

# V R SIDDHARTHA ENGINEERING COLLEGE

## Annual Report of IQAC 2019-20

### Initiatives taken and activities performed

In the process of development and application of quality parameters for various academic and administrative activities, IQAC has taken up the following initiatives in 2019-20, which were proposed in 2018-19.

- Effectiveness and successful monitoring of Quality Circles
- Plastic free campus – Initiatives in each department
- Departmental distinctiveness
- Implementation of coding practice on model based embedded projects by CSE & IT departments.
- Complete the remaining syllabus and conduct internal examinations online.
- Engage the faculty and students through online courses during Covid 19.

#### ***Initiative 1: Effectiveness and successful monitoring of Quality Circles***

The following departments had implemented the quality circles approach for slow learners:

The Head of CSE department reported that slow learners (<50% marks) were identified after the completion of first two internal examinations of course work and they are taken care in all aspects for their betterment through Quality Circles. While, for advanced learners ELITE student welfare club was formed to enhance the computation thinking and to make them expertise in coding.

Quality Circles, with four identified slow learners and one student leader, are formed under the supervision of two faculty coordinators, while for advanced learners different activities are being arranged through various professional societies such as ASCE, IEI, ICI, IGBS, EWB, ACES, as per the Head CE department.

QC hour is incorporated in time table weekly once and is monitored by the designated In-charge in ECE department.

Three courses based on previous batch inputs are selected to form the Quality Circles for the benefit of slow learners in EEE Department.

In EIE department low learners are identified subject wise in 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year classes and implemented Quality Circles. Head EIE reported that considerable improvement is found to an extent of 77% from 50% of results in slow learners having backlogs.

In IT department slow learners were identified from 2<sup>nd</sup> year students and implemented Quality Circles in R Programming, Operating Systems, DBMS, Python Programming and DAA courses. For meritorious students Coding lab + Spl. Task is included in the time-table.

In Mechanical Engineering department Quality Circles implemented in "Strength of Materials course" and 80% of students cleared backlogs through QC approach.

### ***Initiative 2: Initiatives to make the campus a plastic (single use) free campus - Initiatives in each department***

Awareness programs on no plastics (single use) were conducted in all the departments and the message is displayed in the respective department's notice boards and in the campus. The canteen management is also directed to stop the usage of single use plastic in the canteen and also instructed the faculty & students to strictly implement no single use plastics in the campus.

### ***Initiative 3: Departmental distinctiveness:***

#### **Computer Science and Engineering:**

1. Implemented Semester Readiness Programme (SRP)
2. A Work Book developed for Laboratory courses and the functioning of Elite and Elite++ Groups in the department.

#### **Civil Engineering:**

1. Job Oriented Certificate Course conducted for final year students by inviting Industry Experts
2. Industry offered courses introduced in UG and PG programmes.

#### **Electronics and Communication Engineering:**

Conducive atmosphere has been created to promote Research and Innovations which results in more Research Projects and Research Publication in SCI / Scopus indexed journals.

#### **Electrical and Electronics Engineering:**

The department is offering extensive training in PCB design for the present first year students.

### **Electronics and Instrumentation Engineering:**

Job Oriented trainings were organized in Process Instrumentation, Automation and National Instruments laboratories.

### **Information Technology:**

1. Achieved 100% Placement.
2. Establishment of collaborative labs with IBM, APPLE

### **Mechanical Engineering:**

Centre of Excellence in Composites had established which is useful for PG Project Work, R & D and consultancy services.

### **Initiative 4: Implementation of coding practice on model based development for embedded projects by CSE & IT departments.**

1. One workshop and two guest lectures were organized to create awareness on development of model based projects and 18 student projects are identified under EPICS by implementing coding practice in CSE department.
2. 'IOT' based projects were demonstrated on the occasion of Innovation Day by the CE department students.
3. Three projects were developed on 'IOT' by the IT department students.

### **Initiative 5: Complete the remaining syllabus and conduct internal examinations online.**

#### **a) Syllabus coverage:**

- About 75 % to 85% of the syllabus in 2nd / 3rd / 4th year B.Tech, M. Tech, MCA, MBA was covered in the regular mode in the on-going even semester of 2019-20 by the time of COVID – 19 lockdown.
- 50 – 60% of syllabus was covered in 1st B.Tech, MBA, MCA, M. Tech since, the class work was commenced little later in the academic year.
- The rest of the syllabus has to be completed by 31st May 2020 through online classes utilizing digital platforms such as Google Meet, Cisco WebEx, Zoom etc..

The CSE & IT heads directed to propose an online training session to all the faculty on 'online teaching through digital platforms' and circulate the class wise schedule to all students in advance and ensure 80% of student attendance.

**b) Internal examinations:**

It is recommended to conduct online 2<sup>nd</sup> Midterm test in the MOODLE platform. And proposed to complete the online examinations before middle of June 2020. Continuous evaluation in laboratory courses is almost completed for all classes before lockdown. It is directed to complete them through online interaction in the laboratory courses, where the evaluation is yet to be done and complete the continuous evaluation of Projects, Mini Projects and term papers through skype so that no student will suffer either in online classes or online assessment.


***Initiative 6: Engage the faculty and students during lockdown 19 through online courses.***


All the Heads are directed to utilise the Lockdown situation effectively by registering online courses for advancement of knowledge for the following purpose:

- They enhance the emerging skills required for the current industry for better employment and opportunities in higher education to students
- They provide pathway for knowledge in advanced technologies and
- 'CourseEra' is giving free logins to all students and faculty during Lockdown
- Follow up the 'Course era' registrations of final year students, in particular, through class counsellors and also made it mandatory for faculty to register at least one advance online course during Lockdown.

Note:

- In view of COVID 19 Lockdown, the above deliberations are informed to external IQAC members over telephone for their approval.

  
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