DIRECTORATE OF ACADEMY FOR FACULTY DEVELOPMENT





Vadlamudi, Guntur Dist. - 522213. Andhra Pradesh., India. Tel : 0863 2344700 www.vignan.ac.in

DIRECTORATE OF ACADEMY FOR FACULTY DEVELOPMENT (AFD)

About VFSTR

Vignan's Foundation for Science, Technology and Research University (VFSTRU), the flagship institution of Vignan Group, offers quality academic programmes with innovative leadership development opportunities for its students. The University strives to make the experience of each student a transformative one. It is NAAC accredited with an 'A' grade and ranked 88th by NIRF. Located in a serene suburb of Guntur at Vadlamudi, the university is surrounded by lush greenery and offers a stimulating ambience for higher intellectual pursuits. With well-designed infrastructure and learning facilities Vignan's University offers B. Tech, B. Pharmacy, BBM, M. Tech, MBA, MCA and Doctoral Programmes.

About Vignan Group

Vignan Group of Institutions founded in 1977 by Dr. Lavu Rathaiah, a visionary educationist, is today one of the largest groups of educational institutions in the state of Andhra Pradesh with a student base of 45,000. Today, the group caters to the educational needs of students from kindergarten to Ph.d programme. The Vignan group has a host of Schools, Jr. Colleges, Degree Colleges, P.G. Schools, Pharmacy Colleges and eight Engineering Institutions.

Oragnisational Set-Up of the Directorate of AFD

The Directorate is an autonomous institution within the University with a separate budget and office, reporting to the Vice-Chancellor directly. It is headed by a Dean assisted by Dean Academics, Dean Evaluation and Dean IQAC, supported by Registrar Office. An Academic Coordinator with two other coordinators work with the exclusive responsibility of preparing programme schedules, organizing training and faculty development events execute them for the desired outcomes. They coordinate between AFD and the departments of VFSTR as well as other institutions.

Introduction

Teaching is a skill. It is not always imbibed from birth but acquired several times through formal training. It has been therefore the policy of Vignan Group of Educational Institutions ever since its inception as one of the largest provider of education in A.P, to look out for well trained faculty in its quest for assurance of excellence in teaching and evaluation.

Rationale for training Academy

Faculty members in Engineering and Technology do not undergo a formal training in teaching methodology unlike the teachers in schools where they are required to possess a formal degree/certificate in education. Even Polytechnics depute their faculty members for in-service training at NITTTRs. However in Engineering Colleges, Postgraduates fresh from their colleges join as faculty members without any formal training and there is no institutionalized in-service programme for them in pedagogy. They either emulate their teachers or learn teaching by trial and error over a long period.

This does not ensure effective teaching. The paradigm shift from teacher-centered teaching to learner-centered teaching demands understanding of the various concepts and principles associated with the processes of teaching-learning and evaluation which include pedagogy or androgogy, educational psychology and use of educational technology. The faculty should acquire necessary competencies to apply them fruitfully in practice in real class room situation.

The senior faculty also need to be trained in advanced methodologies and changing technology. They must be able to play the role of mentors to their juniors and also provide leadership in organizing various curricular and co-curricular activities on the campus. Further the faculty need to update their knowledge and skills in tune with the recent advancement in their domains and as required as per the changes in the curriculum. There are other areas like optimization of academic time, management of resources, research and consultancy, extension activities, forging institution industry leaderships, communication skills etc., in which the competencies of the faculty needs upgrading.

All this necessitates establishment of a separate Academy to conceive, plan and organize various kinds of programmes spread over an year, to suit different target groups. This can be effectively done if the whole training activity is institutionalized and centralized by establishing a separate academy. This will facilitate to offer the programmes not only to the faculty of Vignan's Foundation for Science, Technology and Research Deemed to be University but also to those working in the sister institutions of Vignan's Group to start with and extend the offer to other engineering colleges also in the region outside Vignan's fold in the long run.

Directorate of Academy for Faculty Development shall manage its training effort by generation and efficient use of revenues and become self-reliant without relying totally on the university's budget in the long run. AFD will attempt make optimal utilization of human resources available within the Vignan's Group while outsourcing expertise from various specialized institutions, industry and academics of repute for training efforts.

Vision and Mission

Vision Statement

The Directorate of AFD as a dynamic and proactive professional body strives to provide faculty members the most appropriate training and mentor faculty members to ensure their effectiveness and success as teachers. It aims to make need based, creative contribution to upkeep the Teaching-Learning and Research Standards in tune with the overall Mission of the University.

Mission Statement

The Academy is responsible for designing and implementing comprehensive progarmmes to support faculty of the parent institution as well as neighbouring Schools and Colleges. The mission of the Academy is to support faculty in the following areas:

- Enhancing excellence in teaching
- Understanding and assessing student learning
- Effective deployment of technology in Teaching-Learning and Assessment.
- Promoting professional activities

1. Core values:

- a) Integrated teaching approach
- b) Student Centric Teaching-Learning
- c) Continuous improvement in quality of teaching-learning processes
- d) Reliable and valid evaluation techniques and procedures
- e) Continuous upgrading of domain knowledge and skills of faculty
- f) Promotion of research in cutting-edge areas and encouraging collaborative research
- g) Imparting employability skills to students
- h) Engagement in outreach programmes

2. Goals:

The following are the goals of the Directorate of AFD

- Enhancement of quality teaching-learning and evaluation in engineering education
- Promoting extensive use of information technology for effective learning.
- Promoting research in teaching-learning and evaluation processes and encourage adoption of innovative and effective practices.
- Promotion of e-learning practices and encouraging effective use of virtual classrooms.
- Enabling the teaching community to contribute to curriculum design and development of outcome-based curriculum.
- Strengthening educational counseling, guidance and mentoring systems.
- Facilitating up-gradation of domain knowledge and skills of faculty.
- Enabling the faculty to take initiatives and achieve collaboration with industries for curriculum development, content generation, project work and research.
- Enhancing communication skills of faculty and educational administrators.
- Promoting awareness of the structural and operational changes coming in the field of engineering education at the National and International level through the policy of initiatives of the governments and other institutions.
- Facilitating change management and adoption of new practices and procedures.
- Creation of multidisciplinary experiences and developing integrated value systems

associated with engineering education in the context of socio-economic transformation of the nation.

- Familiaristaion of accreditation parameters and documentation procedures.
- Familiarisation of techniques of performance appraisal and academic audit systems.
- Management of information systems and data base of the university.
- Improving quality governance, office correspondence, documentation through professional approach.

The above goals are representative but not exhaustive

3. Activities:

The goals of the Directorate of AFD will be achieved by organizing the following activities:

- a) Developing a data bank of faculty and other experts in diverse areas
- b) Making training-need analysis and identifying themes
- c) Identifying potential in-house trainers from Vignan's Institutions
- d) Identifying competent Guest Trainers from reputed institutions
- e) Designing different Orientation/Development Programmes for different categories of staff based on the need- analysis
- f) Preparing an Annual Calendar of Programmes
- g) Organising Faculty Development Programmes
- h) Organising Faculty Training Programme
- i) Organising Refresher Courses for the senior faculty and others
- j) Organising suitable training programmes for teachers working in schools of Vignan's Group of educational institutions
- k) Conducting workshops and conferences on training themes
- I) Conducting training programmes for teachers working in the schools of Vignan Group of Educational Institutions.
- m) Undertaking research in teaching tools and devices.
- n) Providing support and assistance for curriculum design.
- o) Organising workshops for content generation for e-learning.
- p) Organising workshops on Soft-Skill Training.
- q) Undertaking research projects on development models of neighbourhood.
- r) Facilitating Study Tours of faculty to Industries and reputed institutions.
- s) Collaboration with other Faculty Training Institutions.
- t) Video recording teaching demos of participants for providing comprehensive feedback for improvement.



AFD PROGRAMMES

- Faculty Induction/Orientation/Development Programme (FIP/FOP/FDP)
- Employment Orientation Programme (EOP)
- English Proficiency Classes for International Students (EPCIS)
- Cambridge English KET & PET for Schools (CELA)
- Public Speaking Course for Engineering Students(PSCES)
- Teacher Training Programmes (TTP)
- Teacher Orientation Programmes (TOP)

FACULTY INDUCTION/ORIENTATION/DEVELOPMENT PROGRAMME (FIP/FOP/FDP)

Objectives:

To enhance the standards of any educational institution and impart quality education through effective teaching, there has to be a mechanism whereby teachers will be enabled to keep upgrading and apply latest and innovative methods of teaching-learning. The competency and efficacy of every teacher depends on effective Pedagogical Skills, besides Subject Knowledge. Skills can be acquired through formal training and perfected through constant practice. Fresh Post-Graduates or Doctorates coming from Institutions of Higher Learning joining as faculty need to be trained and inducted into the profession of teaching through formal training in pedagogy.

This programme enables participating teachers to

- Understand the Vision and Mission of Vignan's Engineering Institutions
- Familiarize themselves with the work culture, service conditions and expectations at the university
- Understand the multidimensional role of an Engineering faculty member
- Understand and apply the basic principles of teaching-learning and evaluation by appreciating an integrated approach
- Familiarise themselves on various kinds of teaching methods and use appropriate methods for dealing laboratory activities
- Prepare course plans and learning materials
- Acquire the skills required to use technology for effective teaching-learning and evaluation
- Understand classroom dynamics and adopt suitable strategies for creating active learning environment
- Understand the need for student counseling and mentoring
- Understand the importance of Co-Curricular and Extra-Curricular activities to facilitate the all-round development of personality
- Become familiar with research methodologies, for writing research proposals and papers for publication
- Appreciate the need for fostering graduate aptitudes of an engineer and prepare the students accordingly
- Understand the role of engineers in the context of nation building and social transformation



FOPs/FDPs IN 2016 - 2017

S. No	Title of the programme
1	FDP on AUTO CAD applications in Agriculture from 20-11-2016 to 27-11-2016
2	FDP on Automation Studio from 05-06-2017 to 15-06-2017
3	FDP on Data Science and Research,18-03-2017 to 20-03-2017
4	FDP on Big Data, 15-05-2017 to 27-05-2017
5	Faculty Development Programme on Advances in Drying Technologies for Foods, 14-03-2017 to 19-03-2017
6	FDP on Analysis of Indeterminate Structures, 06-02-2017 to 12-02-2017
7	FDP on Intellectual Property Rights, 14-10-2016 to 20-10-2016
8	FDP on ANSYS HFSS antd 3D Printing, 17-11-2016 to 23-11-2016
9	FDP on Open-Source Cloud Computing Platforms, 05-06-2017 to 10-06-2017
10	FDP on Big Data and Its Applications, 24-04-2017 to 29-04-2017
11	Professional Development Program on Banking and Finance, 06-08-2017 to 30-04-2017
12	Professional Development Program on Digital Marketing Strategies, 07-08-2016 to 28-05-2017
13	Professional Development Program in Operational Management, 07-08-2016 to 28-05-2017
14	Faculty Orientation Programme, (16-06-2017 to 24-06-2017)
15	FDP on LAMP, 25-05-2016 to 10-06-2016
16	FDP on Android Application Development, 27-06-2016 to 30-06-2016
17	FDP on Drones & Virtual Reality, 04-05-2016 to 11-05-2016
18	FDP on Remote Sensing & GIS applications in Agriculture Engineering, 09-06-2016 to 17-06-2016
19	FDP on Water and Waste Water Quality Examination, 08-10-2015 to 14-10-2015
20	15-day FDP on PHP & MYSQL, 25-05-2016 to 10-06-2016
21	Professional Development Programme on Banking and Finance, 16-08-2015 to 30-04-2016
22	Faculty Orientation Programme- 2016. (20-06-2016 to 27-06-2016)

FOPs/FDPs IN 2017 -18

S. No	Title of the programme
1	FDP on Advances in Robotization Technology, 01-12-2017 to 08-12-2017
2	FDP on waste land management, 14-06-2018 to 21-06-2018
3	FDP on pattern Recognition, ML and computer vision applications using MATLAB with Hands on Training, 07-05-2018 to 11-05-2018
4	FDP on Machine, Vision and imaging, 25-06-2018 to 26-06-2018
5	Application CAD in Textile, 16-05-2018 to 23-05-2018
6	FDP on Repair and Rehabilitation of RCC Elements, 19-03-2018 to 25-03-2018
7	FDP on Advance Research Methods and Innovation Teaching Techniques, 10-11-2017 to 16-11-2017
8	One Week FDP on Cloud Computing Security, 10-04-2018 to 14-04-2018
9	Professional Development Program on Banking and Finance, 06-08-2017 to 30-04-2018
10	Professional Development Program on Operation Management, 07-08-2017 to 27-05-2018



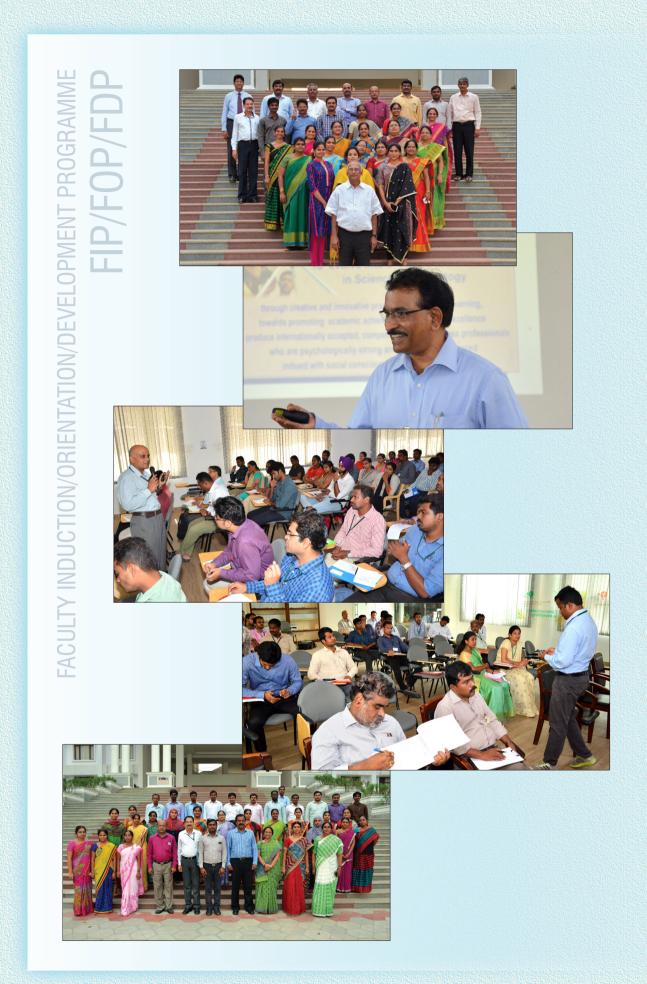
11	Professional Development Program on Human Resource Management, 06-08-2017 to 27-05-2018
12	Technical Staff Training Program on Fabrication of Composite Materials, 07-05-2018 to 19-05-2018
13	Faculty Orientation Programme, 12-06-2018 to 22-06-2018
14	Workshop on "Identifying the Research Problems in Thesis Writing" by Dr. Prakash Kona, Professor,
	EFLU, Hyderabad. (20-09-2017 to 20-09-2017)
15	FDP on "Teaching Learning Process and Outcome Based Education" (28-05-2018 to 02-06-2018)

FDP IN 2018 – 2019

S. No	Title of the programme
1	FDP on Automation using Hydraulics & Pneumatics, 12-01-2019 to 19-01-2019
2	FDP on Internet of things, 28-01-2019 to 31-01-2019
3	FDP on Mathematical and Statistical Computations, 20-04-2019 to 26-04-2019
4	FDP on Advances in Signal Processing & Optimization Techniques, 03-06-2019 to 07-06-2019
5	FDP on Deep Learning & Applications, 27-05-2019 to 31-05-2019
6	Professional Development Programme on Sales and Marketing, 05-08-2018 to 28-07-2019
7	Professional Development Programme on Finance for Non-Finance Executive,
	01-07-2018 to 30-06-2019
8	one Week MDP on Stress Management in Workplace, 19-11-2018 to 24-11-2018
9	MDP on Rural Marketing Management for MSMEs, 08-01-2019 to 11-01-2019
10	MDP on Psychological Empowerment in Employees, 15-09-2018 to 18-09-2018
11	MDP on Tally ERP 9.0"and GST, 01-07-2018 to 10-07-2018
12	MDP on Lean Management Practices for Improved Business Performance of MSMEs,
	27-12-2018 to 30-12-2018
13	Essentials For Insights on Inspirational Teaching for Novice Undergraduate & Graduate Faculty in Phar-
	macy, 04-07-2018 to 11-07-2018
14	Advanced Pharmacological Techniques and Methods, 14-12-2018 to 21-12-2018
15	Upskilling Chemistry Teachers on Latest Pedagogical Tools for Impactful Teaching,
	27-11-2018 to 11-12-2018
16	One of the New Faculty participating the Faculty Orientation Programme is giving her remarks about
	the FOP on the last of the training sessions. (05-06-2019 to 13-06-2019)
17	FDP on "Accreditation Policy, AICTE Reforms and Assessment" (23-02-2019 to 01-03-2019)
18	In-House Training Programme on OBE, POS, COS and PSOS and NAAC Accreditation,
	29-11-2018 to 05-12-2018

FDP IN 2019 - 2020

S	. No	Title of the programme
	1	FDP on Advances in Automotive Mechatronics, 18-02-2020 to 26-02-2020
	2	FDP on IOT Based Drip Irrigation System, 20-11-2019 to 28-11-2019
	3	FDP on Knowledge representation & reasoning by interchanging AI & ML, 15-07-2019 to 19-07-2019
	4	TCS Sponsored 8 Days FDP on Blockchain Technology, 27-04-2020 to 04 -05-2020
	5	A Two-Day Training Program On "Applications of Deep Neural Networks", 14-02-2020 to 15-02-2020



The state of the s	
6	Application of MAT LAB in Chemical Engineering, 17-06-2019 to 23-06-2019
7	Data Science and AI in Oil & Gas Industry, 26-12-2019 to 31-12-2019
8	FDP on Intellectual Property Rights, 11-11-2019 to 17-11-2019
9	TCS sponsored Eight Day Faculty Development program on Block Chain Technology.
	27-04-2020 to 04-05-2020
10	Engrossed faculties in "National Level One week FDP Program on Theory Building and Publishing
	Research", 14-12-2019 to 18-12-2019
11	FDP on "Counselling Techniques" by Prof. Nalini Dwarakanath, IISc, Bangalore.
	(29-07-2019 to 31-07-2019)
12	Faculty Orientation Programme, (17-06-2020 to 25-06-2020)

TEACHER TRAINING PROGRAMME (TTP)

Objectives:

The Teacher Training Programme will enable participating teachers to

Understand and apply the basic principles of teaching, learning and evaluation and also appreciate the integrated approach.

- Familiarize with various kinds of teaching methods and approaches involved and use appropriate method in real classroom situation.
- Prepare lesson plans as per CCE model and learning material accordingly.
- Acquire different skills required to use technology for effective teaching-learning.
- Understand classroom dynamics and adopt various strategies for creating active learning environment
- Acquire the capability for student counseling and mentoring
- Understand the significance of co-curricular and extracurricular activities
- Understand the role of the teacher in the context of nation building and social transformation of the society.

Course Content and Teaching Methodology:

The course content was framed after carrying out the assessment on skill gap of the passed out students of B.Ed. Colleges. The course covers two broad areas:

- 1. Pedagogical and Presentation Skills
- 2. Socio-Psychological Perspectives of Education



EMPLOYMENT ORIENTATION PROGRAMME (EOP)

Objectives:

- i) To impart employability skills to M. Tech First & Final students by honing their interpersonal and presentation skills through group discussions, team work, classroom presentations etc.
- ii) To equip them on pedagogical approaches and tools for teaching engineering subjects
- iii) To impart training on overall personality development and shape them into confident, positive and ambitious professionals.

Course Contents:

- i) Communication (2Hrs) Aspects of communication; interpersonal & intrapersonal: body language; voice accent & intonation etc.
- ii) Overall personality (1Hr) Physical appearance, attire, personal hygiene, presentable demeanour etc.
- iii) Presentation Techniques (1Hr) Organizing content, effective & impactful introduction, making & using PPTs.
- iv) Methodology of teaching engineering subjects (2Hrs) Aligning teaching styles to course objectives, Bloom's Taxonomy, different methods of teaching like lecture, demonstrative, interactive, seminar method etc.
- v) Micro presentations & Microteaching with suggestions for improvement on a one-on-one basis (44Hrs).
- vi) Work experience Teaching one or two subjects to an assigned batch of 3-4 B. Tech students assigned by HoD, to help them clear subject backlogs.

Expected Outcomes:

Having gone through the 50 hrs rigorous training on presentation skills, pedagogy and overall personality grooming, the trainees will get equipped to face any interview confidently, make short and effective presentations during interviews and gain the confidence to handle engineering topics and perhaps also develop an aspiration for a career in teaching.

Assessment

The trainees shall maintain a minimum of 90% attendance and be assessed for a total of 50 marks, which will be incorporated into the II year project marks. The summative assessment will be carried out by a special panel constituted for the purpose in consultation with the Dean Evaluation and respective HoD.

- 10 marks for attendance
- 10 marks for formative assessment
- 80 marks for summative assessment

TEACHER ORIENTATION PROGRAMME (TOP)

The Directorate of AFD, as an Outreach activity conducts programmes for Vignan School Teachers working in Guntur, Ongole, Eluru and Rajahmundry facilitates teachers by training them on current a spects by ensuring smooth transition of the knowledge to their students. The purpose and aim of Teacher Orientation Programme is to transform teachers to be proficient, competent and confident enough to teach all levels of classes by applying different skills and methods.

THE AIMS AND OBJECTIVES

It is an opportunity for the newly joined teachers to know about Vignan family and work culture of the schools together.

- Understand and apply the basic principles of teaching, learning and evaluation and also appreciate the integrated approach.
- Familiarize with various kinds of teaching methods and approaches involved and use appropriate method in real classroom situation.
- Prepare lesson plan as per CCE model and learning material accordingly.
- Acquire different skills required to use technology for effective teaching-learning.
- Understand classroom dynamics and adopt various strategies for creating active learning environment
- Acquire the capability for student counseling and mentoring
- Understand the significance of Co-curricular and Extra-Curricular activities to facilitate all-round development of the individual personality
- Understand the role of the teacher in the context of nation building and social transformation of the society.

Topics covered in the programme:

- Vignan Philosophy & Best Practices Overview
- Understanding the need of New Generation Learners
- Preparation of No Cost and Low-Cost Teaching Models,
- Teacher as a Classroom Manager"
- Understanding Parents Expectations
- Exploring Digital Resources for E-Lesson and lesson plan preparation
- Using PPTs For Effective Teaching
- Need for Effective Communication
- Managing Student-Parent Counselling
- Making School a Vibrant Hub of Learning Achievement
- Teacher as a Role Model

PUBLIC SPEAKING

CAMBRIDGE PET PREPARATORY CLASS FOR INTERNATIONAL STUDENTS



PUBLIC SPEAKING FOR ILB. TECH STUDENTS

- The selection process of Campus Drives and Internship requirements of the companies keep changing time to time,
- During the year 2017-18, the companies which came to campus for drives in had shared their feedback on the performance of final B. Tech students. They have expressed that our students lack speaking ability and are unable to express things confidently.
- The students joining the University mostly come from agricultural background may be the first-generation learners of higher education in their families.
- English language exposure isn't much though have studied in English Medium Schools.
- So, to overcome this incompetency levels of speaking by B. Tech final year students; it was envisioned and planned to have 60 Hrs of special speaking classes for our students in their II B. Tech 2nd year I & II Semester so that their speaking ability is improved and groomed accordingly.
- To facilitate this activity the management decided to assign this task to the AFD Team with experience faculty could mould and train the students overcome speaking problems.
- Keeping in view of the necessity, the AFD Team swung into action by designed suitable course module duly incorporated in our university curriculum.
- Thus, the programme started, and students are encouraged by building their self-confidence
 to participate in seminar, group and individual presentations on covering all topics and other
 aspects to nurture them the best speakers.

CAMBRIDGE PET PREPARATORY CLASS FOR INTERNATIONAL STUDENTS

- Generally, the international students when they join our university for programmes such as B. Tech, B. Pharmacy, B.B.A & B.C.A have to undergo an intensive training inclusive of Basic English Grammar and Cambridge Objective Preliminary English Test.
- The training is overseen by AFD Team. Prof (Dr.) A. Sharada, Dean, AFD and Mr. Nagendra Rao Howji, Asst Prof of English and Cambridge CELTA qualified as their mentor.
- This programme is worked out in collaboration with Dean, Admissions and the Directorate of Academy for Faculty Development (AFD) VFSTR for over a period of six months (At least 26 weeks).
- Mostly the international students are coming from Sudan, South Sudan, Burundi, Saudi Arabia, Syria, Zimbabwe and Rwanda and the African nations have Arabic as their medium of instruction except in countries like Zimbabwe and South Africa where the medium of instruction is English.
- So, many of the students joining our university their understanding of English is either nil or have less proficiency levels which becomes one of the hurdles to continue academic programmes in our university as the medium of instruction here is English.
- Therefore, to fulfill university Academic requirement criteria set for international students joining our university in regular programmes is that international students should become proficient enough during the course of six months training programme conducted by AFD.
- Once they complete six months training, they will appear Cambridge PET Examination further to their regular courses.
- This programme opens up paramount spectra of English which helps international students to excel in their academic subjects without any hindrance or hesitation
- The AFD Team has taken care of all the particular aspects which are necessary to groom
 international students joining our university programmes and make them learn by becoming
 proficient in LSRW (Listening, Speaking, Reading & writing). training encompasses through
 the basic English the level of Preliminary English Test (PET Exam).









Chief Patron

Dr. Lavu Rathaiah

Chairman,

Vignan's Group of Institutions

Patron

Sri. L. Sri Krishna Devarayalu Vice Chairman

Dr. K. Ramamurthy Naidu Chancellor, VFSTR

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

Cmde. Dr. M. S. Raghunathan Registrar, VFSTR

Dr. D. Vijayaramu Dean, Academics, VFSTR

Dr. P. M. V. Rao Dean, Evaluation, VFSTR

Dr. M. Rama Krishna Dean, IQAC, VFSTR

AFD TEAM MEMBERS



Dr. A. Sharada Dean, AFD

Mr. Nagendra Rao Howji Chief Co-ordinator





Dr. Vijaya Kumar Chavan Co-ordinator

Mr. Ravi Babu Velaga Co-ordinator

