

# V.R. SIDDHARTHA ENGINEERING COLLEGE

## Annual Report of IQAC

2018-19

### Initiatives taken and activities performed

In the process of development and application of quality parameters, IQAC has taken up the following academic, administrative and Green initiatives and activities which were proposed in 2017-18.

1. Implementation of Quality Circle approach in Identified areas
2. Assessment for comprehensive performance of departments
3. Minimization of usage of Plastic products in the campus
4. Departmental Distinctiveness
5. Institutional Distinctiveness

#### ***Initiative 1: Implementation of Quality Circle approach in Identified areas*** **QC and its Objective:**

Quality Circle (QC) is a small group of students / faculty in the same work-area, doing a similar type of work. They voluntarily meet regularly for about an hour every week to identify, analyse and resolve work-related problems.

It is a mandatory requirement as per revised the NAAC guidelines. It creates a student-centric environment where students are involved and encouraged to participate enthusiastically in their teaching-learning process. It acts like a catalyst in transforming a passive learning environment to an active learning environment. It also enhances student's involvement, morale and satisfaction. It promotes team building among students and spreading message of work together for progress.

#### **Measures taken:**

In house awareness program on quality circles was organized to the program coordinators and Course Coordinators of all the departments on 28<sup>th</sup> Nov 2018. To support this initiate IQAC approached the "Quality Circle Forum of India (QCFI) and took membership of QCFI to get benefits from it. Later, a Faculty Training Program was conducted on 'Quality Circles & Implementation by QCFI, Hyderabad Chapter on 22<sup>nd</sup> February 2019. The participated faculty were prepared to implement Quality Circle approach for slow learners, repeated failure of students in specific subjects and Improvement in first year results, with a faculty coordinator as mentor in all the departments and functioning effectively.

#### **Expected Outcome:**

It requires two to three years result data of subjects under QC approach to know the outcome of Quality Circles implementation.

### ***Initiative 2: Assessment for comprehensive performance of departments***

**Objective:** It is proposed to enhance the academic excellence of Institute through the assessment of performance of departments. For which IQAC has prepared a comprehensive pro-forma to assess the departments annually and rank them.

The assessment will be made based on performance indicators such as pass percentage, department visibility in terms of participation of students and faculty in outside Institutions of repute and obtaining good ranks in national level competitive examination like GATE, Industry Institute Interaction, placements and Faculty contribution in R&D.

#### **Expected Outcome**

It is felt that annual ranking will enhance the competitive spirit among departments in improving the overall Academic excellence. However two to three years assessment data is required to know the outcome of assessment for comprehensive performance of departments

### ***Initiative 3: Minimization of usage of Single Use Plastics in the campus***

#### **Objective:**

To inculcate and motivate the students on environmental sustainability as social responsibility. To meet the requirements of NAAC accreditation and to participate in AICTE Clean Campus Awards.

#### **Measures taken:**

The college canteen management was directed to stop usage of 'single use plastics' (water glasses, tea cups, straws, carry bags, plastic plates, disposable spoons, etc.), while serving the food / drinks in the canteen.

Message is disseminated through notice boards of all departments. Student clubs are formed in all departments to spread the awareness among students regarding "Single use Plastics" through departmental students associations. In addition awareness and motivational programs through NCC & NSS activities, a pledge also made with faculty, staff and students to reduce the usage of single use plastics.

#### **Expected Outcome:**

This initiative will create awareness among the students and staff about the harmful effects of the single use plastic as a result they will be motivated towards the use of alternatives.

### ***Initiative 4: Departmental Distinctiveness***

#### **Civil Engineering:**

1. Organizing Job oriented Certificate course by Industry Experts for final year students to gain knowledge in real time construction Industry thus improvement in placements
2. Offering technical consultancy services to industry and Society

**Computer Science and Engineering:**

1. Adopting 'Semester Readiness Program (SRP) –An Innovative Teaching Methodology
2. Motivating the students to register different International Certification programs such as Oracle, Cisco, etc.

**Electronics and Communication Engineering:**

Conducive Environment for excellence in Research and Development.

**Electrical and Electronics Engineering:**

1. Real time product Development. Two industry experts are recruited as adjunct faculty to train faculty and students.
2. New Solar laboratory with self- developed experimental setups
3. More than 75% of student projects are hardware related projects.

**Electronics and Instrumentation Engineering:**

Supplementary Training programs in Process instrumentation, Automation and data acquisition- certification

**Mechanical Engineering:**

The department is offering technical support in characterization and analysis of composite materials by establishing centre of excellence in composites

**Information Technology:**

1. 100% placement record –training programs by industry and academicians from external agencies.
2. Collaborative Labs with IBM, Apple, etc.

***Initiative 5: Institutional Distinctiveness:***

Industry Collaborative laboratories & Centres of Excellence are emphasized to realise the objectives of Outcome Based Education.

Industry Collaborative Laboratories and Centre's of excellence are the added strength of our college. As an outcome, the college has established APPLE, DESSAULT SYSTEMS, CISCO, IBM, ORACLE as Industry Collaborative Laboratories and Composites Lab in association with DST-FIST, Video Analytics Research Lab in association with ADRIN, SIEMENS CoE in association with AP Skill Development Corporation, TIFAC CORE in association with DST as centres of excellence.

***Some of the activities are detailed below******Activity 1: Faculty Development Programme on Modern Pedagogical Techniques and Creative Problem Solving***

The FDP program has been conducted to enhance the abilities of Faculty with respect to modern pedagogical techniques and creative problem solving. The IQAC in association with Teaching Learning Centre of Indian Institute of Technology, Hyderabad (IIT Hyd) organized a Faculty Development Programme under AICTE - Margadarshan Scheme on Modern Pedagogical Techniques and Creative Problem Solving during 15<sup>th</sup>– 17<sup>th</sup> April, 2019.

**The following modules are covered in the above said FDP:**

- Communication skills in teaching-learning process and knowledge dissemination
- Communication to improve the instructional process
- Active Learning and Problem Solving
- R & D through teamwork
- Guidelines for developing a research field for oneself

### ***Activity 2: Faculty Training program on Quality Circles and Implementation***

It has taken a decision to implement the ‘Quality Circles approach’ for the enhancement of performance of students. In this connection an awareness program was conducted on 28th Nov. 2018. In continuation, a faculty training program on “Quality Circles and Implementation” was organized on 22nd January, 2019 in association with Quality Circle Forum of India (QCFI), Hyderabad Chapter. The college has taken QCFI Membership to enjoy the benefits of QCFI.

The objective of conducting this program is to implement the ‘Quality circle approach’ in all departments, so that the performance of repeated failures and slow learners particularly in 1st and 2nd years can be improved.

**The modules covered in the technical session are as follows**

1. Problem identification & selection.
2. Problem analysis.
3. Review & decision by the committee of PC & SC.
4. Implementation.
5. Formation of the circle.
6. Briefing to QC members.
7. Monitoring Quality circles.
8. Documentation of QC meetings and final result analysis

**Some tangible & intangible gains of QCs**

- Enhancement in student’s involvement,
- Increased students morale and satisfaction,
- Better way of utilizing students for pedagogical methodology,
- Improvement of learning by open communication among students,
- Team building among students,
- spreading message of work together for progress, Joy of creative fulfilment,
- NAAC ranking.

### Future Plan for next academic year

1. Extension activity involving Technical expertise under Unnat Bharat Abhiyan
2. New Industry contacts for taking up real time students projects
3. Industry Incubation Centres
4. Sewage treatment plant
5. Recording facility and Lecture Capturing system
6. Systematic utilisation of Alumni services

*MVR*

Dr.M.V.S.Raju  
Coordinator- IQAC



*Dr. A.V. Ratna Prasad*

Dr.A.V. Ratna Prasad  
Chairman, IQAC &  
Principal, VRSEC

**PRINCIPAL**

**V.R.Siddhartha Engineering College**  
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