

(Approved by AICTE, New Delhi & Affiliated to Pondicherry University)
(Accredited by NBA-AICTE, New Delhi, ISO 9001:2000 Certified Institution & Accredited by NAAC with "A" Grade)

Madagadipet, Puducherry - 605 107



03.06.2019

Dear Sir /Madam

Sub: Internal Quality Assurance Cell (IQAC)  $-13^{th}$  meeting to be held on  $28^{th}$  June 2019 – intimated – Reg.

I wish to inform you that the 13<sup>th</sup> meeting of the Internal Quality Assurance Cell (IQAC) of Sri Manakula Vinayagar Engineering College will be held on 28<sup>th</sup> June **2019** (Friday) at **09.00A.M** in the Audio Visual Room.

The Agenda for the meeting is listed below:

- 1. Review and confirmation of Vision, mission statement
- 2.Improvement of academic results
- 3.NAAC accreditation
- 4. Various ongoing/planned academic & co-curricular activities/Outreach programmes.
- 5. Annual Quality Assurance Report (AQAR)
- 6.Domain specific training towards recent technologies
- 7.To improve teaching and learning methods
- 8. Training and Placement Activities
- 9. Autonomous system
- 10. Students achievements
- 11. Review of R & D activities and High quality research
- 12.Student counselling and career guidance system
- 13. To improve Outcome Based Education
- 14. Other points

Members are kindly requested to attend the meeting and participate in the discussions.

Dr. S.Anbumalar Coordinator/IOAC

Dr.V.S.K. Venkatachalapathy, Director cum Principal

To

- i) The Members of IQAC
- ii) PA to Director cum Principal
- iii) Administrative officer
- iv) IQAC File



SRI MANAKULA VINAYAGAR ENGINEERING COLLEGE
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#### Internal Quality Assurance Cell

Sl. No	Composition as per NAAC	Members	Signature
1.	Chairperson: Head of the Institution	Dr.V.S.K.Venkatachalapathy, Director cum Principal	9
2.	Nominee from the Management	Shri.M.Dhanasekaran Chairman and Managing Director, SMV Educational Trust	Meenz
3.	Senior administrative officer	Mr. T.Selvam AO / SMVEC	1-34/hon
4.	Senior Faculty Members	Dr. S. Anbumalar HOD/EEE Dr. P. Raja HOD/ECE Dr. N. Danapaquiame HOD / CSE Dr. R. Raju HOD/IT Dr. L.M. Varalakshmi HOD/ICE Dr. K. Velmurugan HOD/ Mech. Engg Dr. S. Jayakumar, HOD/ Civil. Engg Dr. N.S.N. Cailassame HOD/MBA Dr. A. Ramalingam, HOD/MCA Dr. K.Oudayakuimar Professor/Physics Dr. S. Deepa Professor/Chemistry Dr.J. Madusudhanan Training Coordinator	3(6)19
5.	Placement Officer	Dr. N.S.N. Cailassame HOD/MBA	m
6.	Members from Students	Aravind.R,EEE/IV Year/EEE Aishwaya.M/IV Year/CSE	Amerya -
7.	Members from Alumni	R.Vimalraj, Team Lead,TCS, Chennai.	7. Vinel

		Mr.Vivek.M,		s
		Senior Engineer, Robert Bosch, Bangalore	M. Nork	4
8.	Nominees from Industrialists	Mr. R. Annadurai, Senior Manager production LUCAS TVS Limited, Puducherry,	Anneli	÷
9.	Academic Expert	Dr.AlameluNachiappan, Professor/EEE Pondicherry Engineering College, Puducherry.	Slameliero	chiaff.
10.	Member from Parent/Society (NGO)	Mr.K.Sivakumar, Junior Engineer, Rajiv Gandhi College of Veterinary Sciences, Puducherry.	K.S. Vovicmon	
11.	One of the senior Faculty as the coordinator of IQAC	Dr. S. Anbumalar HOD/EEE	Market	
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Madagadipet, Puducherry - 605 107

28.06.2019

Dear Sir /Madam

Sub: Internal Quality Assurance Cell (IQAC)  $-13^{th}$  meeting to be held on  $28^{th}$  June 2019 – forwarding minutes – Reg.

Minutes of  $13^{th}$  meeting of the Internal Quality assurance cell (IQAC) held on  $28^{th}$  June 2019 (Friday) are forwarded herewith.

Dr. S. Anbumalar Coordinator/IQAC

Dr.V.S.K. Venkatachalapathy, Director cum Principal

To

- i) The Members of IQAC
- ii) PA to Director cum Principal
- iii) Administrative officer
- iv) IQAC File

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Venue: AV Hall

Madagadipet, Puducherry - 605 107

### MINUTES OF 13<sup>th</sup> IQAC MEETING

Date: 28.06.2019

Time: 09.00 am - 11.30 am

Chair: Dr.V.S.K.Venkatachalapathy, Director cum Principal

Members Present: (As in the annexure)

**Dr.S.** Anbumalar, coordinator/ IQAC welcomed all the members of the meeting. She introduced the members of IQAC, briefed the Goals, Objectives, Strategy, Functions, Benefits, Follow-ups, Roles and responsibilities of members and also presented the report. She invited the members to share their views.

### 1.1 Review of 12<sup>th</sup> meeting held on 22.12.2018

### 1.1.1. Various programs organized in the institute

Various programs were organized in the college.

Project Exhibition was conducted through TBI cell.

National level student's technical symposium was conducted on 9<sup>th</sup>March 2019.

The following Value added courses / training were conducted on 9 March 201 third year students

- Testing of electronics devices
- SCADA
- Mobile phone servicing
- Autonomous Robotics
- Analog Electronic Circuit
- Analysis and Design Principles of Microwave Antennas
- Analysis of Nano materials
- Automata computations
- Introduction to C++
- Creating video games using Animation
- 3D Drawing
- 3D Max Software
- Auto CAD Modeling
- Autodesk Inventor
- CREO
- Solidworks
- CATIA V6 etc
- Aptitude training by SMART and Innate for third year students
- Aptitude training by FACE for third year students
- Soft skill training for third year students
- Online test by skill rack for third year students

Co cubes and AMCAT online test for third year students

In-house training on Saturday

## 1.1.2. The existing & prevailing policies are discussed & reviewed.

Promotion policy

Welfare measures like EPF, Medical Health Care, and Fees Concession etc.

Administrative policies

Academic policies

### 1.1.3. Review and confirmation of Organization structure, roles & responsibilities of the Organizational structure in order of hierarchy is ratified & approved by IQAC.

Roles & responsibilities of the members in the Organizational structure in order of hierarchy are discussed.

#### 1.1.4 R & D activities

> R&D activities are increased through more no. of industry institute interactions

More no. of students are motivated to participate in innovative research project competitions

Industry sponsored Projects are done with collaboration with TVS Sundaram Fasteners Limited, Appaswamy associates, Revocoat India Pvt. Ltd, Unisys, Bangalore etc

> Faculty members and students are encouraged to prepare the project proposals for the

various funding agencies.

P Dr. S. Anbumalar, Professor and Head/EEE received mentor award in the National level Indian Innovation Challenge Design Contest(IIDC) conducted by Texas Instruments and DST, New Delhi. Some of the achievements are listed. Various patents are obtained by the faculties and students.

Dr. J. Madhusudanan, Professor/CSE received Best Project Mentor Award in the

Event Cloud 2020 conducted by Unisys, Bangalore on 07/04/2019.

Dr.K.Velmurugan, Professor and Head/Mechanical received the Most Promising Educator from International Associate of Research and Development organization on 10.02.2019.

IQAC members appreciated the faculty and student achievement for their R & D

### 1.1.5 Promotion of activities for Stakeholders

Feedback obtained from the stakeholders is discussed. Quality improvement strategies are discussed.

### 1.1.6 NIRF 2018 submission

The data submitted to the NIRF ranking is analyzed.

### 1.1.7 Pondicherry University approval

Under Graduate programme in Biomedical Engineering, Mechtronics, Proposal s for Research Centres in EEE, ECE and CSE are applied to Pondicherry University.

1.1.8 Latest domain in IoT-industry 4.4 and other training to the students

- The students are exposed with latest domain in IoT-industry 4.4 and low cost automation.
- > Student undergone in the following companies for Internship programme in Various companies
  - EATON India Pvt ltd
  - HCL India limited
  - Lenova Pvt ltd
  - Unisys, Bangalore
  - Ramakrishna Transformers
  - Rane brakes lining India Limited
  - Tenneco Automotive India Private Limited
  - Lucas TVS
  - Ashok Leyland
  - Ladder Land Surveys Pvt. Ltd.
  - VLAND'S Best Hub Pvt. Ltd
  - HDFC Mutual Funds
  - Capital Honda etc
- Initiatives are taken to give the training on foreign languages especially Japanese and German for the students.

# 1.1.9 To improve results, placement and higher studies, various club activities, symposium/conference planned, value added courses to be conducted

- The students are motivated to participate in events organized by the other colleges.
- Training is given to the students on software tools which are used in core companies like MAGNET, INVENTOR, MATLAB etc accordingly in application oriented way during saturdays.
- ➤ Both the faculties and students are participated in symposium/conference conducted by premier Institutions.
- > Training is given to the students in Microsoft excel with macro and power point presentation.
- Mock interviews for final students are conducted by Alumni and faculties in all the departments.
- ➤ Workshops, Hands on training are given to the students Servicing of Electrical Equipments, PLC &SCADA etc are conducted.
- > First year students are trained with "C" programming language.

### 1.1.10 To improve outcome based education:

Outcome based Education is improved through the effective Teaching Learning Process

#### Agenda points for the 13th IQAC meeting

#### 1.2.1 Review and confirmation of Vision, mission statement

Existing Vision Mission statements are reviewed & ratified.

#### 1.2.2 Improvement of academic results.

- Academic results of UG/PG programmes conducted by Pondicherry University in Apr/May 2019 are discussed.
- ➤ In most of the subjects the result is above 90 %. The subjects which are below 90% were analyzed for the remedial measures.
- ➤ IQAC members appraised about academic results of final year students of all departments. They suggested that remedial classes are to be conducted for the slow learners based on their performance during Internal examinations.

#### 1.2.3 NAAC accreditation

- Director cum Principal told that the NAAC peer team visited our college on 26/03/19. The College got NAAC accreditation with "A" grade in the second cycle.
- ▶ He appreciated the efforts of the various Department Heads, Faculties, Staff and stakeholders.

#### 1.2.4 .Various ongoing/planned academic & co-curricular activities/Outreach programmes.

Following activities are reviewed and approved in the meeting.

- ➤ Centre for Testing, Research centre, Centre of Excellence are functioning in various departments.
- The various value added courses and Hands on training on like Certificate Course in Electronic Product Testing, PSPICE, Catia V6, Electronics Trouble shooting, MAGNET, AUTODESK-AUTO CAD, CREO, solid works, IoT, Data Analystics, PLC and SCADA, Robotics, CADD,IOT, Mutisim and Microsoft Azure etc will be conducted to upgrade the knowledge of the students.
- > Various events are to be organized by the department is discussed in the meeting
  - Induction Day is planned to be conducted for the recently joined first year student on 28-8-2019.
  - Founder's day will be Celebrated on 6 <sup>th</sup> September,2019.Innovators Day-A National level student's Project Contest will be conducted on September 15-9-2019.
- > The Director cum Principal detailed the various activities conducted by NCC, NSS and clubs such as Red Ribbon club, etc., Through NSS following activities are to be conducted
  - Pollution control awareness programs, Awareness regarding saving water & Electricity, Blood donation camp.
  - Green ambience, Clean India, Tree plantation program
  - Plastic-free campus
  - Rain Water Harvesting
  - Yoga Day
  - Helmet Awareness
- Women Empowerment cell organized various programs for the benefit of the girl students on the following topics

Women Healthy Lifestyle Session, Women's mentoring program

### 1.2.5. Annual Quality Assurance Report (AQAR)

AQAR report is a NAAC mandated one. Prompt submission of AQAR is a prerequisite for next cycle of NAAC accreditation. It involves voluminous data collection including evidences and uploading. Hence, all the heads are requested to provide the data needed for AQAR submission.

### 1.2.6. Domain specific training towards recent technologies

- > Planned to arrange Microcontrollers, IOT, Core & Advanced Java training for Faculties
- Planned to arrange Training on Selenium, .NET, Android Studio tools.
- > Planned to conduct Two Days National Conference on the topic "Digital Security" at Sri Manakula Vinayagar Engineering College on 26th and 27th July 2019

### 1.2.7. To improve teaching and learning methods

- > To ensure completion of syllabus and to comply with NAAC guidelines, faculty members are suggested to prepare well defined lesson plan and to implement the same. It has to be verified by heads of the departments.
- > Faculties are recommended to adopt innovative teaching methodology such as project based learning, smart class room, Interactive learning, Collaborative Learning, Computerassisted learning, Content beyond syllabus etc.,
- Academic audit is to be performed in the departments.
- Faculties are suggested to felicitate deep knowledge to the students in their area
- Faculties requested to visit industries to identify their problems and provide solutions through projects to improve the learning process & Industry Institute Interaction.
- > Staffs are motivated to use digital tools like Video and Animated Presentation, PPT, webinars, e-books, etc., to improving teaching learning process.
- Role plays, group discussions, model based demonstrations and quizzes are initiated.
- The students are to be motivated to participate in events organized by the other colleges. The faculties have to be motivated to participate in FDP/Seminars/Refresher courses/ conference conducted and premier Institutions.

### 1.2.8 Training and Placement Activities

- > Placement officer presented list of students placed (department wise) in the academic year 2018-19. Moreover, he presented the consolidated report of the training activities,
- Mock interviews are to be conducted by SMVEC in all the departments.
- > Alumni pointed out that Soft skills and personality development programmes are to be arranged for final/pre-final year students. They suggested that guest Lectures should be conducted at regular intervals from corporate and industry.
- > Industrial Expert suggested that the faculties of different departments should work in coordination with Training and Placement Cell of the college. The Placement officer said that it is already in practice in our institution.
- Industry- Institue interaction from various departments is discussed. Various guest lectures will be arranged on varoius topics like Electric vehicles, Significance of Biomedical Instruments, Software Testing, Recent Development in Satellite Communication, Entrepreneurship development, IoT Data Analytics and Storage, etc.

- Placement officer informed that the students can choose anyone of the career options. Director cum Principal replied that if students are willing to attend both classes for competitive exams and placement trainings, both training classes may be appropriately arranged.
- > The Placement Officer highlighted the students placed in core industry through L&T Core company.
- ➤ Mr.J.Gowtham and Mr.R.Barathraj from EEE department got Job offer in L&T Core company through "TECHGIUM-2017" contest conducted by L&T Technology Services at Bangalore
- The placement training is to be given for the final year students is discussed in the meeting. The Training Coordinator reported that the details of Industrial internship training programs, Inplant training programs and Industrial project works completed by the students in the last academic year. Industry- Institue interaction from various departments is discussed
- Alumni suggested that student should undergo internship program during their course of study.
- The training coordinator replied that students are undergoing Various Internships through the initiatives taken by the Training Division of the College.

#### 1.2.9. Autonomous Inspection

- The IQAC chairman narrated the benefits of Autonomous system
  - Academic Freedom
  - Choice-Based Credit System (CBCS)
  - Better Subject Choice and Electives
  - Employability Becomes Easier
  - Examinations
  - Make-up Examination
  - Fast Track Semester & Examination
  - Internships.
- ➤ He asked the Department Heads to prepare required files to face the autonomous inspection.

#### 1.2.10. Student achievements

- > Students who have won prizes in the events conducted by Premier Institutions have been appreciated in IQAC meeting.
- A student team with members Ms. Nallam Ramalakshmi, Ms. N. Karpagam, Ms. R. Soniya and Ms. R. Aswini pursing B.Tech Final year from department of Electrical and Electronics Engineering, SMVEC had participated in the semifinal round of "India Innovation Challenge Design Contest 2018 –IICDC 2018", organized by Texas Instruments in collaboration with Department of Science and Technology (DST), New Delhi, anchored by NSCREL and Indian Institute of Management (IIM), Bangalore and supported by government of India (MyGov) held at IIM, Bangalore on 27th May 2019. They have done and exhibited a project titled as 'Mustard Seed Processor (MSP) Machine' which integrates harvesting, cutting and grading of mustard in a single machine.
- They received a cash prize of Rs.25,000/- for being shortlisted as semi-finalist. Also they receives a product development fund of Rs.5 Lakh from the Department of Science & Technology for developing their prototype as product.

- The meritorious work on "Intensify method for characterization of ultra capacitors by uniform current charging" and "Performance analysis on grapheme based composite structure for electrodes in ultra capacitor" done by the team of members S. Vengadesh, M. Hariharan & K. Selvakumaran and R. Dhanushvarma & S. Shylesh under are from the Department of Electrical & Electronics Engineering Pre final year & second year students of Sri Manakula Vinayagar Engineering College, Puducherry was honored with a memento by the Technical Committee Chairman Dr. R. Venkatesh of TDK electronics AG in Germany and session chairman of Dr. R. L. Sharma Managing Director, CTO in SPEL super capacitor in 9<sup>th</sup> International conference on capacitors organized by IEEMA at New Delhi on14<sup>th</sup> & 15<sup>th</sup> February, 2019.
- Bharath, Chandru, Surya, Harene, Jayalakshmi and Pavethra, IV Year and III Year Students of Department of Information Technology won First Prize with cash award of Rs.75,000/- in SMART\_INDIA\_HACKATHON-Hardware edition conducted by DELL EMC, Government of India held at Jaipur, July 2019.
- ➤ Second year student K.SUBASHREE, from Dept of ECE got First Prize with a trip to Singapore for winning Youth Talk conducted by ICT Academy in December–18.
- Rahul Krishna, Siddharth, Ajeetkumar and Martin of third year students won trophies and cash award of Rs.1,12,000 in the project contest SRISHTI 2019, conducted by SAINTGITS college of Engineering, Kottayam. They won 1.Best innovative project award. 2. Best Instrumentation Project award. 3. Best institution award and 4. Best Mentor award

### 1.2.11. Review of R & D activities and High quality research

- Faculties & students are encouraged to take up research projects and pursue their Ph.Ds. for enhancing the research activity in the departments
- Proposals are submitted in the Month of May, 2019 for consideration of support under the Scheme "Fund for Improvement of S&T Infrastructure (FIST)" of the Department of Science & Technology (DST), Government of India.
- Incubation center is again a stride taken by the college in the direction of promoting research and application of the technology for the professional and societal development.
- Planned to carry out more Industrial projects in the industries like Appaswamy Associates, RANE Brake Lining Limited, Ladder Survey Pvt. Ltd, Lenova India Pvt. Ltd, Revocoat India Pvt. Ltd etc.
- ➤ IQAC coordinator presented about research activities of the institution. R&D coordinator gave the details of projects submitted for the various funding agencies. Proposals are to be submitted by departments is discussed in the meeting.
- > Real time products, Society oriented products which are developed by the students are appreciated by the IQAC members.

### 1.2.12. Student counselling and career guidance system

- Awareness programmes were conducted to provide the details about higher studies in India and Overseas.
- Career guidance programs/Motivations talks are planned to conduct for the welfare of the students.
- ➤ Heads of the department are suggested to organize interactive session with alumni about higher education and industrial expectation for the students' benefit.

#### 1.2.13. To improve outcome based education:

- Alumni suggested that more importance is to be given to accomplish the Outcome Based Education (OBE).
- > Design oriented teaching will be an effective method for obtaining better understanding of the subject and good outcome.
- > The coordinator presented the benchmarks for academic departments, notable events, Periodic assessment of Teaching methods.

#### 1.2.14. Other points:

- ➤ IQAC members suggested that experimental learning is essential to the students. It is generally considered the most effective way to learn. The internet and a variety of emerging communication, visualization and simulation technologies now make it possible to offer students authentic learning experiences ranging from experimentation to real-world problem solving.
- Assignment-presentation: It enhances the ability of research on any topic as the students search topic from different books, websites etc. it should be the regular practice in both UG and PG courses in the college.
- Employers suggested that to motivate all the students and faculties to register and get the NPTEL (MOOCS) certificate courses. They are prepared by experts so they can learn from best in the field. It creates a good impression and helps to enhance students and faculty's knowledge a lot.
- > The parent member reported that all the parents also support their wards to go for attending various competitions.
- > The IQAC coordinator stated that faculty and students have completed NPTEL cortication course. She suggested more number of students and faculties have to complete the certification courses.
- > IQAC coordinator explained the importance of creation of a learner-centric environment conducive to quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process
- Director cum Principal appreciated all the members of IQAC for their interactive participation and their valuable suggestions to improve the quality of our college in all the aspects.
- All the points discussed in the 13<sup>th</sup> IQAC meeting were recorded. Dr.S.Anbumalar, coordinator/ IQAC finally thanked all the members of IQAC for their valuable and valid suggestions given for the further improvement of the quality standards of SMVEC.

Dr.S. Anbumalar Coordinator/ IQAC **Dr. V.S.K.Venkatachalapathy**, Director cum Principal



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Madagadipet, Puducherry - 605 107



#### **Internal Quality Assurance Cell**

Sl. No	Composition as per NAAC	Members	Signature
1.	Chairperson: Head of the Institution	Dr.V.S.K.Venkatachalapathy, Director cum Principal	Q ()
2.	Nominee from the Management	Shri.M.Dhanasekaran Chairman and Managing Director, SMV Educational Trust	whenz
3.	Senior administrative officer	Mr. T.Selvam AO / SMVEC	T. selvan
4.	Senior Faculty Members	Dr. S. Anbumalar HOD/EEE  Dr. P. Raja HOD/ECE  Dr. N. Danapaquiame HOD / CSE  Dr. R. Raju HOD/IT  Dr. L.M. Varalakshmi HOD/ICE  Dr. K. Velmurugan HOD/ Mech. Engg  Dr. S. Jayakumar, HOD/ Civil. Engg  Dr. N.S.N. Cailassame HOD/MBA  Dr. A. Ramalingam, HOD/MCA  Dr. K.Oudayakuimar Professor/Physics  Dr. S. Deepa Professor/Chemistry  Dr.J. Madusudhanan Training Coordinator	Manh Jagle 14  Sefe 14  De Jagle 14  De Jagl
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6.	Members from Students	Aravind.R,EEE/IV Year/EEE Aishwaya.M/IV Year/CSE	Auras
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		Mr.Vivek.M, Senior Engineer, Robert Bosch, Bangalore	M. M.M.	
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9.	Academic Expert	Dr. Alamelu Nachiappan, Professor/EEE Pondicherry Engineering College, Puducherry.	Handen	achiappa
10.	Member from Parent/Society (NGO)	Mr.K.Sivakumar, Junior Engineer, Rajiv Gandhi College of Veterinary Sciences, Puducherry.	K. Sivankmar.	
11.	One of the senior Faculty as the coordinator of IQAC	Dr. S. Anbumalar HOD/EEE	1922	

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