IQAC 17th REGULAR MEETING

V.R. SIDDHARTHA ENGINEERING COLLEGE

Monday, 16th December, 2019

AGENDA

A) Action taken report on the proposals of 16th IQAC meeting

> Effectiveness and successful monitoring of Quality Circles

> Plastic free campus – Initiatives in each department

> Departmental distinctiveness

> Implementation of coding practice on model based development for embedded projects by CSE & IT departments

B) Issues open for discussion

> Extension activity by involving technical expertise under Unnat Bharat Abhiyan

> New Industry Contacts for taking up real time student projects

> Any other item with the permission of Chairperson

A) Action taken report on the proposals of 16th IQAC meeting
➢ Effectiveness and successful monitoring of Quality Circles

Computer Science & Engineering:

❖ Slow learners (<50% marks) were identified after the completion of first two internal exams in every semester. Various measures are taken to improve academic standards and to reduce strength of slow learners, such as;
- ✓ Student monitoring by an allotted mentor
- ✓ Special classes and tests for the needy
- ✓ Discussing the student progress with their parents in regular intervals
- ✓ Psychological counseling to the students through counselors.

❖ For advanced learners ELITE student welfare club (120 from 3rd year and 70 from 2nd year) is formed by assessing the technical, communication and academic skills of the students, with Objectives of;
- ✓ motivation of students to learn programming with enthusiasm,
- ✓ improve the leadership qualities of the students
- ✓ enhances the computational thinking
- ✓ expertise in coding
- ✓ work through projects rather than through didactic teaching, inculcate the ability to work in a team.
- ✓ About 13 Activities are organized through ELITE student welfare club so far in this academic year.

Civil Engineering:

- ✓ Student leaders are identified based on their merit scored in previous course work. Each student leader is allotted maximum of four identified slow learners of their class (having backlogs and also poor in studies) to guide and to discuss difficult topics in various subjects. Two faculty coordinators associated and guide the students for smooth conduct of this program. For Five courses QC classes were organized during the last semester for the benefit of about 51 students through 14 student leaders.

- ✓ For advanced learners different activities are arranged through various professional societies Such as ASCE, IEI, ICI, IGS, IGBS, EWB, ACES.

Electronics and Communication Engineering:

- ✓ Analytical and Problematic subjects are identified from each semester to implement Quality Circles.
- ✓ Quality Circles in the department is monitored by the designated In-charge.
- ✓ QC hour is incorporated in time table to conduct weekly once.

Electrical and Electronics Engineering:

- ✓ A group of students (3) from 4/4 B.Tech to taught FPGA for a group of 3/4 B.Tech students (5) through QC – Transfer of Technology.

- ✓ Three courses (Network Analysis – I, Digital Signal Processing, Electrical Machines – II)) based on previous batch inputs are selected to form the quality circles and for the benefit of slow learners.

Electronics & Instrumentation Engineering:

- ✓ Subject wise Slow learners are identified in 2nd, 3rd and 4th year classes.
- ✓ Remedial classes were conducted for slow learners by identified Meritorious students.
- ✓ Outcome was measured and recorded in Quality Circles.

Information Technology:

- ✓ Slow learners are identified from 2nd year students and implemented Quality Circles in the subjects : R Programming, Operating Systems, DBMS, Python Programming and DAA.

Mechanical Engineering:

- ✓ Four Student groups are formed for Strength of Materials Course.
- ✓ Each group consists of 4 – 5 members guided by a team leader nominated based on merit in previous semester course to clarify and discuss difficult topics in the subject.

➢ **Plastic free campus – Initiatives in each department**

Computer Science & Engineering:
- Arranged guest talk on Plastic Usage and its related Health Hazards to create awareness among students.
- Organized rally in the college to bring awareness on single usage plastic and distributed cotton cloth bags.
- As part of the awareness program the department organized 2 events: Ideathon and Photography with theme on 'No Plastic Day'.

Civil Engineering:
- Single use plastic is strictly banned in the department.
- Display boards are arranged at prominent places to motivate students.
- Students are informed and motivated to avoid using single use plastic though various professional society activities of the department.

Electronics and Communication Engineering:
- A team of 7 members (1 Faculty Coordinator + 6 Student Volunteers) is formed to create awareness among student by conducting seminars and other orientation programmes on hazards on plastic.
- A Seminar was conducted for faculty and students on International Plastic Bag free day (3rd July, 2019) to create awareness about the hazards of using plastic.

Electrical and Electronics Engineering:

- Performed pledge with faculty and students to avoid usage of single use plastic.
- Staff are provided ceramic cups/ Steel glasses in place of disposable cups/ glasses for tea and water.

Electronics and Instrumentation Engineering:

- Initiatives towards "minimization of single use plastics" :
- Motivational classes are conducted by department IQAC Coordinator (25.01.2019).
- Survey activity (What actions would people support to "reduce the use"? (28.02.2019)

Information Technology:

- Organized International Plastic Bag Free Day (3rd July, 2019). In this connection Poster Presentation, Ideathon, Best out of waste, Paper Bags presentation events are organized to create awareness among the students to avoid usage of single use plastic.

Mechanical Engineering:

- Organized interdepartmental program in association with IEI – Students chapter on " Heal the World – Say No to Plastic" (18.09.2019) to create awareness among the students on plastic usage and its harmful effects.

OUTCOME:

Based on the efforts & contribution of all departments it is possible to control and avoid usage of single use plastic in the campus.

➤ **Departmental distinctiveness**

Computer Science & Engineering:

- ❑ Semester Readiness Programme (SRP)
- ❑ Work Book for Lab
- ❑ Elite and Elite++ Groups

Civil Engineering:

- ❑ Job Oriented Certificate Course by Industry Experts for final year students
- ❑ Industrial Consultancy Services
- ❑ Technical Service to Industry & Society
- ❑ Field exposure to faculty and students
- ❑ Industry offered courses (PEBS Pennar, Hyderabad & Metay Engineering, Hyderabad , Sri M.V. Sarma, APO (Rtd), APCRDA) – **Received AICTE – CII IndPact award for BEST INDUSTRY-LINKED INSTITUTE, 2019 in India.**

Electronics and Communication Engineering:

- ❑ Creation of 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.

Electrical and Electronics Engineering:

- ❏ Product development
- ❏ Extensive training in PCB design for present first year of strength 120.
- ❏ Idea churning sessions on IOT based projects for 2nd year students of strength 131.

Electronics and Instrumentation Engineering:

- ❏ Job Oriented training in Process Instrumentation, Automation and National Instruments laboratories

Information Technology:

- ❏ 100% Placement
- ❏ Established collaborative labs with industries like IBM, Apple
- ❏ Industry offered courses in the curriculum.

Mechanical Engineering:

- ❏ Established Centre of Excellence in Composites – useful to carryout PG Project Works, R & D and Consultancy Services.

> Implementation of coding practice on model based development for embedded projects by CSE & IT departments

Computer Science & Engineering:

> One workshop and Two Guest lectures organized to create awareness on development of model based projects

> 18 projects are identified under EPICS by implementing coding practice on model based development

Civil Engineering:

> 3 Projects developed by students were demonstrated on the occasion of Innovation Day.

Electronics and Communication Engineering, Electrical and Electronics Engineering, Electronics and Instrumentation Engineering, Mechanical Engineering:

> Students are encouraged to implement coding practice on model development projects.

Information Technology:

> Students are encouraged to enroll in hackathon, hacker rank, hacker earth for the improvement of their coding skills

> 3 projects are developed by students on IOT

B) Issues open for discussion

> **Extension activity by involving technical expertise under Unnat Bharat Abhiyan**

Computer Science & Engineering:

S. No.	Name of Activity	Date	Objective/Goal	Beneficiaries
1	Stop Soil Pollution	05.12.2019	To create awareness on soil pollution	Chowdavaram Village people
2	Awareness Program on online Vote Enrolment	25.01.2020	To train citizens on online voter enrolment	Chinaogirala Village people
3	Science Quiz Competition	28.02.2020	To interact with primary school students and import the importance of science in daily life.	AKTP Municipal Corporation School, Satyanarayanapuram
4	Awareness program on E-Banking for women	08.03.2020	To demonstrate the usage of internet banking.	Dwakra women of Ameenapur village
5	Project Demo on how to check the Quality of the Drinking Water	22.03.2020	Demo. of products developed by EPICS student groups	Kanuru Panchayat
6	Health Camp & Blood Donation Camp	07.04.2020	To organize a health and blood donation camp.	VRSEC family

Civil Engineering:

S. No.	Name of Activity	Objective/Goal	Beneficiaries
1	Solution for the problem of Fluorosis	To suggest remedial measures to overcome the problem of Fluorosis	Banduguleru Village, Prakasam District.
2	Soil tests on cultivation lands in Diviseema Area	To create Awareness about various parameters affecting fertility of soil	Diviseema, Krishna District.
3	Water Treatment - Importance	Need for water treatment & Method of water treatment to be adopted suggested.	Moturu Village, Krishna District
4	Environmental Problems in Rural Areas & Remedies	Identification of various environmental problems and suggestion of remedial measures	Kanuru Village, Krishna District
5	Studies on Contamination & Pollution due to Industry	Level of Contamination by the influence of Industrial Effluents measured.	Auto Nagar, Vijayawada
6	Waste Management	Development of Suitable waste management mechanism	Gosala Village, Krishna District
7	Development of Farmers Library	Dissemination of information regarding various cultivation practices	Vinjarampadu, Krishna District
8	Rain water harvesting and recharge shaft implementation	Awareness to the school students about rain water harvesting and how to implement in their school	Z.P. Upper Primary School, Kakani, Guntur District.

Electronics & Communication Engg:

S. No.	Name of Activity	Objective/Goal	Beneficiaries
1	Home Security	Building a smart home security system	All Public
2	School of Children Monitoring	Development of a security system for school children	All Parents
3	Patient Monitoring and medication	Development of a medication monitoring system for aged patients	All aged patients

Electrical & Electronics Engineering:

S. No.	Name of Activity	Objective/Goal	Beneficiaries
1	Energy Saving methods	To create awareness among public on energy saving	Chowdavaram Village People
2	Awareness in Using Solar Energy	To create awareness on solar energy systems	Chowdavaram Village People

Electronics & Instrumentation Engineering:

S. No.	Name of Activity	Objective/Goal	Beneficiaries
1	Renewable Energy	Demonstrate the necessity of renewable energy sources and subsidy schemes for the purchase of renewable energy	All public

Information Technology:

S. No.	Name of Activity	Objective/Goal	Beneficiaries
1	Health Camp	To create awareness of general health among the people and to provide general health care services	Selected village under UBA
2	Self defense Program	To combine self-protection with a philosophy of living taught in various styles of martial arts.	Girl students & working women
3	Women Health and Hygiene	Minimization of the medical illnesses related to reproductive tract infections in women and girls	Girl students & working women
4	Visit to our Institution	To create awareness about the various ongoing campus activities	Students of 'IT'
5	Awareness Program on Cashless transaction	To make the world more digitize and to reduce corruption that takes place mostly through cash medium.	Selected village under UBA

Mechanical Engineering:

S. No.	Name of Activity	Objective/Goal	Beneficiaries
1	Training Program to School Dropouts – Carpentry / Welding/ Turning	To improve employability potential	Selected village under UBA

Department of Business Management:

S. No.	Name of Activity	Objective/Goal	Beneficiaries
1	Health	To create awareness on plastic free society and awareness on liquor and tobacco consumption	Selected village under UBA
2	Skills and Entrepreneurship	Promotion of rural entrepreneurship and awareness on E-Banking	Selected village under UBA

➢ New Industry Contacts for taking up real time student projects

Computer Science & Engineering: 7 Industries/Companies are identified.

Name of the Organization	Nature of Association
AMERIGO, Bangalore; CISCO, Bangalore, Anblicks, USA, Delloite, Hyderabad, HCL, Chennai, National Informatics Centre, Machilipatnam, APSDMA, Tadepalli	Placements/ Internships / R & D Funding

Civil Engineering: 21 Industries/ Companies are identified

Name of the Organization	Nature of Association
Badri Builders, Vijayawada; Barrsyl, Secunderabad; Canter Cadd, Vijayawada; Contec Syndicate Pvt. Ltd., Vijayawada; Lakshmi Infrastructure & Developers, Vijayawada; PEBS Pennar Industries, Hyderabad; RVNL Associates, Vijayawada; Ambitus World School, Vijayawada; Desicons, Vijayawada; Earthanomic Engineers Pvt. Ltd., Chennai; R.V. Rayanam Spl Class Contractors, Vijayawada; Ramadasu Construction, Nellore; Shapoorji & Pallonji, Vijayawada; Velko Infratech Projects Pvt. Ltd, Vijayawada; HCL Technologies, Vijayawada; ACE Urban, Vijayawada; Grant Thronton India LLP, Hyderabad; Sri Durga Malleswara Swamyvarla Devastanam, Vijayawada; AP State Ware Housing Corporation, Vijayawada; APSCSCL, Vijayawada	Placements/ Internships / R & D Funding (Rs. 26 Lakhs)

Electronics & Communication Engg: 2 Industries/ Companies are identified

Name of the Organization	Nature of Association
RVNL, SCR, Vijayawada; Efftronics, Vijayawada	Placements/ Internships / R & D Funding

Electrical & Electronics Engineering: 1 Industries/ Companies are identified

Name of the Organization	Nature of Association
Sarada Metals & Alloys Ltd, Kothavalasa, Vizianagaram (MoU)	Placements/ Internships / R & D Funding

Electronics & Instrumentation Engg: 2 Industries/ Companies are identified

Name of the Organization	Nature of Association
Jocil Limited, Guntur; Central Leather Research Institute, Chennai	Placements/ Internships / R & D Funding

Information Technology: 5 Industries/ Companies are identified

Name of the Organization	Nature of Association
Anblicks, USA; K J System; Cyber Fox Technology; Sedibus Technology Business Incubator; World Vision Technologies	Placements/ Internships / R & D Funding

Mechanical Engineering: 5 Industries/ Companies are identified

Name of the Organization	Nature of Association
ARCI, Hyderabad; NSTL, Visakhapatnam; Accurate Engineering, Pune; John Deere, Pune, Cummins, Pune	Placements/ Internships / R & D Funding

➢ Any other item with the permission of Chairperson

THANK YOU