# ANNUAL REPORT

(2017-2018)

# **Academic Staff College**



VIT, Vellore



#### 1. Introduction

Academic Staff College, Vellore Institute of Technology, Vellore trains faculty for developing professional attributes holistically. This year, 158 programs including the Faculty Orientation Program was conducted. 6891 participants attended and have benefitted from the programs.

### 2. Faculty Orientation Program

This year's FOP was scheduled from 3<sup>rd</sup> May to 1<sup>st</sup> June 2018. 60 topics of one and half hours with 2 industry visits, 2 outbound trips and a day for HR formalities marked the faculty orientation program.

Our Honorable Chancellor, Vice President and Vice Chancellor graced the inaugural ceremony. The vision of taking VIT to the Top 200 Global Universities List was seeded in the minds of the new faculty. Training programs were structured to envision this dream.

The Respected Vice Chancellor made transparent the expectations of the University from the newly joined faculty. The Dean Academics shared on academic regulations. The Dy.Director from Software development team shared on V-TOP and rubrics. Respected Pro VC shared on the openings at VIT for administrative roles. Dr. Nadesh related to digital tools for classroom teaching and learning.

Some of the titles deliberated in this academic year's FOP are:

Virtual Class Room / Big Blue Button & other tools, Powerful Speech – a must for Professors, Evaluation in VIT, Digital Evaluation, SLOs and Mapping in Syllabi, Principles of curriculum Design. Setting HOT Questions / Blooms Taxonomy, PBL conduct of course & evaluation and Smart Board Operations.

The other titles for deliberations are: SMAC in Academics, Challenging Experiments in Laboratories, PPT presentation with animation & multimedia, Quality Circle Operation, Characteristics of a facilitator, Capturing self-lecture & uploading in YouTube and creating digital footprint and digital portfolio. Different Approaching to Research – Transdisciplinary Research, Product Development at VIT, Patenting / Design Registration, Funded Project Proposal Writing and Consultancy work have gained great significance over the years.

Dr Babu shared on Question Paper Setting for Open Book Exam, Flipped Class Room Methodology, and LMS Moodle. Dr Srinivasan Latha had an enterprising talk on MOOC: What it is and what VIT plans for online courses in the future. The Registrar shared an overview of VIT, while Prof. Elizabeth Rufus shared on PE form & PE & Rational behind it / KRA / KPI. The other titles deliberated were Flipped Class Room Methodology, Review & Q&A on Academic Regulations, Becoming Digital ourselves in our day to day dealings and Proctoring.

Dr. Manohar, VP Senior, TVS shared his views on Parenting. VIT\_ A disciplined campus, Students Concerns-from counsellor's view point, Maximizing Industry Connectivity,

Strengthening International Connectivity, Understanding Gen-Y & Gen-Z, QS & THE World Ranking & Criteria and learning through stories were some interesting titles. Mr. Ashok, from Cognizant shared on the expectations from the Industry. An alumni now from Schnider Electrics shared her views on how she aspires her VIT to be different. Dr.Nayamullah Khan deliberated his talk on University 4.0 while Dr Sivakumar spoke on IQ, EQ, SQ and their use in academics.

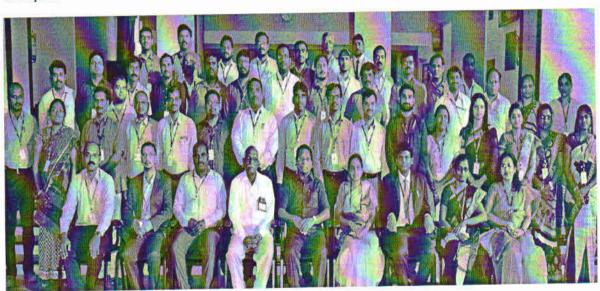
It's not enough to be emotionally stable, says Dr. Prasantham, CCC, Vellore, managing stress is very essential and important.

Managing Personal Finance & Training, Winning in your work place (Behavioural Issues), Being a leader in VIT (Traits), Am I the "Best Facilitator"?, Multiple Intelligence, Professionalism in Teaching Career, Soft Skills for Professors – (Self Esteem Confidence Building, Goal Setting & Time Management) were some more titles.

University Social Responsibility and Making of a world class University marked their place.

The participants bonded over with love and emotions during the valedictory function.

#### Glimpses:







## 3. Five - Day Faculty Development Program

### 3.1Faculty Enrichment Programs

Exclusive five-day faculty enrichment programs were conducted for faculty belonging to school of Information Technology and Engineering and School of Computer Science and Engineering. The consultant trainers were from Bangalore.

The enrichment program was phased out in batches. The titles were based on a broad spectrum: communication, speak effectively, body language, positive psychology and brain based learning.

The faculty were grouped and extensive tasks were given. They were also guided to write a session plan for a particular topic. They had to do micro teaching and their lectures were recorded. The consultant and the faculty sat over a cup of coffee and the consultant gave an intense feedback on the lecture. This helped the faculty to improve their classroom experiences.

The training was very intense and focused. This five day program was a mandatory one.

# 4. Regular Faculty Development Program

# 4.1 Application of statistics and calculus in Science and Engineering

The Workshop on Application of statistics and calculus in Science and Engineering is categorized under technical tools for teachers. The resource persons were Dr. B. Krishna Kumar, Professor, CEG, Anna University and Prof Satyajit Roy, IIT Madras, Chennai. The workshop was dated 27- 29 October 2017 and 60 participants reaped the benefits of the workshop.

The snippets and objectives of the three day workshop:

#### Day 1:

Markov chains and application

Stationary and non-stationary process

Queing theory and applications

#### Day 2:

Fundamentals of Calculus

Applications of calculus in science and engineering

Applications of vector calculus in fluid mechanics

#### Day 3:

Fundamentals of Fluid Dynamics

Differential Equations for fluid dynamics modelling

Finite Difference methods for PDE.

The 3-day workshop threw insights on various fundamental approaches and the faculty had a lot of take-aways.

# 4.2 Workshop on Optimization-Tools and techniques for solving real world problem solving

The Workshop on Optimization-Tools and techniques for solving real world problem solving dated 11-12 November 2017 was categorized under technical tools for teachers. Dr. Rajesh Kumar Arora, Senior Scientist, ISRO was the resource person and 53 faculty members attended the workshop.

The objectives of the one day workshop:

- i. To empower the target group with the methods of optimization
- ii. To enhance the problem solving skills of the target group
- iii. To create a platform for the target group to learn the latest developments in optimization.

The participants enjoyed the session and understood the significance of solving real-world problems.

### 4.3 Workshop on writing a Methodological Review Paper

Dr. Sivakumar A, VITBS conducted a Workshop on writing a Methodological Review Paper on the 4<sup>th</sup> August 2017. This workshop was categorized under Research and Content Writing (RCW) and **65** participants benefitted from the training.

- Summarize methodological variety in literature,
- Identify methodological gaps
- Explore and suggest new methodology were few objectives of the program.

Educational Research Review publishes different types of reviews, theoretical articles, research critiques and forum papers. It calls for a systematic meticulous approach of each contribution to foster the growth in the academic background. A clear and concise way of communication based on a standard and explicit organization of a review founding accessible syntheses of the evidence is the career way forward. This workshop was well-

defined to ensure any prospective publication with the standards of good quality contribution to theory, practice or policy in the educational field.

## 4.4 FDP on Ayurvedic Products & Its Conservation Strategies

Prof M V Rao, Bharathidasan University, Trichy and Dr G Ravikanth, Ashoka Trust for Research in Ecology and the Environment, Bangalore, spearheaded a workshop on "Ayurvedic Products & Its Conservation Strategies" on the 22<sup>nd</sup> September 2017. The workshop was categorized under Multi-Disciplinary Research (MDR) and 54 participants enjoyed the session.

The objectives framed for the workshop were:

Safety issues related to existing Ayurvedic products

Importance of natural drugs and delivery systems

Conservation and protection of Natural plantresources

The objectives were met and especially School of Bio Sciences and Technology benefited from this workshop.

These are a short snippets of the faculty development program.

### 5. New Initiatives

## 5.1 Massive Open Online Courses (MOOC)

The phenomenon of Higher Education has grown exponentially. Higher Education creates a positive and innovative leadership domain that stems from in-depth scholarship. To match the millennial generation, Higher Education leaders and administrators have recognized the importance for exploring and improving the current educational landscape. With number of students and universities on the increase, sustainable and result oriented learning management systems like MOOC (Massive Open Online Courses) are inevitable.

MOOC courses reach out to larger audiences and also cater to uniformity in class room delivery. Newer aspects of knowledge, recent trends in educational delivery, teaching learning approaches along with technological tools that bring out the optimum potential of the individual make MOOC the most sought after edutainer platform.

With this at the background, VIT University is pioneering the revolution in introducing MOOCs for their own environment as well as for the society at large.





SWAYAM under the agesis of MHRD and AICTE has initiated a digital reach out program so that the best teaching learning resources traverse unexplored zones too. Driven by the digitalisation initiative of the government, Academic Staff College, VIT University has encouraged VIT faculty members to express the Memorandum of Interest with special reference to Non technology PG Courses. 18 members recorded their presentation under the guidance and supervision of ASC and have submitted the same as instructed

#### 5.2 On-line course creation

At the seed level, one faculty from IIT Madras and one faculty from VIT University will join together and jointly propose a course on NPTEL platform. The initial discussion is going on and the visibility of the course will be seen soon in the area of Bio-Science

Also, through lecture capturing system, all lectures which are being offered through Academic Staff College will be recorded and stored in repository for further utilization

Few Brain Storming Sessions were started during this year led by ASC with Top management and selected faculty members. This provided the energy to VIT-ASC to venture into the construction of in-house MOOC Centre on the VIT campus.

#### 5.3 Virtual Conference

ASC had initiated Virtual conference with following objectives

#### Objective:

- ✓ To develop mutual cooperation among participating Universities
- ✓ To encourage Inter Disciplinary research in the select areas
- ✓ To understand the research interests and expertise of the participating schools and departments.
- ✓ To work towards collaborative research between the countries.
- ✓ To initiate exchanges of experts between universities
- ✓ To build an understanding towards applying for International Funded project Proposals.

Based on the aforesaid objective -India-Ukraine - Spain virtual conference was organized under the Theme: "Emerging Technologies in Education" dated 26<sup>th</sup> September 2017.

The keynote speakers and the participants shared interest on mutual research areas under several domains like Machinery Design Fundamentals, Automobile Engineering, Thermal and Energy Engineering, Design and Automation along with common areas such as Information technologies in education where several issues were addressed. 25 professors from VIT interacted and benefitted.



Virtual conference under the theme, "Advances in Electric Drives, Automation and Mechatronics"- NUM-Ukraine, Universities of Rome, University of Castilla-La Mancha - Spain and few universities along with VIT University was conducted on the 15<sup>th</sup> of November 2017. The event brought like-minded people to share their insights, research ideas and collaborative significant knowledge sharing. 29 Professors from VIT interacted with the fraternity overseas.

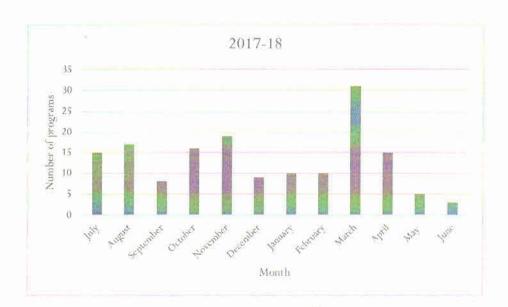
This year ASC had leaped forward in terms of digital print at the University level.

### Year -2017-2018

Number of Programs conducted: 158

Number of Participants : 6891

Budget in INR (lakhs) : 65.75



Dr. B. Prabu Christopher

Assistant Director - ASC