dependent on electronics. It is worth mentioning that EoT (Electronic of Things) and photonics are set to take over all our current advancements to unparalleled heights.

Why Electronics at Vignan?

Established in 1997, the Department of Electronics and Communication Engineering (ECE) is one of the oldest departments at Vignan's University. ECE has a world-class faculty with over 30% of members holding Doctorate degrees and over 35% of members have been recruited from premier institutes like IITs and NITs.

The Department possesses an outstanding faculty-student ratio of 1:13 and has assembled state-of-the-art infrastructure such as smart class rooms (ICT enabled), industry-driven labs and research centres. Beyond this, the Department has a diverse range of facilities for assisting on Research and Development in areas such as Wireless Sensor Networks, VLSI Design. Machine Vision and Image Processing. This is complimented by a rigorously developed, and international standard, academic curriculum.

Programs Offered

Presently the Department is running courses at both the undergraduate and the postgraduate levels, providing excellent facilities to carry out research for Doctor of Philosophy (Ph.D.) degree; R&D work for sponsored and consultancy projects; testing and consultancy work for industrial problems. This is, in addition to the regular courses in Bachelor of Technology (B.Tech.) and Master of Technology (M.Tech) programmes that are a part of the curriculum.

5G Wireless research at Vignan

A team of three faculty members Dr. N. Usha Rani, Mr. T. Pichaiiah, Mr. Y. Ravi Sekhar and Ms. Yamuna from Vignan University attended a 10 day "5G summer school", at Technical University of Dresden, Germany during 21-30 September 2016. This team interacted with more than 50 researchers from academia and industry, across the globe to support the 5G., requirements, such as speed 1Tb/Sec, latency (1ms), and also discussed various application areas using 5G wireless technologies, like Precision farming, Automatic car driving, Virtual Reality for remote surgeries, emergency services and Industrial automation.



Employment Prospects

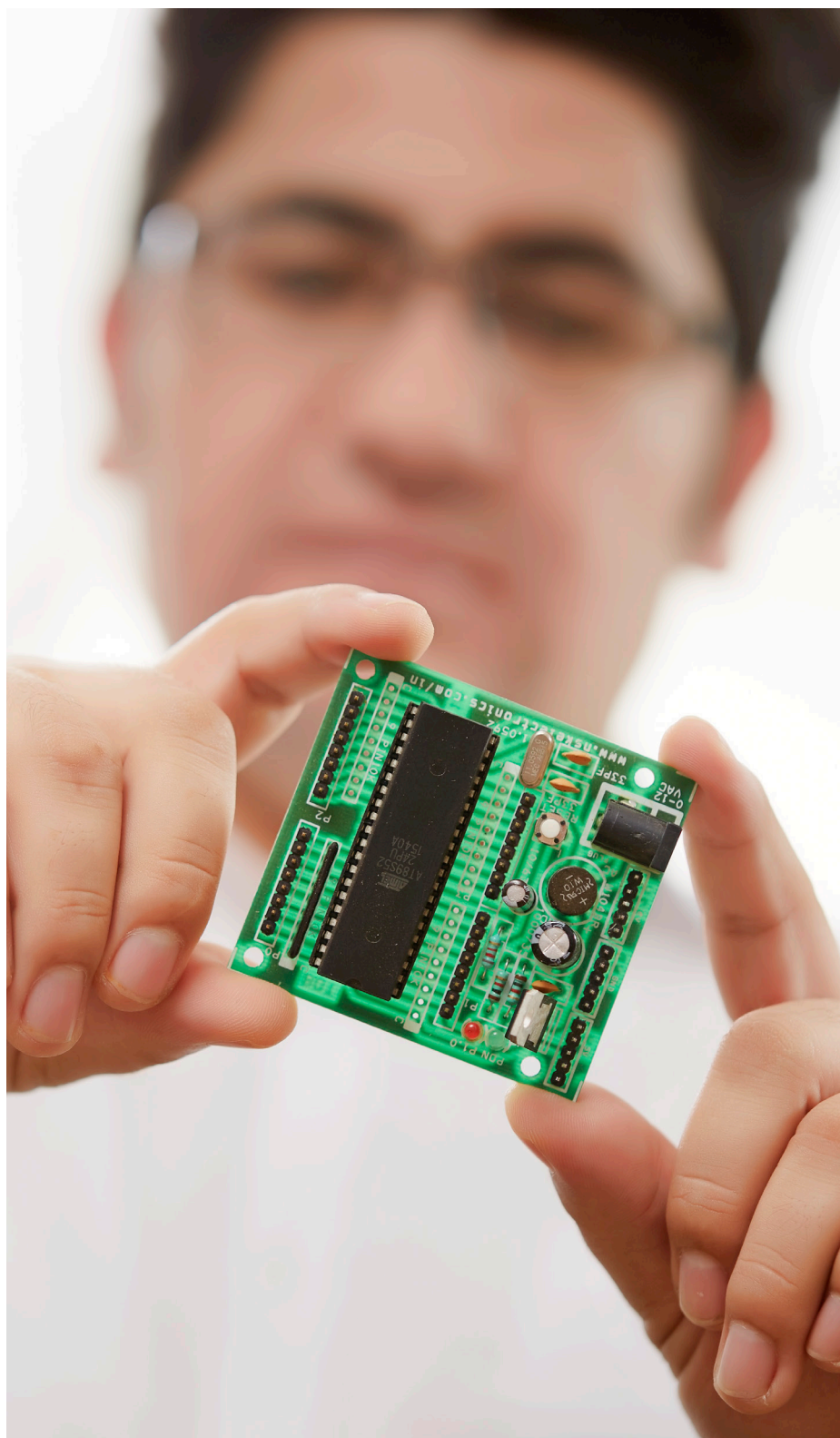
- Top Sectors which offer jobs for ECE engineers : Electronics Circuit Design, Signal processing, Wireless Communication, Optical Communication, Robotics, Embedded Systems, Telecommunications, Consumer Electronics, Solid State Physics, Control Systems, VLSI, Defence, Nanotechnology, Mobile Companies.
- Top Companies which offer Jobs for ECE engineers : Texas Instruments, Intel, AMD, CISCO, IBM, Samsung Electronics, Sony, Toshiba, Philips Semiconductors, Nokia, Nvidia, Robert Bosch, HP, LG Electronics, BHEL, ECIL, NTPC, ISRO, DRDO, SYNTEL, Tata Consultancy Services, Infosys, Wipro, Tech Mahindra, HCL.
- Higher Education Opportunities for Electronics and Communication Students : Students graduating with M.Tech in the field of Electronics and Communication have unlimited scope of employment opportunities. Having a Masters Degree will definitively improve employment prospects and long-term career success (Vignan graduates move straight into job placements at MNC's)



STUDENTS REFLECTION

Kowshika

Vignan's University has an MoU with École Centrale Nantes, France which is a leading French institute which combines top-level research, academics, and innovation at the cutting-edge of science and technology. Three of our final year ECE and ECM students went to this prestigious institute as a part of student exchange programme. With the support of several strong institutional and industrial partnerships Centrale Nantes produces world-class academic and applied research. At ECN, we engineers will learn how international companies work and develop the products needed for societal needs.



Reflections

It is a pleasure to have association with ECE department at Vignan's University. The atmosphere, the faculty, and students are very disciplined. The curriculum design is very good in transforming students to industry ready professionals. The department has well equipped lab infrastructure to facilitate the theoretical inputs on design, analysis & simulation. – Dr. M.V. Kartikeyan, Professor, IIT-Roorkee (Member of BoS, Vignan's University)





B.Tech – ELECTRONICS & COMMUNICATION ENGG

Electronics and Communication is one of the oldest and most essential branches on engineering in the present era. The Department offers a huge scope in the fields of Electronics, Telecommunications, Networking, Embedded Systems, Advanced Signal Processing and Health Care. Graduates of ECE will have enormous job opportunities both in core companies and IT industries.

Outcomes and scope

- Professional Skills: An ability to understand and apply the design concepts of engineering to various areas like Electronics, Communications, Signal processing, VLSI and Embedded systems.
- Problem-Solving Skills: An ability to provide cost effective solutions for the complex engineering problems in the domain of Electronics and communication.
- Successful Career and Entrepreneurship: building successful career with social-consciousness, environmental-wisdom and good ethics.

B.Tech – BIO MEDICAL ENGINEERING

B. Tech in Biomedical Engineering fuses expertise in biology, medicine, physics, mathematics, engineering science and communication to make the world

healthier place. The practice of medicine and biomedical research and development is becoming increasingly multi disciplinary in its disposition, with a particular emphasis on the wide applications such as, designing electronic circuits, computer software for medical instruments ranging from imaging systems to small ear implants. This program imparts students with critical understanding of how biological knowledge interacts with engineering aspects to produce engineering solutions to healthcare problems. Curriculum has been designed to impart required skills along with knowledge to tackle real time challenges by frequent hospital visits which cater the needs of industries and research centers.

Outcomes and scope

- By acquiring an essential knowledge in the key science, mathematics, engineering and medical sciences students will develop the ability to work in multi disciplinary environments involving engineering and health care.
- Develop the ability to analyze real-world problems, and design healthcare solutions that are technically sound, economical, and socially acceptable.
- Demonstrate professionalism, ethical aptitude, communication skills, ability to work in teams, and a talent for adapting to changing trends by engaging in lifelong learning.

M. Tech – EMBEDDED SYSTEMS

The objective of this specialization is to transform a fresh electronic graduate into an embedded system designer. Many small, sophisticated house hold equipment as well as kids toys include embedded products. Embedded system includes both hardware and software kernel. A student after completion of this course can find opportunity in many industries often continue as an entrepreneurs.

M. Tech – VLSI

Nowadays people are fascinated towards small, light weight, low power and high speed appliances, which are possible by VLSI technology. A student with VLSI specialization can develop such applications with this technology that satisfy the current day needs. A graduate with a sound knowledge of VLSI technology can be placed in chip fabrication and code generate industry with a handsome pay. VLSI is a more research prone area since needs of humans are growing day by day.

Ph.D PROGRAMME

The Ph.D programme allows students to gain advanced knowledge and research experience in a specialized field of study. The principal component of the programme is a dissertation based on original research. Beyond this, students are required to complete 12 credits of course work which includes 3 subjects (2 core courses related to the Ph.D topic, and 1 course on research methodology). The department of ECE provides an opportunity to learn and work alongside the latest developments in the field of VLSI design, Image processing, Machine Vision, Advanced Communication Systems, Wireless Sensor Networks, Smart Cities, Embedded Systems, Health Care Systems, Antennas.

ECE Department currently has 32 active research scholars exploring these various different areas of ECE.

RESEARCH PROGRESS

- More than 70 no. of publications over one year.
- Three patents in VLSI and Medical Imaging.
- Four DST and AICTE Projects of worth 50 lakhs.
- MoUs with reputed organizations like Ananth Tech, Keysight, AMD R&D, NI, Bharathiya Nabika Vidyut Nigam Ltd. (BHAVINI).
- Conducts more than 10 Workshops / Seminars every year.
- Established student chapters of reputed professional bodies such as IETE, ISTE and IEEE.
- 25 faculty membership Technical Societies like IEEE, ISTE, IETE, BMESI and ACM.

SALIENT FEATURES

- Highly dedicated faculty.
- An amalgam of academicians and industry persons.
- Well disciplined community of around 1100 students.
- >90% consistent student performance in results.
- >80% placements.
- >90% of students opting for the 6 month internship in core industries in India and abroad.
- Technical skill development through summer and winter add-on programs, student workshops and guest lectures.



STUDENT ACHIEVEMENT

Ms. V. Sriharsha, IV ECE student has attended the student exchange programme at United States Institute for student leaders on Womens Leadership managed by the US Govt. Dept of State, hosted by University of Kansas.



CENTER OF EXCELLENCE

COE - Advanced RF Microwave and Wireless Communications worth of Rs. 1200 lakhs. Lab was established jointly by Vignan's University and Keysight. Advance equipment like vector Signal Generator, Network analyzer, Signal Analyzer, RF Kits and Ads with Emprow EVA software is available in the lab.

→ Overview

Programmes Offered

B.Tech

Electronics & Communication Engineering
Bio Medical Engineering

M.Tech

Embedded Systems
VLSI



Head of the Department
Prof. T. Pitchaiah
hodece@vignan.ac.in
0863 2344700 Extn : 221

HoD Message

Ever increasing pace of development in electronics, audio and video communications systems and the automation in industry has made an electronic engineer a catalyst for rapid changes in our modern society. Electronic gadgets and communication systems of the present age have tremendously improved the quality of life. With the tempo of events throughout the world, it has become essential to have more efficient communication network supported with the latest electronic devices and circuits.

The School of Electronics at Vignan's Foundation for Science, Technology & Research (Deemed to be University) with its strong faculty base and infrastructure prepares students who are strong in the field of electronics with associated inter departmental mix so that he/she can pursue higher studies. We plan to develop the School of Electronics further and make it well recognized by establishing still higher quality of research and teaching programs. We strive to be at the forefront of research and equip our students not only in the fundamentals but also in the emerging technologies and their applications.

Electrical and Electronics Engg.

→ Year by Year

YEAR 1

You will be introduced to the Fundamental principles of Electrical and Electronics engineering and Computer programming. Moreover, you will be well trained in English Communication Skills in addition to introduction of courses on a wide range of subjects.

YEAR 2

You will cover all the relevant topics that comprise the fundamentals of Electrical Machines, Power systems and also Fundamentals of electrical devices, Digital electronics and other courses of your choice.

YEAR 3

Your studies will become more focused, with a choice of up to eight courses related to your core streams, chosen from a range of 20; all combined with individual practical work.

YEAR 4

You will build a portfolio of 6 to 10 specialized courses that match your particular interests. during this period you will undertake an individual research project or work in an industry of your interest (internship) and write a dissertation on the chosen topic.



The Department

From low-power processors for mobile phone technology to heavy-duty power electronics for wind turbines, the design of electronic and electrical systems is an innovative challenging and dynamic area of study. This demands a clear understanding and mastery of concepts in electrical and electronic engineering apart from developing skill sets to obtain feasible solutions for solving challenging engineering problems. On par with other vibrant engineering disciplines, electrical and electronics engineering is constantly forging ahead new horizons through advances in technology for medicine, transportation efficiency, safety monitoring systems, surveillance, entertainment, transmission and distribution efficiency manufacturing and computing (to name just a few areas). This program offers an exciting opportunity for all applicants who look for building a great career.

Skill Development Centre

The mantra of Indian Government 'Make in India' can't be realized without focusing on all-round skill development of technical work force. The role of recognizing Vignan University's in this regard, The Government of Andhra Pradesh has established a skill development centre under the aegis of APSSDC, at department of Electrical and Electronics Engineering.

Why EEE at Vignan?

- Vignan's Electrical and Electronics Engineering department has a faculty base which moulds the students on all aspects of communication, core areas and programming. 80% of the EEE students got certified in BEC examination conducted by Cambridge University, U.K. 70% of the students were recruited by top MNC's like Schneider Electric, TATA, General Motors, IBM etc.
- Six months of industrial internship in companies like ISRO, BHEL, NTPC etc help students to develop technical and soft skills which help them to learn about industry practices in leading to employment.
- Our state-of-the-art laboratories and Research Centre on Hybrid Vehicles has helped to launch high quality research activities enabling students to acquire placement opportunities.
- The progressive and multifaceted approach has consistently produced successful alumni who have received direct admission into Ph.D programs in IITs and premier international institutions.

Programs Offered

Presently the department is running courses at both undergraduate and postgraduate levels, and providing excellent facilities to carry out research for Doctor of Philosophy (Ph.D.), R&D work for sponsored and consultancy projects and testing as well as consultancy work for industrial problems. This is, in addition to the regular courses in Bachelor of Technology (B.Tech) and Master of Technology (M.Tech) that are a part of the curriculum.

Employment Prospects

- Students are regularly absorbed into core sector companies such as GENCO, L&T, GE, BHEL, TRANSCO, NTPC, SAIL, GAIL, IOC, HPCL, BPCL, ONGC, DRDO, ISRO, BARC, IOCL & Power Grid Corp. of India etc.
- The salary for fresh graduates of Electrical & Electronics Engineering varies from 3-8 lakhs per - annum.
- Students also get placed through campus interviews in MNC's such as TCS, Infosys, IBM, Syntel etc.



STUDENT REFLECTION

Abu Talha Siddiqui

Being grown up in the northern part of our country I always wanted to explore the southern part. This curiosity drive me to choose a university among southern India. While exploring it was like love at first sight for VIGNAN and I decided to join VIGNAN. The environment and culture at VIGNAN especially in EEE department helped me to adapt at a faster pace.

The scholarship offered at VIGNAN helped me to achieve my dream to become Electrical Engineer. Department of EEE provided proper education and necessary mental tools for superior learning. Because of all the facilities I was absorbed for internship at DRDO, Hyderabad and placed in IBM, Capgemini. All the support offered by the department has developed me as a complete individual.

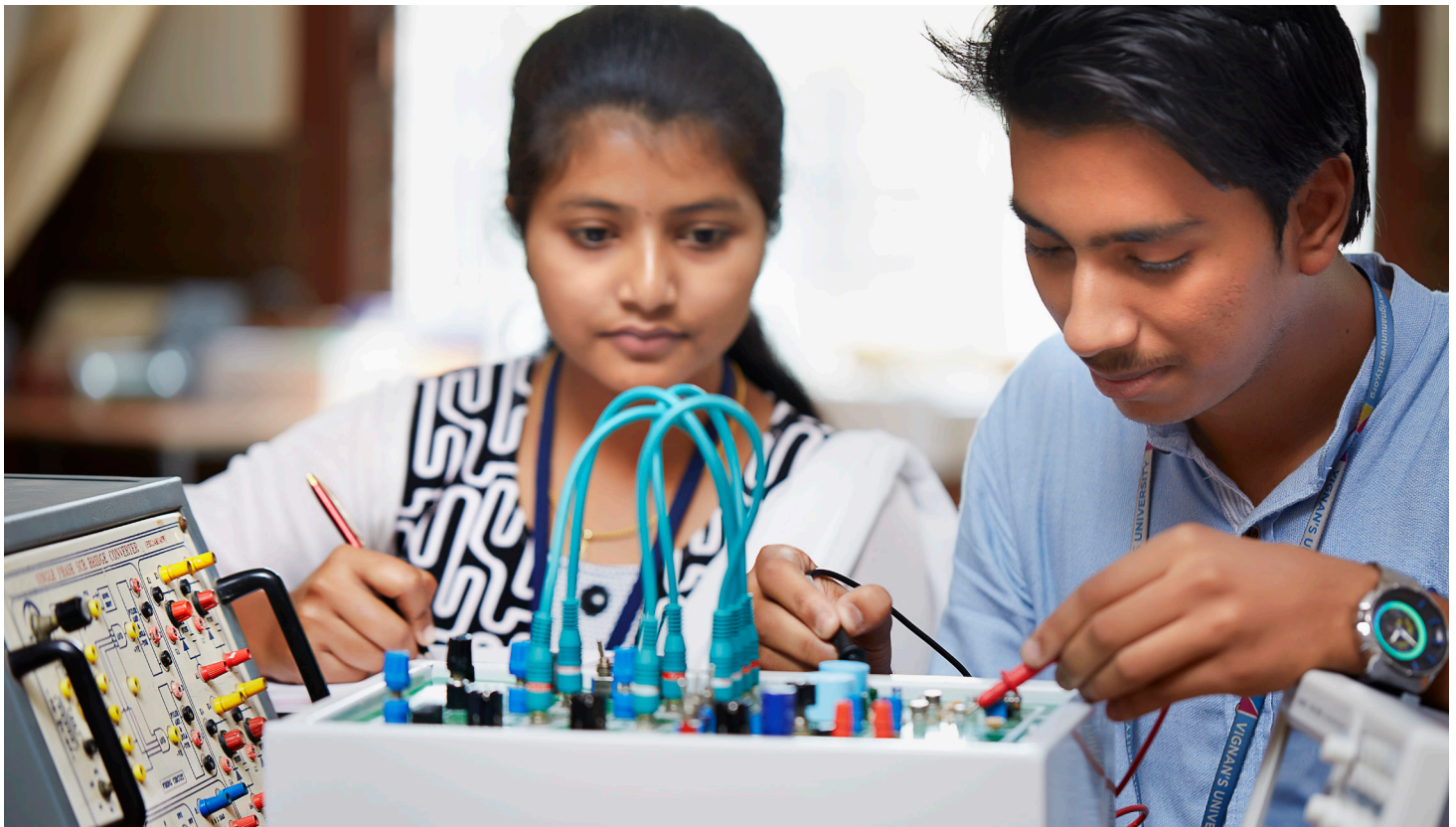
A big thanks to the department and VIGNAN for making me today what I am.



Reflection

EEE alumni of this university are very successfully established in reputed companies such as General Motors, TATA motors, General Electric, BHEL, Power Grid, IBM, Oracle and so on. The department is collaborating with reputed industrial experts, and academic experts from all over the world by organizing workshops and conferences. The department is involved in research activities with faculty members of EEE having published more than 200 papers in reputed journals. A DST project of worth Rs. 36 lakhs is in progress. The department has also created a societal outreach program by conducting energy audits in order to develop a more holistic educational experience. – [Dr. V. T. Somasekhar, Professor and Head, Dept. of EEE, NIT Warangal \(Member BoS, Vignan's University\)](#)





B.Tech – ELECTRICAL AND ELECTRONICS ENGINEERING

The B.Tech program in Electrical & Electronics Engineering at VIGNAN offers a unique mix of electrical, electronics and computer related courses enabling students to take up a professional career/ higher studies in any of these areas. The curriculum is based on a credit scheme and is updated periodically to reflect latest developments in the field of electrical & electronics profession in consultation with experts from industries and renowned academics institutions.

Outcomes and scope

- Electrical engineering jobs represent over 25 % of all available jobs in engineering.
- In India 30% of the government jobs are from the Electrical engineering sector.
- A EEE student can enter into the job markets of Computer engineering, Electronics & communication engineering, Instrumentation engineering, Control engineering, Robotics, Mechanical engineering, VHDL and VLSI.
- Other than conventional electrical engineering jobs in power generation, distribution, transmission, manufacturing and utilization

sectors, electrical engineers are also well positioned to address crucial engineering issues that the society is facing today.

M.Tech – POWER ELECTRONICS AND DRIVES

Spurred on by technological progress and a growing concern researching the efficient use of depleting energy resources, static power electronic converters, the deployment of advanced semi-conductors devices, are currently on an increase for a number of applications. They range from low power converters for milliwatt applications, to converters for high-voltage DC transmission systems, in the range of hundreds of mega-watts.

The key themes behind studying Power Electronics and Drives is to provide students with in-depth understanding of the technologies and scientific disciplines that are involved in electric energy conversion through means of power electronic converters and electric machines.

Outcomes and scope

- The PED specialization offers core competencies in power electronic converters, electrical machines and control engineering. This program provides the ability to model, analyze, synthesize and develop PED systems.

- We also focus on how Power Electronics and Drives interact with externally connected components and systems.
- Upon completion of this programme, students are well equipped to apply for a wide range of jobs in both public and private sectors.

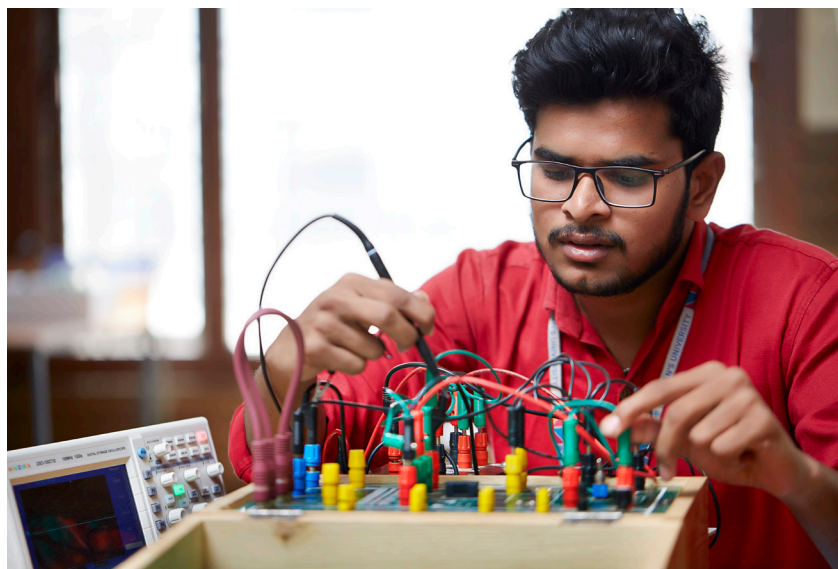
Ph.D PROGRAMME

Our Ph.D programme in Electrical engineering provides post-master's applicants with the opportunity to study in a broad range of areas, many of which overlap with other disciplines. An electrical engineering Ph.D scholar, will pursue theoretical and empirical studies in a topic determined, based on the area of interest. As a student at Vignan, you will be in the midst of a vibrant high-tech research community where external collaborations with industry, government, and other universities are common. A student's educational experience will not be limited to Vignan, but will also include dynamic learning experiences from national and international sources and institutions. This is a truly global degree.

The successful completion of a Ph.D establishes a student's ability to conduct independent basic or applied research, and prepares him or her for a career in academia, industry, or government.

RESEARCH PROGRESS

- Department filed a patent on “Realizing ZVS and ZCS in a continuous conduction boost converter with boundary mode control” vide Application no 201841007010 Dated 23.02.2018
- DST SERB sanctioned project titled “Hardware model implementation of IEEE 57 bus power system network” worth Rs 36.40 Lakhs.
- Established 1 MW rooftop solar photovoltaic plant in collaboration with Novus Green.
- DST Sponsored fast track project on “Design and development of back to back photovoltaic system with neuro fuzzy controller” worth Rs 26 Lakhs has been successfully completed.
- Submitted MNRE project on “Design and development of hybrid auto rickshaw for Indian conditions” worth Rs 56 Lakhs.
- AICTE sponsored project on “Modernization of Power Converters lab”.
- More than 200 publications by department faculties in reputed national/international journals.
- The department has developed a solar powered mini car for less than Rs 1 Lakh.
- The department has established strong academic/research interaction with IITs and reputed national institutes.



→ Overview

Programmes Offered

B.Tech
Electrical & Electronics Engg.

M.Tech
Power Electronics & Drives

Ph.D – Programme



Head of the Department
Dr. G. Srinivasa Rao
hodeee@vignan.ac.in
Tel : 0863-23447 40/41

HoD Message

It is my pleasure to welcome you to the Department of Electrical & Electronics Engineering at Vignan's Foundation for Science, Technology & Research (Deemed to be University). Our life would be unthinkable without the use of electrical energy. The growing utilization of the electrical energy is a decisive prerequisite for a rapid development of industry and agriculture. This department aims to train students by imparting them latest knowledge in the fields of Electrical, Electronics and other allied areas.

The department offers academic programmes B.Tech (Electrical & Electronics Engineering) and M.Tech (Power Electronics and Drives). The curriculum has been enriched on regular intervals by Board of Studies members drawn from International and National level reputed academic, research and industrial organizations.

The department is supported by well qualified and experienced faculty with a rich and varied teaching and research exposure. Many of them are drawn from reputed Indian Institutions like IITs and NITs and institutions abroad. Most of the faculty members have published and presented papers in the reputed national, international journals and conferences. Electrical Engineers have great opportunity for employment in various mini and maharatna companies. The department has the record of 90% placement from the past 4 years.

Mechanical Engineering

→ Year by Year

YEAR 1

Engineering Mechanics, Engineering Graphics, Engineering Materials and computer programming, engineering Mathematics, physics and chemistry courses are offered. Students are also trained in English communication and writing skills.

YEAR 2

Mechanical Engineering core fundamentals of thermodynamics, strength of materials, Materials & Manufacturing and application of data structures: To provide multi-disciplinary learning minor courses in (Management/Humanities/Electronics/IT) Minor-stream electives are offered up to VII semester, starting with II year.

YEAR 3

Machine Design, Heat transfer, Finite element analysis and machine tools fundamentals and applications along with laboratory sessions are accepted organized core elutriation advanced technology start in III year.

YEAR 4

Robotics and Management subjects are covered as core courses in this year. 12 specialized courses comprising of Mechanical and Non-mechanical courses are offered for the benefit of the students, with a focus on prospective career opportunities. A complete semester is allocated for the internship on the area of student's choice.

Minor course like electronics, Humanities, Electronics & IT start in II semester for multidisciplinary learning.

The Department

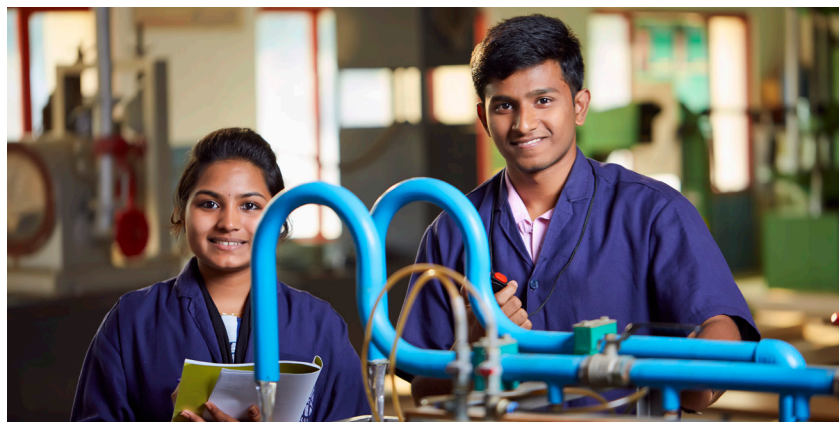
Mechanical Engineering is an evergreen branch among other branches of engineering. The mechanical engineering deals with the concepts of Engineering Graphics, Engineering Mechanics, Machine Design, Manufacturing, Heat Transfer, Robotics & CAD/CAM along with their applications. The Mechanical Engineering Department makes the student with knowledge and skills which are essential in the leading professionals to address key challenges in various fields.

Why Mechanical Engineering at Vignan?

- Vignan's Mechanical Engineering Department has strong faculty base whose primary goal is to make the students with excellent grasp on the technical skills of engineering along with international quality communication and soft skills.
- Majority of students undertake and complete certificate programs in English like PET an BEC conducted by Cambridge University, UK.
- Students secured placements of 80% in last year and 20% have opted for Higher studies.
- Main recruiting companies are Hyundai, Mahindra, Greentech Industries, Amaraja, Relevance, Cummins etc.
- Six month industrial internship programs in reputed companies such as DRDO , BDL, BHPV ,BHEL, ONGC , NTPC, VSP, L&T , Ashok Leyland , HUNDAI motors , Amara Raja Batteries, Mercedes Benz, Kumar Pumps, Railway Wagon Workshops etc., help the students with real hands on experience in industry and make them 'field ready' upon graduation .
- Students will get extra knowledge from Centres of Excellence which are available in the department in the areas of composite technology , Mechanical system design, Bio Diesel powered in CI engines and Tool Condition Monitoring.
- Continuous field visits from III semester onwards will help the students to develop a feel of the industry.
- During summer and winter breaks, certificate programs in CAD/CAM/CAE areas are organized to enrich the students knowledge and skills with the current edge technologies.

Programs Offered

The Mechanical Department offers B.Tech in Mechanical Engineering, Post Graduation in specialization of Machine Design.



Employment Prospects

- Our graduates are regularly absorbed into core companies such as L&T, NTPC, ONGC, DRDO, ISRO, Cummins, Satyam Ventures, Visakha Steel Plant, Ship Yard, Mercedes Benz, GE Motors, HYUNDAI Motors, TATA Motors, Mahindra & Mahindra etc.
- The salary of fresh graduates from Mechanical Engineering varies from Rs. 3 to 6 Lakhs per Annum.



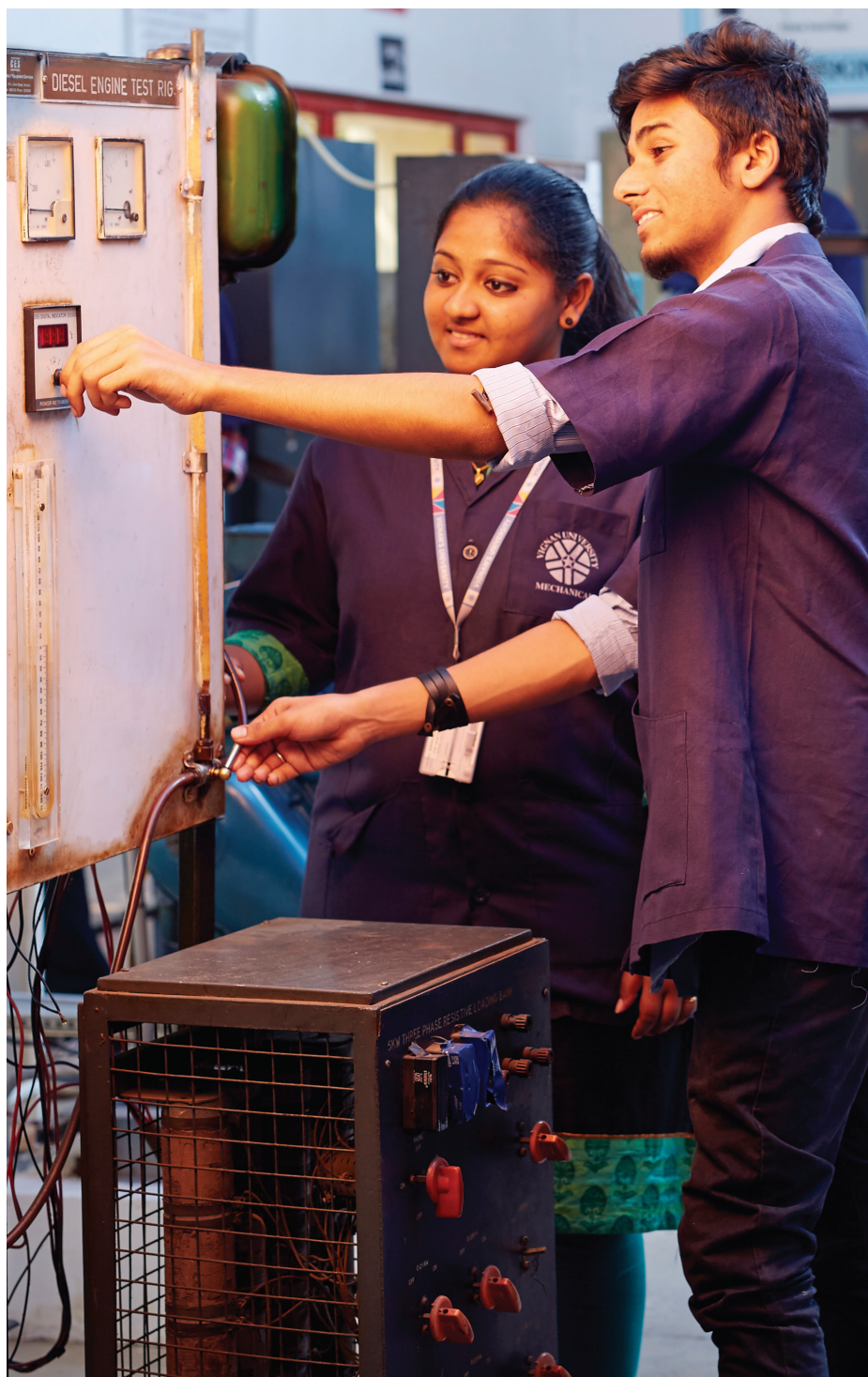
STUDENT REFLECTION

Pavan Kumar Nookala
(2012-2016 Batch)

VFSTR University – Building Young India, by preparing the engineers ready to face challenges and fulfil their dreams. A goal is a dream with a time limit. All the short and long term goals that I had set for myself in these 4 years have been fulfilled. I should thank Vignan for making this to happen. In VU there will always be a red carpet for one who strives to do something. There are surplus opportunities for overall development and the only thing you must do is to utilize them perfectly.

Behind my success there is support of 3 Fs - Family, Faculty and Friends. The first one will always be with us, but the latter two Fs matter a lot. In my department we get it more than sufficient, starting from HOD to the very end, everyone are very supportive.

My 4-years journey with Vignan was most memorable part of my life. The best thing in VU is freedom given to student and the one who doesn't misuse it will always get success. I have got a great number of good friends and enjoyed my life to the fullest. I have been awarded merit scholarship twice. In VU apart from academics we have PET, BEC, CRT classes which helped me a lot to improve my communication skills and get rid of stage fear and inferiority feeling. I got placed in TCS. I scored 7.0 in IELTS and now I am learning German language to apply for masters in Germany. I would like to thank Dr. Lavu Rathaiah garu for encouraging the students by giving scholarships, fee waivers and providing quality education. Thanks to Vignan University and Mechanical Engineering Department



Reflection

Mechanical Engineering students are lucky to have a peaceful environment with state of the art facilities, laboratories and highly qualified faculty from the reputed institutes. The department is continuously interacting with industry people to accommodate the changes in the curriculum. This is one of the good moves of Vignan, compare to other universities. As an automotive engineer when I visited the department, it really excited me. The students knowledge and their work in automotive projects is remarkable. The department is putting a lot of effort in setting new syllabus by incorporating cutting edge technologies and providing the required knowledge to get success in a students professional career. – *S. Rama Krishna, Manager, Head of Body Dept. Isuzu Motors Pvt. Ltd, Chennai. (Member BoS, Vignan's University)*





B.Tech – MECHANICAL ENGINEERING

Mechanical Engineering is designed to educate and train students for professional careers across various engineering organizations. The curriculum is based on a credit scheme and is updated periodically to reflect changes in the mechanical engineering profession.

The ideology of the school of Mechanical Engineering is to provide a broad foundation of knowledge to the students through a deep and sustained exposure to a variety of technical experiences. Curriculum seeks to develop students who are expert problem solvers and creative thinkers.

Outcomes and scope

By the end of the program, students will be capable of applying basic principles of science and mathematics with the confidence to handle their professional responsibilities.

- Get Succeeded in the diverse fields of mechanical engineering and its allied areas.
- Capable of accepting and handling leadership positions in industries and institutes.
- Provide the knowledge and skills that are important for critical positions

in the core mechanical engineering sector, which are necessary in order to pursue Ph.D's through the PG program.

- Acquire the skills of life –long learning; knowledge of contemporary issues; ability to apply techniques, skills, and modern engineering tools; and gain the skills and spirit needed for entrepreneurship.

M.Tech – MACHINE DESIGN

The course is designed to equip students for professional careers in the Design Departments of the Heavy Engineering Industry, Research Laboratories and Defense Organizations. Advanced subjects like Fracture Mechanics, Advanced Finite Element Methods, Industrial Tribology, Reliability Engineering and Nanotechnology courses are offered to strengthen the students' knowledge of efficient design practices with optimum material utilization.

Outcomes and scope

Upon completion of the program the graduates are capable to

- understand advanced concepts in mechanism and analysis; fracture and failure and vibrations.
- apply finite element analysis and optimization techniques to model and analyze various designs.

- provide solutions to a wide scope of engineering problems through the interpretation of data using modern computational tools.

Ph.D PROGRAMME

Our Ph.D programme in Mechanical Engineering develops the ability to apply engineering applications in product design, development, and creation of new innovative techniques.

Department of Science and Technology (DST) supports the Mechanical Engineering Dept. at Vignan's University with more than Rs. 100 lakhs in research areas such as mechanical vibrations, biodiesel powered C.I. engines and composite materials. MOU's with high-ranking foreign universities and industry agreements with Defence organizations, provide ample scope to pursue related research interests. Our state of the art CAD lab with the latest modeling and analysis software helps Ph.D scholars with their research interests in numerical simulation and design.

Annual subscription to research publications resources such as ASME, SPRINGER, IEEE etc. all provide uninterrupted access to recent academic developments, which in-turn accelerates our own research program.

The Department has also forged

relationships with a series of eminent scientists from DRDO, NSTL and ISRO who act as mentors and offer industry insights to our research students.

RESEARCH PROGRESS

- More than Rs. 100 Lakhs of funding from government funding Agencies
- DST sponsored project titled "Formulation and optimization of ISO-STOICHIOMETRIC ternary gasoline-alcohol blends and investigation of their influence on a spark ignition engine" is an ongoing project
- Faculty have published more than 70 journal papers in the last 5 years
- AICTE sponsored research project in CAD/CAM lab (Laboratory Modernization)

STATE OF THE ART FACILITIES

- Center of Excellence in composite materials : Project aims to make experts in the areas of Composites & Develop high performance rigid composite made from carbon, glass, graphite etc.
- Research Center in Advanced Mechanical Systems Design & Analysis: Principle Objective is to Promote CAE application in the field of Mechanical Engineering .

- Research Center in Biodiesel Processing and Testing : This center focus on Biodiesel preparation and its utility, performance and efficiency testing.
- Research Center in Machine Fault Diagnosis : Main objective of this center is to investigate causes for machine failures and to suggest remedies to overcome.

3D PRINTING LAB

3D printing, also known as additive manufacturing (AM), refers to processes used to create a three-dimensional object in which layers of material are formed under computer control to create an object. The lab is equipped with three advanced 3D printers of 3D Systems (USA) make.

UTILIZATION OF 3D PRINTING LAB

- Using the setup students could understand the working principle of 3D printing process.
- Students of UG & PG are utilizing to create solid models.
- Complicated 3D models such as medical implants and other 3D solid models can be prepared for shape study.



→ Overview

Programmes Offered

B.Tech
Mechanical Engineering

M.Tech
Machine Design

Ph.D. Programme



Head of the Department
Dr. LAM SUVARNA RAJU
hodmech@vignan.ac.in
Tel : 2344750, Extn : 117

HoD Message

Welcome to the Mechanical Engineering Department. The journey of the Department started in the year of 1997. Over the last two decades, it acquired expertise and competence in the core Mechanical Engineering curriculum and research. The department offers skill-based engineering curriculum. The primary focus of the curriculum is to impart technical know-how to students with hands-on training in the laboratories, promote their problem solving skills and innovation of new technologies. The course contents are periodically updated, the labs are upgraded time to time, providing opportunities to both the teachers and students to undertake new scientific and technological developments.

The department maintains active research by encouraging faculty and students to carry out collaborative and interdisciplinary research with the state of art research facilities. The Department has a team of highly qualified, experienced faculty and Laboratories in order to achieve the mission of the Department. The objective is not to merely produce professionals capable to serve their own needs but endeavor to serve the society with great concern for human values. On behalf of the Department, I wish success to all students who join us in the journey of quality education and have impressive experience in the campus.

Please do not hesitate to contact us should you have any further queries.

Applied Engineering

→ Year by Year

YEAR 1

Basics of Engineering would be taught here along with the skills required for professional communication and programming.

YEAR 2

From here onwards, the study is completely oriented towards the chosen branch of Engineering. Basics of Materials, Mechanics, Theory of Machines, Dynamics etc. would be the scope for Automobile Engineering students. The Crop Production Technology, Basics of Machinery, Water conservation and Post production technologies are learnt by the students of Agriculture Engineering.

YEAR 3

Here, all the students are focused to opt for specialization in various fields. Automobile Engineers focus on Automotive system design, CFD, Motorsport Engineering and Hybrid Vehicles. Agriculture Engineering students can specialize on Farm Machinery, Soil & Water Conservation Engineering and Food Process Engineering.

YEAR 4

The students get a chance to do a real time project either in a specified industry or in a research project. The knowledge gained through various core and elective subjects culminates to a dissertation on the topic of choice.

The Department

The disciplines of Automobile Engineering and Agriculture Engineering have converged at the Department of Applied Engineering. Here the students are exposed to a wide range of topics within the field, including technical aspects on systems design and implementation. The flexible academic curricula and hands-on research opportunities prepare the undergraduate and graduate students for successful careers in a multitude of disciplines. Live projects such as battery operated car, ornithopter and greenhouse for vegetables and fruits, managed completely by students are some examples of the initiatives taken by the department.

Why Applied Engineering at Vigan?

- At the Department of Applied Engineering, we believe that experiencing is the key to understanding the concepts needed for engineering. The department provides the opportunities to resolve real time problems faced and find optimal solutions for them through experimentation. It encourages the students to attend seminars and conferences in the domain area to add flavor to what they learn in class. Such initiatives have aided fruitful results, the students working on projects with the help of competent faculty.
- Six months of industrial internship in top companies helps students to convert industry practices into employment.
- Our state -of-the-art laboratories and research centers have helped to launch a globally recognized research, as well as offered a launch -pad for student careers.

Programs Offered

Presently, the Department offers courses at both the undergraduate and postgraduate levels, and provides excellent facilities to carry out research for the Ph.D programme.



Employment Prospects

- Companies like John Deere, TAFE, Eicher, Mahindra, VST Tillers, L&T, J.K Fenner, TATA, Hero, Honda, Bajaj etc are promising.
- Average salary ranges from Rs. 3 - Rs. 8 lakhs per annum
- Many students prefer to go for higher studies with scholarships.
- Software companies like TCS, Infosys etc., are also our regular recruiters.



STUDENTS REFLECTION

Madineni Lokesh

Agriculture Engg. – 2013-17 batch

Life in Vignan University has been tremendously enthusiastic and enriching for me. The environment not only helped me in imbibing knowledge but also in developing my overall personality, inculcating confidence in me. Vignan University has achieved excellence in imparting high quality education with prime focus on holistic learning and inculcating competitive abilities in students which has helped me immensely. My sincere thanks to all the Faculty members, mentors and everyone in Vignan family for their support and altruism. They have played a very crucial role shaping me & proved me right, in selecting Vignan over other colleges. My lovely memories of Vignan will always be with me throughout my life. Thank you Vignan University for making this journey so pleasant.



D. Guru Charan Kumar

Automobile Engg. – 2013-17 batch

Since the first moment I came to Vignan I was met with nothing but energy and enthusiasm. The faculty and staff at this institution are top rate. They all want their students to do well. This school has so many opportunities for the students to get the help they need. Professors helped me beyond words I can say. This university keeps the student first. You will not be let down. I really believe it is a privilege to come to this University and I am so glad I made that decision.



Reflection

I find Department of Applied Engineering with tremendous scope of growth as it comprises disciplines of today's need. A graduate has to be resourceful with not only knowledge but skills. I feel the department is competent to train tomorrow's engineers with skills to attain jobs as well as research opportunities. I wish the future engineers all the best to become successful professionals with social commitment. — **Dr. V. K. Tewari**, Professor & Head, Agricultural & Food Engg. Dept., IIT, Kharagpur, (Member of BoS, Vignan's University)





B.Tech – AUTOMOBILE ENGINEERING

Automobile engineering deals with designing the vehicle, manufacturing new products, as well as repairing, and servicing vehicles. It is indeed a sub-branch of mechanical engineering and also known as automotive engineering or vehicle engineering, involving study of motor systems, design, technology and many more. Automotive engineers are involved in almost every aspect of designing cars and trucks, from the initial concepts right through to manufacturing them. The curriculum prepares students as knowledge seekers with fundamentals of engineers interdisciplinary problems solving skills and societal awareness to become confident and excel in their chosen professions.

Outcomes and scope

- Students are imparted with the ability to apply knowledge of mathematics, science and engineering to design and conduct experiments, as well as to analyze and interpret data.
- They will be able to design a system, component, or process to meet desired needs within realistic constraints.

- They will have an understanding of professional and ethical responsibility with an ability to communicate effectively.
- They will use techniques, skills, and modern engineering tools necessary for engineering practices
- Students have scope of creation and maintaining of automobiles, starting from designing the vehicle to manufacturing the components, assembling and testing them for safety.

B.Tech – AGRICULTURE ENGINEERING

Agriculture Engineering provides inputs and trained manpower to the State of Andhra Pradesh towards making farming progressive through efficient use of natural resources like water, land and energy. India being an agricultural dependent economy with small, medium and large farming groups, this course provides the possibility of incorporating latest technologies into farming for increased productivity.

Outcomes and scope

- Agricultural graduates are in great demand due to the global trend towards standardization of all agricultural products and equipment.

- Students are exposed to knowledge of agricultural principles combined with the principles of animal biology, plant biology, mechanical engineering, civil engineering and chemical engineering.
- An interesting, challenging and a rewarding career is assured to all graduates of Agricultural Engineering. They design agricultural equipment and agricultural structures by means of better engineering methods, inventions and technologies.
- Agricultural engineers can either specialize in designing power and machines systems, animal or plant production, environment management or in food and bioprocess.

M.Tech – FARM MACHINERY

Farm Machinery as a field of specialization, imparts to students an analytical mind to apply the principles and knowledge gained from the study of biological, agricultural, and physical sciences in addressing real needs and concerns in agricultural production from land preparation to harvesting and threshing stage. The aim is to conceptualize and develop a better method or approach, an improved machine, or an upgraded system in

terms of efficiency, more comfort to operator, capacity, ease of operation, and production profitability. With the incorporation of computer and electronic technologies, the designed machine or system will be more efficient and a higher degree of automation can be implemented.

Outcomes and scope

- To acquaint and equip with the latest design procedures of farm power and machine systems.
- To acquaint and equip with knowledge of the dynamic properties of soil, soil failure and design of tillage tools, prediction of traction performance and dimensional analysis of different variables related to soil-tyre system
- To acquaint and equip with the concept of instrumentation used in farm power and machinery as well as measuring devices for force, torque and other parameters.

RESEARCH PROGRAMMES

Research center on Vibration & Noise Analysis

The vibration and noise emission in all the automobiles is of great concern and needs to be addressed. This project analyses the level of vibration and noise in varying categories of automobiles and re-designing them with suitable isolators for arresting the same. The facility is useful not only to automobiles but also to different farm power machinery

and equipment under the Agricultural Engineering programme. Along with research activities, the facilities created are used for conducting practical classes to Post Graduate students in the concerned discipline. An exposure to modern techniques of measurement and analysis equip the scholars to with a better understanding of the systems.

The facility is being modified to enable consultancy work for Automobile and Agricultural Industry. Creating these facilities at the University also benefits the surrounding engineering colleges, who have Post Graduate programmes in similar disciplines.

RESEARCH CENTRE ON E-YANTRA ROBOTICS & EMBEDDED SYSTEMS

e-Yantra Lab Stepup Initiative (eLSI) on Robotics and embedded systems is a college level program under which colleges are encouraged to setup robotics labs. It is designed as a scalable and sustainable approach that addresses infrastructure creation and teacher training - to create an eco - system at the colleges to impart effective engineering education. This provides guidance and supporting establishing robotics labs, a two-phased training for teachers, and participation of teachers and students at national level competitions to work on real tasks. The Applied Engineering Department has set - up the lab and completed the training. One student team has been selected for National event under this programme.

→ Overview

Programmes Offered

B.Tech

Automobile Engineering
Agriculture Engineering

M.Tech

Farm Machinery



Head of the Department
Dr. N. NARAYANA RAO
hodaeh@vignan.ac.in
Tel : 2344700, Extn : 168

HoD Message

The disciplines of Automobile Engineering and Agriculture Engineering have been converged to Department of Applied Engineering. We believe that experiencing is the key to understand the concepts needed for engineering. Department provides the opportunity to attend the real problems faced and to find the solutions for them by experimenting on it. It encourages the students to attend seminars and conferences in the domain area to add flavor to what they learn at class. Such initiatives have shown fruitful results that students have made working projects with the help of competent faculty. A healthy number of reputed research papers and project initiatives make the department stand high in the VFSTR. We have conducted significant outreach programmes for different category of participants. Department is training students for addressing real times projects in various industries. Overall, we give a platform to develop both in academic, technological, managerial environment, above all to a sensible human being. There are plenty of employment opportunities for qualified professionals and they can select a career in any Industry of their domain, which can lead to a bright future. We believe to maintain constant and active partnership with industries for achieving this objective. We support the students for their higher education also by providing coaching for GATE, IES etc. A number of students have taken admission in reputed overseas universities also.

I welcome you to explore the department and enjoy the environment

Management Studies

→ MBA Year by Year

The Two Year MBA Programme is spread over four semesters.

Nine courses are conducted in I and II Semesters.

After completion of II semester the students have to undergo Summer Internship for a minimum duration of 8 weeks where students are exposed to real time work environment.

Two (Dual) specializations can be selected at the end of II semester from areas of Marketing, Human Resources, Finance and Operations etc.

Two core courses will be offered in III and IV semesters. In addition to this the student will undergo two / three courses each in the two areas of specialization (Dual specialization) opted.

Two courses on essential Skills for managers and two courses on analytical skills for managers are offered in all 1st and 2nd semesters to develop future managers.

→ BBA Year by Year

Field trips to top industry, internships in industry, interaction with corporate world, etc. are included to enhance the students' understanding of the actual practice of management and administration.

Summer Internship (at the end of II year) and project work help the student to have direct experience with industry environment.

Laboratory/practice sessions of English Proficiency courses- I&II, Soft Skills Lab, Communication practice, Seminar etc. are designed to enhance their skill set.

A student will take up project work during VI semester of BBA and IV semester of MBA under the guidance of a faculty member. The objective is to do some innovative research oriented work with application of knowledge gained in various courses studied earlier.

The Department

The Department of Management Studies has an excellent composition of faculty members, from a wide and diversified backgrounds. Our senior faculty members – with unique expertise in industry, research and teaching experience focus special attention on student development. By offering opportunities for students to add value to their degrees in the form of research projects and professional skill development workshops, we seek to develop leaders for tomorrow's Industry. We periodically invite academic and industry experts to address the students on current business trends and other areas of professional interest, important topics, and professional development. Furthermore, our students are encouraged to undergo industrial training during the course of their study in order to have a smooth transition to the workforce later.

Why MBA at Vignan?

- The MBA program at Vignan's University aims to build a pool of easily employable, and industry leading managers. Our meticulously planned and uniquely crafted syllabus has become a bench-mark for many universities/institutions, owing to the significant partnerships which we enjoy with the industry.
- The MBA program is designed to increase students' ability to think critically about management theory and practice, to solve a wide range of managerial problems, to lead organizations, to communicate effectively in a professional environment, and to work in teams and manage organizations ethically. In addition to the program itself, we offer supplementary courses on business communication, two-months summer internship and free classroom support for certification programmes such as NCFM and AMFI.
- In the midst of an increasingly dynamic and unpredictable economic environment, employment competition is becoming progressively more intense. In a sea of new and emerging brands, as customers become increasingly choosy, as markets turn, once-successful businesses obsolete in a span of a few hours, it is only the truly well-prepared and professional managers that companies are searching for. Vignan's MBA offers a comprehensive programme to produce graduates who are well equipped with requisite knowledge and skills to succeed in the global job market.

Programs Offered

Presently the Department is running a Bachelor of Business Administration (BBA) and a Master of Business Administration (MBA) courses at undergraduate and postgraduate levels, besides providing excellent facilities to carry out research for Doctor of Philosophy (Ph. D.) degree; R&D work for sponsored and consultancy projects, along with consultancy work for industrial problems.



Employment prospects

- The department has a consistent placement record of above 80% since 2009.
- Achieved 100% placements in the year 2013.
- The average salary package ranges from 20K to 50K per month.
- Campus drives are conducted for both MBA and BBA students.
- Many students are absorbed by their internship companies after SIP.
- MNCs like Colgate-Palmolive and Videocon regularly conduct on-campus interviews.



STUDENT REFLECTION

My experience with Vignan's University

Ravikanth Tadepalli

Senior Manager of IT-Business Development,
Pennant Technologies Pvt. Ltd.
Alumnus-Class of MBA 2009-11

I am the one who got placed in an MNC by doing internship after MBA-1st Semester. Also, I was selected in all the campus placements whatever came to hire MBA graduates. My career started as a Management Trainee in one leading MNC. Along with me 25 management trainees joined the same day. After four months most of the people got fired and some left the office for unknown reasons. Finally, the team size came down to 3 from 25. I felt very confident and proud to face these challenges. I learned good concepts of Organizational Behavior and perfect managerial skills, which made me reach the pinnacle of success. 4P's of marketing help me a lot whenever I think about a new IT-Product. Theoretically I learned those in the college and practically implemented in my profession. Especially, the case studies I solved in MBA helped me in identifying the real problems of the organization and help me to solve problems. Group Discussions, JAM, Case Studies, Internship Projects and other Management Activities helped me to take better decisions and groomed me in a shape that helped me ascend to my present position in the company. Thanks to Vignan for showing me the path to growth.



Reflection

It gives me immense pleasure to introduce the Department of Management Studies at Vignan's University. The curriculum has been designed in-line with industry needs, and after consulting industry and academic experts - the outcome has been the creation of a dynamic and field-leading programs like BBA and MBA. The strength of the department is in the faculty who come with a blend of experience and expertise guiding students towards development and career progression. I am glad to be associated with this progressive institute. – Mr. P.V.S. Ravindra Varama CEO, Formula HR Consultancy (Member of BoS, Vignan's University)





MBA – MASTER OF BUSINESS ADMINISTRATION

MBA program is designed to develop aspiring managers who can manage organisations competitively. The program aims to develop entrepreneurs who can establish and manage their enterprises in an effective manner. Identifying industry needs that demand multi-skilled people, the program is offered with dual specialization.

Students may opt for two areas of interest from the elective areas offered like Marketing, Human resources, Finance, Operations and Systems in his second year of course work.

WORK EXPERIENCE, INTERNSHIP AND RESEARCH:

Case study methodology and practical assignments provide the students with hands-on experience in order to help them absorb (through practical application) the theoretical concepts that they learn in the class room.

Mini projects as well as major assignments provide the practical work experience and knowledge concerning the functional areas of management.

BBA – BACHELOR OF BUSINESS ADMINISTRATION

The BBA program offered by Vignan's University, is a unique initiative developed in order to meet the evolving aspirations of young students. The program seeks to attract bright and motivated students who aspire to become the outstanding business leaders of tomorrow.

With a specially developed, industry relevant and career oriented curriculum, the integrated program seeks to develop holistic, social leaders, not just management professionals.

The pedagogy consists of traditional lecturing through audio visual aids, role play scenarios, case studies, industry visits, projects, field visits and seminar presentations. Case study methodology, practical assignments and projects provide an rewarding learning experience.

PROFESSIONAL OUTCOMES

- Inculcate business and management skills.
- Develop the ability to analyze the impact of the changing business environment and respond to it appropriately.
- The ability to notice critical insights and apply creative thinking, to management applications.

- Develop essential decision making, leadership and entrepreneurial skills.
- Become an aspiring and dynamic manager who can match the challenges of business and industry.

RESEARCH PROGRESS

- Faculty members of the department of Management Studies have to their credit, publications in 150 national journal articles and 50 international journals.
- The department is currently working on research projects worth Rs. 63 Lakhs.
- Expanding the research thrust, the department has so far organized 16 conferences and workshops.
- Three books have been published by the faculty members of the department of Management Studies.



→ Overview

Programmes Offered

BBA

Bachelor of Business Administration

MBA

Master of Business Administration

Ph.D – Programme



Head of the Department

Dr. K. Kalpana

hodmba@vignan.ac.in

Tel : 0863-23447 46/47

HoD Message

Greetings from the Department of Management Studies, Vignan's Foundation for Science, Technology & Research (Deemed to be University). As you are aware, the Department of Management Studies has contributed to the spread of Management Education through its full-time programmes. The Department is committed to achieve professional excellence in imparting management education along with social commitment towards extension and diversity. The curriculum is designed and enriched with industry support and participation. The pedagogy is highly interactive with practical orientation. The industry has recognized the capability of our students by absorbing them and by giving them challenging assignments. The students are placed in well reputed organizations like Cognizant, GENPACT, HDFC, Efftronics etc.

Pharmaceutical Sciences

→ Pharmacy Year by Year

First Year

The First year of B.Pharmacy is intended to introduce the fundamentals of all the subjects pursued throughout the course. The curriculum is designed to impart knowledge on various subjects such as Pharmaceutics, Human Anatomy & Physiology, Pathophysiology, Biochemistry Inorganic & Organic Chemistry, Basics in computer applications and analytical techniques, as B.Pharmacy can be pursued by both Maths and Biology students of the higher secondary grade. An introduction to mathematics for biology students and biology for maths students is provided in the course. The practical component plays an important role throughout the course.

Second Year

The second year of B.Pharmacy introduces the student, the core of pharmaceutical essentials through fundamentals of physical pharmaceutics, engineering, Medicinal Chemistry, Pharmacology, Pharmacognosy, Microbiology and advanced knowledge of Pharmaceutics and Organic chemistry of drugs. Students will be introduced to the subject specializations opted (Unique system adopted in the university) along with the regular B.Pharmacy Course.

Third Year

Advanced knowledge on Medicinal Chemistry, Pharmacology and Herbal Drug technology along with a fundamental knowledge on Biopharmaceutics, Concept of Quality Control and Assurance, Industrial Pharmacy and Jurisprudence are studied in the third year. Case studies, real time work culture with industrial visits and short term internships and skill based activities are introduced in this year.

Fourth Year

With the training by the industrial experts, an increased awareness about the subjects is attained which would be useful for better understanding of the subjects like novel drug delivery systems, advanced instruments for drug analysis, Pharmacy Practice in Clinic, Biostatistics etc. the concept of practice school/ long term internship is introduced in the fourth year will further enhance their learning ability.

The Department

Provides a premier professional education program leading to the Bachelor of Pharmacy degree with additional expertise in various areas of interest in the field of pharmacy (the first of its kind) and is committed to prepare future pharmacy leaders with essentials to thrive as a successful individual in pharmaceutical sector. It also provides them with the tools necessary to practice in different roles, develop and maintain research initiatives in the formulation, analysis, clinical, regulatory, management and discovery sciences to implement new knowledge and approaches for enhancing health care.

Pharmacy, the course intended to prepare pharmacy professionals for the health care, industrial, retail, community and discovery sectors, consists of various subjects in the curriculum prepared by the pharmacy council of India, the regulatory body of pharmacy education in India. It consists of different subjects that could be categorized based on the branch of science that deals with the drugs / chemicals. The major areas of study include pharmaceutics (physical properties, manufacture, formulation, machinery, regulations and management), Pharmaceutical analysis (isolation, estimation, detection, purification and quantification), Pharmacology (drug action, content, efficacy, side effects, adverse effects, uses, testing), Pharmaceutical Chemistry (synthesis, structure activity relationship and discovery) and Biological aspects (biochemistry, microbiology and biotechnology). It is having a wide scope of opportunities due to the diverse areas covered in the curriculum. With increase in the demand for new drugs and as the pharmaceutical companies are facing strict restrictions from the regulatory bodies, there is an ever increasing growth in the requirement for a qualified pharmacy professional, pharmacy course is the only available option that could serve the needs of various sectors involved in drug discovery, screening, manufacturing, analyzing and marketing.

Why Pharmacy at Vignan?

- The B.Pharm programme, along with its regular curriculum, will offer Electives/Minor in either formulation, analysis, clinical, regulatory and health care management based upon the selected streams.
- The programme is unique and enables students to have a broad knowledge with strong inputs about the basics and the advanced developments in a variety of research and professional settings in their selected electives, thus making them readily employable, unlike the conventional course which requires an additional master's degree to enhance their employability.
- Taught by stellar faculty, the program is closely associated with industry, the electives leading to the specialization are designed to meet the industry requirements without compromising with the regular curriculum.
- Personalized and practical experience is emphasized in the university, which is offered in the department. Students also engage in a variety of real-time experiences before embarking professional organizations.
- The skill based activities designed in the curriculum provides with utmost practical exposure and substantiate their learning from the theoretical aspects.
- A Unique Program in which the students will be an integral part of the rich academic and research environment of the university campus. The interdisciplinary culture of the university will develop a strong foundation in the students.
- The department offers opportunities for internships at various pharmaceutical industries, taking advantage of its collaborative programs with the leading pharmaceutical manufacturers.

Programs Offered

Currently the department is offering undergraduate course leading to the award of Bachelor of Pharmacy degree, and is recognized by the Pharmacy council of India. Course work of the electives are offered to the students from the second year, which are opted by the students based upon their interest in the field of pharmacy, leading to award of processing/ minor in either Formulation development / Analytical chemistry /Clinical research /Quality and regulatory management / Health care management.

Employment prospects

Despite many factors that are affecting the employability in various sectors of the nation, pharmaceutical sector is expected to grow upto 45% from that of the existing in the coming decade. The stimulus underlying this is the growth in domestic sales, exports, an ageing population, increased health insurance coverage, increase in per capita spending, increased awareness on health related hazards and medical tourism. The pharmaceutical sector, which is a part of Indian health sector, is expected to be a worth of over 10000cr and CAGR of approx 22%, making it the 3rd in terms of volume and 13th in terms of value internationally. With a whopping number of 25000+ pharmaceutical companies and despite the increased requirements for qualified pharmacy graduates only 42.3% & 40.62% with pharmacy degree are employed in 2016 & 2015 respectively. Thus pursuing a pharmacy course with a right add on/ elective, will nurture the student into an industry ready individual.



Reflection

The course curriculum of Bachelor of Pharmacy is designed to meet the needs of the pharmaceutical industry and is innovative and first of its kind as observed in the field of pharmaceutical education. The students will have exposure to various areas of the industry and this course provides with, both the fundamental and advanced knowledge regarding the working interests of the industry and health care. These essentials would give them high priority for placements because of the understanding of essential concepts and real time exposure to the industry. – By Prof Prakash V Diwan, Founder Director, NIPER-Hyderabad & Chairman, BoS, VFSTRU





FORMULATION PROCESSING

Formulation/preparation of various dosage forms is one of the key industrial activities that are fundamental to any pharmaceutical industry. Students along with their regular Pharmacy course will pursue exposure into various aspects of formulation processing such as Drug regulatory requirements, good manufacturing practices, ICH Guidelines, validation procedures and scale up & technology transfer.

Outcomes and scope

With additional knowledge on formulation development, students would be able to work for industries in areas pertaining to R & D of formulation (F R&D) and product development. The knowledge of good manufacturing practices according to ICH guidelines and drug regulatory requirements will enhance their employability in monitoring the regulatory aspects of formulations as well. The scale up and technology transfer would provide adequate inputs necessary for the quality control and quality assurance of formulations, one of the most recruited sectors in pharmaceutical industry.

ANALYTICAL CHEMISTRY

Analysis of the drugs, excipients and impurities from various sources, such as formulations and biological fluids is one of the essential areas with prime importance in the pharmaceutical industry. Students along with their regular Pharmacy course will pursue exposure to various aspects of drug analysis. Such as good analytical practices, advanced instruments, Analytical method development and validation, quality control and quality assurance.

Outcomes and scope

The highly required skills in pharmaceutical industry are the analytical abilities. Analysis of drugs and impurities has a continuous presence during drug discovery starting from synthesis, preclinical and clinical studies. The knowledge on various good laboratory practices provides information about the regulatory requirements to be met in analytical departments and the in depth knowledge on instrumentation techniques about advanced instruments such as HPLC, UPLC, ICP-OES/AES, GC etc. makes the students expertise in handling and use of equipment. Analytical method development and validation are the key areas of pharmaceutical industry that are essential in any unit irrespective of size and type. Exposure to the quality control

and quality assurance will provide them with a unique identity among their peers, the knowledge gained from the subject will ease the placement opportunity for the graduates. The curriculum has been designed based upon the procedures followed in the industry, thus concentrating on the required skills and expertise necessary to meet the eligibility of various pharmaceutical companies.

CLINICAL RESEARCH

With the advent of globalization and outsourcing, India has become the first choice for the conduct of various clinical studies. With many countries coming with new drug molecules and the expiry of patents of various existing drug molecules is making generic drug manufacturers to conduct clinical, bioavailability and bioequivalence studies for these drugs. Students will have a thorough knowledge about regulatory requirements for clinical research, design of clinical trial and BA/BE studies, documentation and management of clinical trial data, Pharmacovigilance and SAS.

Outcomes and scope

Clinical research is one of the most happening arena for placement in pharmacy post graduates, with the knowledge of good clinical and pharmacovigilance practices, clinical trial

design, clinical data management, BA/BE design and clinical trial documentation, a lot of opportunities in the fields as clinical research coordinator, clinical research associate, clinical research manager, medical writing, medical officer, project management, etc are available for the graduates with this elective. pharmacovigilance, medical coding and SAS are the other streams which are very related to the core of clinical perspective and are the most sought working preferences by the students.

HEALTH CARE MANAGEMENT

Health care management unleashes the managerial ability of the students. They typically coordinate and direct the delivery of healthcare services in a hospital and community system. Managers may head entire hospitals or be in charge of specific departments or branches. This knowledge increases the self employability. The curriculum covers the very essentials of hospital and health care administration such as healthcare management, resource management, hospital support and utility services, quality in health care.

Outcomes and scope

Training in a hospital setup will open up a number of career options. Large hospitals often have a team of managers to oversee operations in specific departments, such as human resources, health information and medical billing. Apart from the exposure to the health care perspectives the knowledge from the course makes them to work in multiple administrative areas. The need for cost control measurements, mandated computerization of hospital records, increased multinational hospitals and competitive environment has shown a promising growth in the placements of healthcare administrators. The course also provides fundamentals for professionals with advanced training for enriched administrative experience, who may find many employment and advancement opportunities.

QUALITY AND REGULATORY MANAGEMENT

The stringent rules for the maintenance of quality of drugs, framed by various regulatory bodies of different countries has made the Indian drug manufacturers to follow their guidelines for marketing their products in different countries. The specialization in quality and regulatory Management will give an exposure to the regulatory affairs followed widely in majority of the pharmaceutical companies. They are given extensive exposure on various subjects such as Indian drug regulations, international drug regulations with emphasis on USFDA, quality, safety and efficacy guidelines by ICH, documentation and regulatory writing and good regulatory practices.

Outcomes and scope

Regulatory pharmacy typically includes topics that provide students with an introduction to the laws of regulatory bodies. Students will learn how various regulations are developed over time, discuss the differences in laws regarding discovery, study, manufacture and sale of drugs and look at how new products and devices are created. Other topics that are discussed in the course include laws regarding imports and exports, international regulations, the Freedom of Information Act and FDA enforcement. Regulatory professionals are vital to a number of industries including pharmaceuticals, biopharmaceuticals, medical devices, food and nutrition and cosmetics, and regulatory work is varied in each sector. Skilled regulatory affairs people are in high demand in all the industries.

The course focuses on teaching students the proper way of writing in the field of regulatory sciences. Students may read various technical and medical journal articles in order to develop a deeper understanding of the way, documentation and writing is done in this field and also focuses on improving their writing skills.



→ Job Profiles

Formulation Processing

- Drug development
- Process development
- Technology transfer
- cGMP Compliance
- API processing
- Regulatory Compliance

Analytical Chemistry

- Drug Analyst
- Quality control
- Product validation
- Process development
- Data interpretation and documentation
- Regulatory submission

Clinical Research

- Clinical Research Analyst
- Clinical Trial Coordinator
- Pharmacovigilance
- Drug Discovery
- Statistical Analyst
- Medical Transcriptionist

Health Care Management

- Community Pharmacist
- Clinical Pharmacist
- Outpatient Pharmacist
- Hospital Drug Formulary Maintenance
- Pharmacy & Therapeutic Committee
- Monitoring & Reporting ADR



Head of the Department
Dr. Jithendra Chimakurthy
M.Pharm., Ph.D.
hodpharma@vignan.ac.in
0863-2344700 Exnt - 419

HoD Message

With an intention of revolutionizing pharmacy education, the Dept. of pharmaceutical sciences had made an innovative design to the B. Pharmacy program following the guidelines of pharmacy council of India. Focused industry oriented expertise, offered with the program, is one of the approach to guide budding pharmacists for an effective career development. With the faculty from institutes of national and international repute, such as NIPERS's, IIT's, NIT's, Central Universities and abroad,

VFSTR is a mound of intelligence and knowledge that caters the needs of students from all over India and abroad. To be the preferred choice of students in the field of pharmacy is the prime motto of the department and training the students to meet the standards of industry is one of the key factors that guides us to strive for the professional development of student. Excellence necessary to attain global development and meet the worldwide competition is imparted to the students by the faculty, mentors and industrial personnel. Which, in turn enhance the integrity, quality, passion and technological skills in the coming generation pharmacists.

→ Overview



Dean, Training & Placements

Mr. D. Vijay Krishna

Tel : 0863-2344700 , Extn : 209

dean_placement@vignanuniversity.org



Head Training

Mr. C. Raghava Rao

Tel : 0863-2344700 , Extn : 206

director_training@vignanuniversity.org

Skill India, Made in India and Digital India are the new age slogans for a fast growing India. Against this background, the software industry in the country is consolidating itself and the manufacturing sector is just about taking off. At Vignan, this year also we produced incredible results in campus placements. The percentage of placements has gone up and the average package is also more attractive.

The success can be attributed to the well thought out and structured training programmes organised for students by T&P Cell from 1 year to final year of their course.

BUILDING CAREERS PLACEMENT SERVICES

Vignan received the Award of Excellence for the best placement record from the Honourable Chief Minister of A.P. in 2006. Over the years 75 to 80% of the eligible students are consistently placed through campus interviews. 60% of students are placed in Tier-I Companies.

Win-Win tie-ups with Industry

The University has MoUs with industry for curriculum development, collaborative R&D and training students as well as faculty.

The university has MoUs with AMD, Hiremee, ridsys, Byjucee and AGS.

Collaborated with TRIEDGE (CIIWN) FACE and ITC for providing better placements / internships in software and core areas.

The university enjoys an accredited status with TCS.

STRATEGIC GLOBAL COLLABORATIONS

The University has MoUs with following foreign universities and consortia for student & faculty exchanges, student and faculty training assessment, as well as research collaborations. They are...

- Daegu University, Gyeongbuk, South Korea
- Soongsil University, Dongjak-Gu, Seoul, South Korea
- Koreatech, Cheonan, South Korea
- Hannam University, Daejeon, South Korea
- Stanford For English Academy, Mumbai
- Focus Academy For Career Enhancement, Coimbatore
- Cambridge English Language Assessment of University of Cambridge
- Regents of The University of Colorado, United States of America
- National College of Ireland, Ireland
- University of Massachusetts Lowell, USA
- The Edinburgh Napier University
- The University of The Fraser Valley, Canada
- The University of Westminster, England
- The Lingaya's University - Faridabad
- ECN, France





Avinash

TCS - Campus Recruitment, Hyderabad.

The students of Vignan University have increased their technical skills. The Placement cell is very strong in conducting the Day One drive with no confusion. I appreciate the Vignan University Management for providing very good hospitality.



Prem Kumar Kondaparthi

BE, MBA, Six Sigma Cert.
Global Resource Management Lead, CSC

The University has an excellent reputation, track record and history which speaks for itself and doesn't need any more further endorsements. Personally I feel, the students here are better placed than many others due to state of the art infrastructure and facilities Management is providing.



పాస్పూరు, న్యూనీడు: విజ్ఞాన్ విశ్వవిద్యాలయానికి చెందిన 231 శ్రమిది విద్యార్థులు టూటా కన్నైల్స్ సర్కిలెం(టీఎంసీ)లో ఉద్యోగాలకు ఎంపికై తమ విజ్ఞాన్ విద్యాసంస్థ అభ్యర్థకుడైన డాక్టర్ రావు రత్నమ్మ ఇంటారు ఒక ప్రకటన వెల్లడించారు. ఈ నెల 18 నుంచి 19వ తేదీ వరకు టీఎంసీ నిర్వహించిన ఉద్యోగ పరీక్షలలో ఆంధ్రప్రదేశ్ విశ్వవిద్యాలయంలో ప్రాంగణ ఎంపికకు నిర్వహించుకునేందుకు రానున్నాయని వివరించారు. ఉద్యోగంపందరికి ఉద్యోగ అవకాశాలు కల్పించడమే తమ లక్ష్యమని పేర్కొన్నారు.

Sports & Optional Clubs

Needles to emphasise that sports are very essential to students to remain healthy and agile. The power of concentration is possible only if the body is in a perfect working condition.

→ Overview



Physical Director
Mr. Dasarada Ramaiah
Tel : 0863-2344700 , Extn : 183



A healthy mind resides in a healthy body

Vignan ensures the all-round development of the student by providing not only the necessary infrastructure for playing carrom, basketball, cricket, volleyball, kabaddi, tennicoit, throw ball, tennis etc. but also trainers and coaches for preparing the students to compete for various state and national level sports events. Students have a great time playing their favourite sport and develop team building skills and traits.

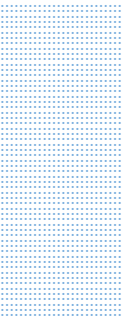
Striving for a Social Cause

The National Service Scheme (NSS) of the University is very active in carrying out various outreach service programmes. It promotes social consciousness among students by organizing tree plantation, rural health and hygiene awareness, eye check up and blood donation camps, adult literacy programmes etc. Vignan's University has adapted three rural schools in Vejendla, Chebrolu and Jagarlamudi for the upliftment of socially underprivileged students. Students carry out community work by conducting computer literacy programmes. The University has collaborated with an international philanthropic organization called Aus-Nirvana and conducts health awareness camps for rural women on prevention of breast cancer every year.

Outreach and awareness programmes on agribusiness development are conducted for farmers. The University, in association with ITC & Baif Institute of Rural Development (BIRD), Hyderabad conducted five awareness / training programmes towards strengthening of Agribusiness centres for the farmers of Guntur and Prakasam districts.









Spreading
Wings to fly

Sixth
Convocation
2018





Dr. K. L. VARAPRASAD REDDY
Padmabhushan Awardee,
Chairman Shantha Biotechnics Limited

"Spirit of Inquiry, Being Innovative, Using technology, Being Entrepreneurial, Value-based Leadership" is the five key elements to achieve the order of excellence in life and moral values and culture are the true qualities of a human being which defines as a complete person. It is the proud moment for both parents and institution for bringing glory as an "Eligible professionals." "Be the change and be versatile in these fast changing times and the degree is a base line to all the students".



Dr. K. RAMAMURTHY NAIDU
Chancellor

Our University envisions all-round development of its students and presents them as competent professionals to the world. It is known for promoting highest levels of ethical values and commitment towards imparting knowledge and skills. We have created an environment in which the students' intellect and knowledge could flourish and inspire others. Our faculty members are recruited from the prestigious institutions like IIT, NIT and other premier institutions. They are the backbone of our University.

My dear young engineers, I would like to remind you of your responsibilities towards the nation. You must at all times put your professionals integrity and ethics above pecuniary motives.

I urge you to keep yourself abreast of the latest additions to the body of ever evolving knowledge and continuously explore the possibility of innovation. Discipline, dedication will help you to reach the target destination.



Dr. LAVU RATHAIAH, Chairman

Indianisation does not mean just conquering the top spots in global companies, but spreading the Indian culture and promoting Indian competencies across the world. We Indians have already established our supremacy, in space technology, agriculture and milk production. We should extend the same to all other sectors. Ultimately, we should reach a level of exporting our trained and skilled manpower, we must be in a position to export our products and services of the finest order with the Indian brand. To make This happen, and happen with speed, our youth have to think of entrepreneurship and start-ups. Then only, our dreams of seeing a strong India and a glorious India will be realized. As I already mentioned, we should once again see India of the days of Takshila and Nalanda, where number of people came from far and wide to drink at the fountains of our knowledge centres.



Dr. M. Y. S. Prasad, Vice-Chancellor

India requires a large number of engineers to further develop its infrastructure. The scientific temper in the country needs to be enhanced through the efforts of highly educated sections of the society like graduating students of today. We also need sincere and hard work of all professionals to uplift significant sections of the society from the poverty. These challenges require professionals approach, sincere and hard work and above all highly ethical standard of behavior by all of us. I am sure the graduating students will strive to meet the in their professionals career.

Recently, the former president of India said "if our institutions have to become world-class, they will have to adopt best practices in their academic management. They will have to move relentlessly in the direction of excellence in whatever they do. The sphere of intervention are many. For one, our institutions have to provide the best of amenities to their academic community. State-of-the-art laboratories will enable quality experiments. Good classrooms including well-stocked libraries will offer students to enrich learning environment". Vignana's University continuous to implement the advice of Hon'able president to bring all the best professionals into society.



CMDE. Dr. M. S. Raghunathan, VSM
Registrar

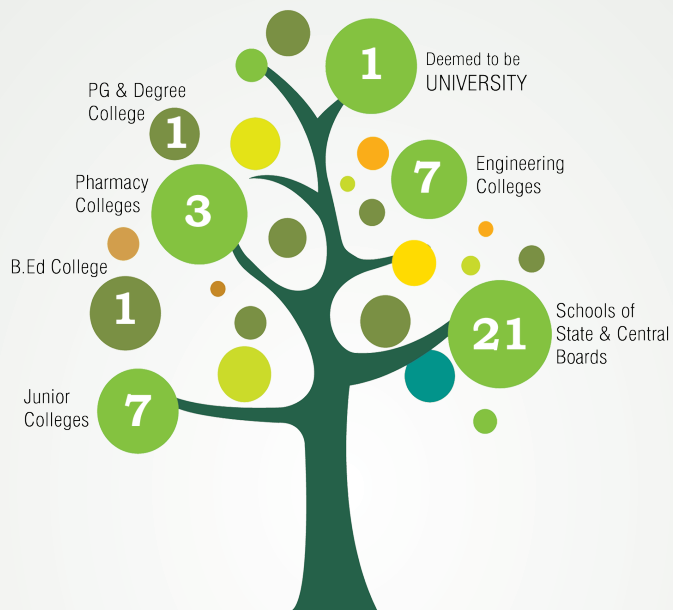
Nothing is impossible and one should have value based education to attain higher standards of life. Constant reminders of your capabilities can dispel yourself doubt and worry. Aim to master the work you do and must dedicate yourself to improve. No matter what challenges you face, hold fast to your integrity. Make a conscious choice to do well and do good at the same time.



Dr. V. M. RAO
Dean, Engineering & Management

"You truly deserve the success. I am sure that on your graduation day you feel am lot smarter. Your success is not a surprise, it is well designed and deserved and will give you a chance to spread your wings. Remember the past, live in the present and look forward to the future. The adventure begins to succeed in life if you align your education with your skills, goals and dreams."

Symbolising
42 years of
honest growth



VIGNAN'S

Foundation for Science, Technology & Research

(Deemed to be UNIVERSITY)

-Estd u/s 3 of UGC Act 1956

Building young India

School of Postgraduate Studies

7 Engineering Colleges

3 Pharmacy Colleges

B.Ed College

Degree College

7 Junior Colleges

22 Schools



Vadlamudi, Guntur Dist. A.P. Pin - 522 213 | Toll Free : 1800-425-2529 | www.vignan.ac.in