WELCOME

IQAC 16th Regular Meeting

V.R.SIDDHARTHA ENGINEERING COLLEGE

Saturday, 15th June 2019

Welcome to External Peer team

Major changes made through IQAC

- Bar coding in examination process.
- Teaching – Learning Training center
- Recognizing Best Student project.
- Internal answer scripts audit.
- R&D Incentive policy to promote research.
- Environmental Audit
- Establishment of Compost plant.
- Introduction of Best Practices
  - ➢ Performance Based Appraisal System
  - ➢ Technical Model Development
  - ➢ Academic audit
  - ➢ Proctor system for Student Counseling

- Introduction of Certificate courses.
- Online feedback of faculty.
- Promoting students to participate in industry driven National / Global level student competitions. (TCS – CodeVita, CISCO - Global Problem solver challenge / TEXAS INSTRUMENTS - Innovation Challenge, NATIONAL INSTRUMENTS – Annual Student design contest, etc)
- Automation of college activities.
- Institutionalization of Quality circles
- Measures to make plastic free campus

Agenda

A) Action taken report on the proposals of 15th IQAC meeting.

B) Issues open for discussion

1) Departmental & Institutional Distinctiveness.

2) Any other item with the permission of Chairperson.

A) Action Taken Report on resolutions of 15th IQAC meeting

1) Institutionalization of Quality Circles.

2) Initiatives to make the campus a plastic – free zone.

A) Action Taken Report on resolutions of 15th IQAC meeting

1) Institutionalization of Quality Circles.

Awareness Program – An awareness program on "Quality Circles" was conducted to Course Coordinators & Program Coordinators of all Departments on 28th Nov. 2018

A) Action Taken Report on resolutions of 15th IQAC meeting

1) Institutionalization of Quality Circles.

VRSEC became a member of "Quality Circle Forum of India" (QCFI)

A) Action Taken Report on resolutions of 15th IQAC meeting

Institutionalization of Quality Circles.

A Faculty Training Programme was conducted on "QUALITY CIRCLES AND IMPLEMENTATION" by QCFI, Hyd. Chapter on 22nd January 2019

A) Action Taken Report on resolutions of 15th IQAC meeting

Implementation of Quality Circle approach in various departments

Department - ECE

S.No	Year	SQC Groups	Subjects	Meeting dates	Faculty coordinator
1.	II	16	1.Probability Theory &Random Processes 2.Electro Magnetic Theory & Transmission Lines	Jan 2019 8 Meetings Feb-2019 8 Meetings	1.P Vijay Kumar 2.V Saritha

Department - EEE

S.No	Year	SQC Groups	Subject	Meeting dates	Faculty coordinator
1.	II	6	Digital Signal processing	Jan-2019 5 meetings Feb- 2019 1 meeting Mar- 2019 1 meeting	1.S. Venu 2.S.N.V.S.K. Chaitanya
2.	I	5	Network Analysis-1	Jan-2019 1 meeting Feb- 2019 2 meetings Mar-2019 1 meeting	1.P. Venkatesh 2. Dr. A. Rama Devi

SQC – Student Quality Circle

A) Action Taken Report on resolutions of 15th IQAC meeting

Implementation of Quality Circle approach in various departments

Department - EIE

S.No	Year	SQC Groups	Subject	Meeting dates	Faculty coordinator
1.	II	5	Analog Electronic circuits	Jan- 2019 1 meeting Feb- 2019 2 meetings Mar- 2019 1 meeting	1.Mrs. Ch. Jaya Lakshmi

Department - IT

S.No	Year	SQC Groups	Subject	Meeting dates	Faculty coordinators
1.	II	6	1. R- programming 2.DBMS. 3. Design & Analysis of Algorithms 4.Python programming 5.Operating system	Jan-2019 7 meetings Feb-2019 9 meetings Mar – 2019 3 meetings	1.Y. Kalyan Chakravarti 2. Vemuri Sindhura

A) Action Taken Report on resolutions of 15th IQAC meeting

Implementation of Quality Circle approach in various departments

Department - CE

S.No	Year	SQC Groups	Subject	Meetings dates	Faculty coordinator
1.	II	40	Fluid Mechanics	Jan- 2019 6 meetings Feb- 2019 3 meetings	Sri N Balaji

Department - MBA

S.No	Year	SQC Groups	Subjects	Meetings dates	Faculty coordinator
1.	II	2	1.Quantitative Analysis 2. Operations research	Jan- 2019 2 meetings Feb- 2019 2 meetings Mar – 2019 3 meetings	K. Madhavi

A) Action Taken Report on resolutions of 15th IQAC meeting

Initiatives to make the campus a plastic – free zone.

Canteen

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.

A) Action Taken Report on resolutions of 15th IQAC meeting

Initiatives to make the campus a plastic – free zone.

Initiatives taken on minimization of single use plastics in all departments

- Message is disseminated through notice boards of all departments.

- Formed a student clubs in all departments to spread the awareness among students regarding "Single use Plastics".

- The Student clubs conducted awareness programs in the respective departmental Student Associations

- A Discussion on importance of Reduce, Reuse and Recycle of wastes was organized.

- Made a pledge with faculty, staff and students.

A) Action Taken Report on resolutions of 15th IQAC meeting

Initiatives to make the campus a plastic – free zone.

A brochure on hazards of using plastics is prepared and distributed.

Hoardings to be provided in the campus

B) Issues open for discussion
1) Departmental Distinctiveness

Civil Engineering Dept.

1. Job Oriented Certificate Course by Industry Experts for Final Year Students

Course: The course is designed to impart technical knowledge related to various field problems and skills required like field survey, building markings, testing of materials, estimation, bill preparation, tendering etc. for the industry to make them readily employable.

Experts: Technical experts in various fields of Civil Engineering are invited to share their knowledge & their experience in various field problems.

Some prominent experts invited from Ultratech Cement, BOSCH Power Tools, Shapoorji & Pallonji, L & T, Preca solutions Ltd, BASF Chemicals, Vijaya Nirman Ltd, CREDAI, National Academy of Construction, APEWIDC.

Benefits: As the students gain Knowledge of contemporary issues and field related problems, it is easier them to face interviews during campus selections and to get more number of placements.
Placements improvement: About 30 % improvement is achieved.

1) Departmental Distinctiveness.

Civil Engineering Dept.

2. Industrial Consultancy Services

Revenue Generation:

Average revenue generated in the last three years by way of technical consultancy services to industry and society is about 3.0 Crores/year.

Technical service to Industry & Society:

Department is providing technical service in the areas of structural designs, geotechnical investigations, Material testing, quality control, etc. to industry and society.

Field Exposure to Faculty & Students:

By maintaining good interaction with industry and due to active involvement in solving the field problems, the practical exposure of faculty and students will be enhanced.

Prominent clients:

Public sector like NHAI, AAIL, Panchayat raj, R&B, APEWIDC, CRDA, TTD, VMC, GMC, etc and several Private organizations in Andhra Pradesh and Telangana States.

1) Departmental Distinctiveness.

Computer Science Engineering (CSE)Dept.

1. Innovative Teaching Methodology: Semester Readiness Program

SRP makes the faculty ready for the course at the beginning of the semester.

The faculty will prepare the course content including PPTs, e-Notes, interactive video content.

The formative assessments of SRP includes Quizzes and solutions, assignments with solutions, problems solving questions and solutions for slow learners and advanced learners.

For laboratory courses the faculty will design and document the lab experiments for regular conduct of lab, viva-voce questions and additional lab tasks for advanced learners.

Faculty will collect / prepare the placement related questions and answers in the respective courses.

2. International Certifications

The Department of CSE has MOUs with CISCO Networking Academy and Oracle to motivate and train the students to upgrade their technical knowledge.

1) Departmental Distinctiveness.

Computer Science Engineering (CSE)Dept.

Outcome

Around 510 certifications were completed by the students under CISCO Net-working academy in various

courses like

NDG Linux essentials - 120

NDG Linux Unhatched - 120

Programming Essentials in Python - 180

Introduction to cyber security - 120

students have also completed the ORACLE certification.

These certification adds strength to student resume for their Campus Placements

Almost all the students who completed the above certification have placed through campus placements.

1) Departmental Distinctiveness.

Electrical and Electronics Engineering (EEE) Dept.

Real time Product Development

1. **Products**
    - ✓ Panel type Digital Voltmeters and Ammeters (both AC & DC) are manufactured and are being used in electrical machines laboratory.
    - ✓ Digital Assistants using tinker boards are developed and are placed in e-class rooms.
    - ✓ Manufacturing Multifunction meters which measures
        - ➢ AC & DC voltage, AC & DC current with an auto range facility
        - ➢ Active, reactive and apparent powers
        - ➢ power factor and frequency, are in progress
    - ✓ Offering training to faculty and students on product development.

2. **Adjunct Faculty**
    - ✓ Two industry experts are recruited as adjunct faculty to train faculty and students with respect to product development and new experiment setups.

1) Departmental Distinctiveness.

Electrical and Electronics Engineering (EEE) Dept.

3.Training on latest technologies:

✓MOUs are made with reputed organizations to impart training to students in the campus/internships in their organization on latest technologies.

  ➤ Pantech Solutions, Chennai (Python Programming, Machine learning, IOT based projects, µC)

  ➤ ISIE India, Noida (Training on design & fabrication of e-bikes)

  ➤ PRDC, Bangalore (Training on MiPower software, projects to PG students)

  ➤ EESL, Noida (Training on demand side management of Power System, Internships)

  ➤ Siemens center of excellence (Training on Drives, Low voltage switch gear, automation using PLCs & SCADA)

✓In the last academic year 77% of student projects are hardware related.

1) Departmental Distinctiveness.

Electrical and Electronics Engineering (EEE) Dept.

4. **Project room:**

- ✓ Created a facility called Project room for students to develop hobby projects, models.
- ✓ This room is maintained by student coordinators with the help of faculty.
- ✓ It is kept open for students after 4.30 pm onwards.
- ✓ To motivate the students in developing hardware projects electronic components are given at free of cost.

5. **New Solar Laboratory:**

- ✓ Attempting to establish a solar laboratory with our own experimental kits rather than procuring from any manufacturer.
- ✓ Few experimental setups are developed.
  - ➢ I-V and P-V tracers using Aurdino boards.
  - ➢ Verification of insolation effect on PV panels.
  - ➢ Identification of faulty panel in a series and parallel connection.
- ✓ Customized experimental setups in Microcontroller, Power electronics & Power Systems labs.

1) Departmental Distinctiveness

Electronics & Instrumentation Engineering (EIE) Dept.

Industrial process instrumentation Training

Supplementary Training programs in Process instrumentation, Automation and data acquisition

• In process instrumentation lab, students have been trained on industrial process instrumentation and SIMATIC PCS to configure process hardware.

• In automation lab, students have been trained on industrial PLC programming, SCADA and HMI to control industrial processes.

• In National Instruments lab, students have been trained in last two years on data acquisition using NI myDAQ and NI Real Time and FPGA Implementation using NI myRIO.

• 626 students completed certification out of 663 registered EIE students, in last three years in process instrumentation and automation fields.

• The above training facilitated campus placements in core industries for 23 students in the last 3 years.

1) Departmental Distinctiveness

Information Technology(IT) Dept.

100% Placements Record with good salary / Excellent placements

Provide environment for high quality education and meet the expectation of the stakeholders such as students, parents, employers, alumni and industries.

Provided quantity and quality of placements to IT Students and achieved 100% of the placement to all the eligible students

For achieving the above objects the department is taking special care throw

In-house Training on Domain Knowledge and Soft Skills in
C & Data Structures
Java Programming
Database Management Systems
Networks
Big Data Analytics &R Programming
Agile Methodologies,

Training provided to Students from Industry and Academia in
Android App Development
Amazon Web Services
Artificial Intelligence
Machine and Deep Learning
Agile Methodology

1) Departmental Distinctiveness

Information Technology(IT) Dept.

Established Collaborative Labs for improvement of placements

IBM Collaborative Lab at a worth of Rs.15,45,750.00 /-

    IBM CE - Enablement Program - Essentials of Big Data with Hadoop using IBM InfoSphere

    IBM CE - Application Development for Cloud Deployment using IBM BlueMix

    IBM CE – Enablement Program – Fundamental Course on Identity Management

Established AATCE (**Apple** Authorized Training Center for Education) of worth Rs.8,75,000/-

Placement Details

Year	No of Students Registered	No of Students Eligible	No of Students Selected	Highest Salary Package LPA	Average Salary Package LPA	Percentage of Selection	No of Companies Visited
2018-19	124	102	102	10	4	100	21
2017-18	124	98	98	4	1.8	100	18
2016-17	124	103	103	11	4.5	100	18

1) Departmental Distinctiveness

Electronics & Communication Engineering (ECE) Dept.

Strong research background

Our department creates conducive atmosphere for the students and faculty to conduct research in the frontier areas of Electronics and Communication Engineering to continuously strengthen the research potential of the department.

1. Obtained research projects worth of nearly Rs 3 Crores from UGC, DST, DLRL, ANURAG, DRDO, NRSC etc., during the last six years.
   Centre of Excellence in Telematics was established with the help of DST and industry.
   Collaborative research lab with the help of University of West Alabama was established.
2. Faculty produced 15 Ph.Ds during the last decade and presently guiding 31 Ph.D scholars.
3. More than 300 Research papers published in national / international journals / conferences.
4. 5 patents filed and 2 of them published.
5. 20 faculty and 100 BTech/MTech students were involved in conducting research.
6. 20 faculty members possess PhD qualification and 15 members are pursuing their PhDs out of 50

1) Departmental Distinctiveness

Mechanical Engineering (ME) Dept.

Department is offering Technical Support in characterization and analysis of Composite Materials

- Established the Centre of Excellence in Composites funded by DST-FIST.

- Unique facility in the State of Andhra Pradesh

- Received Rs.85 Lakhs research grants in the area of composite materials from various funding agencies.

- 7 Faculty are specialised in carrying out research in this area.

1) Departmental Distinctiveness

Mechanical Engineering (ME) Dept.

Department is offering Technical Support in characterization and analysis of Composite Materials

- The faculty and students are actively involving in research work in the area of composite materials and the research findings are published in reputed journals.

- IPR's Filed – 3,

- Ph.Ds produced – 7,

- Ph.Ds pursuing – 7

- Equipment worth – Rs.60 Lakhs

- Offering consultancy services in the area of composites fabrication and testing –Revenue generated Rs 9.0 Lakhs

1) Institutional Distinctiveness

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

Industry Collaborative Labs

S.No	Company	Year	Purpose
1.	APPLE	2018	Training on developing apps related to IOS Operating System and SWIFT Programming
2.	DASSAULT SYSTEMS	2019	Computer aided modeling and simulation
3.	Cisco Systems	2017	Training on cyber security, IOT and CCNA certification is in pipe-line
4.	IBM	2016	▪ Areas of Training: Cloud Computing, Big Data Analytics and Security. ▪ Two phases of training completed for faculty and students in 2016. ▪ Intensive training programmes in the said Emerging Technologies will be conducted for the benefit of UG & PG students of CSE, IT & MCA.
5.	Oracle Corporation	2016	Training in JAVA and Oracle is in pipe line.

2) Institutional Distinctiveness

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

Centres of Excellence:

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1. Composites lab in association with DST- FIST is developed in ME department with an objective
- To develop new materials which are cheaper and environmental friendly that can be used for applications in advanced areas such as in Automobiles, etc.
- To reduce environmental pollution due to synthetic fibre composites
- To promote rural areas to a great extent by developing natural composite as bi-product of agricultural waste.

2. Video Analytics Research Lab is established in CSE Department to provide a base for video analytics research and to develop interaction with research institutes like ADRIN and reputed academic institutions.

2) Institutional Distinctiveness

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

Centres of Excellence:

3. SIEMENS Centre of Excellence

- 15 laboratories in accordance with the agreement between AP State Skill Development Corporation, SIEMENS and V.R Siddhartha Engineering College.
- Space provided to furnish labs -23000 Sft.
- Amount spent -Rs.1.50 Crores

1. Product Design and Validation Lab	6. CNC Machine lab	11. Mechatronics Lab
2. Advanced Manufacturing Lab	7. Robotics	12. Electrical Lab
3. Test and Optimization Lab	8. Rapid Prototyping Lab	13 .Automobile painting
4. Test and Optimization Lab	9. Automation Lab	14. Automobile repair
5. CNC Programming lab	10. Process instrumentation Lab	15. LMS optimization Lab

2) Institutional Distinctiveness

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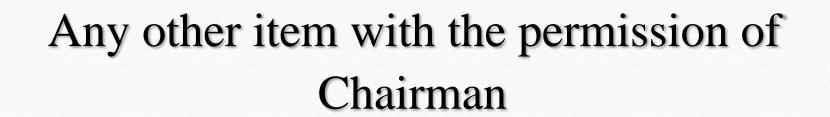
Centres of Excellence:

4.TIFAC (Technology Information, Forecasting and Assessment Council) CORE- DST:
Centre of Excellence in Telematics with the state of the art facilities to produce world class manpower and to be an innovative backyard to the industries .

First private Engineering college in AP to secure and operate TIFAC CORE Rs 9.33 cr +Rs 27 cr software

TIFAC CORE has chosen Electronic Toll Collection (ETC) for Indian scenario as vertical area.

Research was carried out on ETC which includes Automatic Vehicle Identification (AVI), Automatic Vehicle Classification (AVC), Transaction Process, Violation Enforcement and VANETS.

Any other item with the permission of Chairman

Any other item

THANK YOU