

**A.V.C. COLLEGE OF ENGINEERING,  
MAYILADUTHURAI, MANNAMPANDAL – 609 305  
INTERNAL QUALITY ASSURANCE CELL – ACTION TAKEN REPORT (2018-19)**

<b>S.No</b>	<b>Plan of action</b>	<b>Outcomes</b>
1	To create awareness about online TNEA admission process among students and parents – TNEA online application filling process was done by the institution for the students who have completed their plus-two examinations at free of cost.	Based on the demand on different programmed we had increased admissions in some courses viz., CSE, IT and decreased the admissions in MECH, ECE, CIVIL, ICE.
2	To provide awareness about NAAC Accreditation Process, Faculty development programme has been organized – Conduction of FDP on accreditation process .	Dr. S. Selvamuthukumar, Vice-Principal, presented about the importance of NBA Accreditation process, on 01.08.2018 to create awareness for faculty members. 50 faculty members of various discipline got benefited.
3	To promote interdisciplinary research – faculty of one department shall be permitted to do research in another discipline.	<p>1. Dr.P. Balasubramanian , Professor of Mechanical Engineering department is guiding Mrs. J. Sharmila Devi of Instrumentation and control department through Mechanical Engineering department research center. Dr. S. Sivanesan , Professor is the DC member for the scholar.</p> <p>2. Hybrid solar powered electrical vehicle have been fabricated by the students of EEE department associated with mechanical Engineering department.</p>

4	Each department has to submit a minimum of two proposals under AVCCE Research Promotion Scheme with a financial aid of Rs.1,00,000 sponsored by AVCCE.	<p>1. Two proposals from each department have been submitted under AVCCERPS and the presentation has given by the respective coordinators in front of scrutinizing committee.</p> <p>2. Totally 8 staff projects (EEE-2; Mech-2; ECE-1; MBA-2; MCA-1) and 12 student projects (EEE-4; MECH-1; ECE-2; ICE-2; Civil-1; CSE-2) have been presented.</p>
5	Value added courses and certificate programs may be arranged for students in latest software, domain specific courses on industrial standards in ISO, fire safety, industrial safety, food safety, cutting edge technology areas in circuit branches which are not covered in the University syllabus to enhance student's employability.	<p>1. Mechanical Engineering department conducted five days Value added course through 'Trycare Industrial Engineering', by Er. M. Vivekanandan from 27.12.18 to 31.12.18 on the topic "Piping design Engineering". 25 final year students have been participated.</p> <p>2. Department of civil Engineering conducted value added course on 'Autocad fusion 360" from 21.8.18 to 28.8.18. 65 students have been participated.</p> <p>3. Quantitative aptitude programme has been conducted from 13.8.18 to 20.8.18 for all final year students.</p> <p>4. Course on 'IOSH NEBOSH' given by Er. Mohamed ali Jinnah, Alumni of our institution working in 'M2Y Global Academy' at Dubai, from 7.8.18 to 11.8.18. 15 internal and 5 external participants attended the programme.</p>
6	Faculty and students of all the departments should obtain certification in suitable courses of IIT spoken tutorial courses.	33 faculty members and 1238 students have been benefited by IIT spoken tutorial courses.
7	Foreign language training has to be provided to improve the employability of students in German, Japanese and French languages.	As per the options given by the students, training has been given to 62 final year students of various departments during February-march 2019 in hindi – other national language. Training on foreign language is under discussion.

8	Students placement in core engineering areas may be given more importance while conducting on-campus and off-campus interviews	Students have been placed in core engineering areas during the On-campus and off-campus interviews. (CIVIL-8; MECH-100;EEE-10;ECE-23).
9	To identify prospective alumni for offering placement opportunity to students of all branches through alumni association.	<p>1. Prospective alumni were identified by alumni coordinators and measures are taken for job opportunities by interacting with the HR of their companies.</p> <p>2. Varsharathi an alumni of IT department placed 2 students from department of CSE in “Varsharathi Tech solutions”.</p> <p>3. Er. Mohamed ali Jinnah, Alumni of our institution working in ‘M2Y Global Academy’ at Dubai, placed 10 students of final year mechanical Engineering.</p>
10	To enter into MOU with domain specific companies to enhance internship, implant training and industrial visit for eligible students under IIP cell. Identify the companies through alumni, companies offering value added programmes to students and company visiting campus for offering campus placements.	<p>1. Alumni from IT department of “Varsharathi Tech solutions” had given internship to IV year students.</p> <p>2. Industrial collaboration lab has been established with UNIPRO software solution from March 2019 onwards. Ten students have been placed and 10 students undergone training.</p>
11	To conduct ED programmes for students of all branches to kindle their interest to become entrepreneurs.	Department of Management Studies has organized “Entrepreneurship Awareness Camp” sponsored by (DST – NIMAT Project 2018 – 2019 Implemented by EDI, Ahmadabad Under the aegis of NSTEDB, DST, GOI, and New Delhi). Nearly 180 students have participated in the camp during 16 <sup>th</sup> to 20 <sup>th</sup> August 2018 and 2 <sup>nd</sup> to 14 <sup>th</sup> March 2019 coordinated by Dr K. Keerthi & Dr. J. Swaminathan and each participant is awarded a certificate.

12	Each faculty having doctorate degree has to apply for funded projects without fail in various funding agencies.	<p>1. Total number of projects submitted in RPS is 8; MODROBS-5 (MCA-1;MBA-1;Engg-3); Conference applied by S&amp;H-1;Seminars/FDP-13</p> <p>2. After scrutinizing, threeRPS project proposals have been submitted in AICTE portal (CSE,ECE,MECH)</p> <p>3. Five STTP have been submitted for fetching funding (EEE, S&amp;H, MECH, ICE, IT)</p> <p>4. Three proposals have been submitted in MODROBS scheme (CSE, ICE, ECE)</p>
13	Ensure all the trainers are effectively taking classes during skill development programme and language training.	Effectiveness of the program is monitored based on the feedback of trainee .
14	Personality development programme (PDP) periods to be utilized only for that purpose. Faculty from other department has to be invited to conduct the PDP programmes.	A proper schedule has been framed to conduct Personality development programme periods so that faculty from other department are conducting PDP programmes as per the syllabus.
15	Final year students should give placement regarding training to third and second year students.	General awareness about placement has been given to third and second year students by Final year students.
16	Discussion forum to be initiated among students to improve their participative learning skills.	PDP, comprehension and seminar periods are utilized to improve student's participative learning skills.
17	Secretary of AVC institutions insisted to conduct yoga classes.	Mr. S. Senthilnathan, Asst prof/ECE, had organized yoga programme on 21.6.19. Totally 100 participants attended the programme.

18	The faculties should publish their research articles in high impact factor journals to improve their individual credits.	Two faculties published their research articles in high impact factor journals. 1. Dr.A.Balaji-Springer “Advanced composites and hybrid materials”-2 papers Elsevier “Materials today proceedings” -1 paper (0.68 Impact factor) 2. Dr. N. Rajaganesh – Journal of soft computing – 1 paper (2.2 Impact factor)
19	Real-time application of subject concepts to be emphasized with the creation of interactive e-classroom facilities.	Video lectures, Real-time application demonstration, animation of working principle makes the students to easily understand the concepts with the creation of interactive e-classroom facilities.
20	Innovative steps to be taken to ensure good admission.	To improve placement, internship ratio for students. To improve industry connectivity and action of EDC. To improve GATE exam enrollment and academic pass percentage. To go for accreditation.
21	Necessary steps to be taken to improve credit points in weak areas identified based on the second cycle of NAAC accreditation in subsequent cycle of NAAC accreditation process.	1. Industry collaboration laboratory has been established. 2. More number of AICTE funded projects have been applied. 3. Documentation work is in progress regarding NBA accreditation processfor all departments.

**A.V.C. COLLEGE OF ENGINEERING,  
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INTERNAL QUALITY ASSURANCE CELL  
MINUTES OF THE IQAC MEETING HELD ON 25.09.2019**

30.09.2019

The IQAC meeting was held on 25<sup>th</sup> September 2019 at 12.30 p.m in the Board of Management room of A.V.C. College of Engineering. The following members were present for the meeting.

1. Dr. N. Vijayarangan, MD, Chairman i/c, A.V.C Institutions
2. Mr. K. Karthikeyan, MCA, Secretary, A.V.C Institutions
3. Mr. N. Gnana Sundar, B.A., Treasurer, A.V.C Institutions
4. Dr. K. Raghukandan, DEAN – FEAT and Vice - Chancellor i/c, Annamalai University, Annamalai Nagar,
5. Dr. R. Nagarajan, Principal, A.V.C. College (Autonomous)
6. Dr. C. Sundar Raj, Principal, A.V.C. College of Engineering
7. Dr.M. Senthilmurugan, Director (Administration)
8. Dr. S. Selva Muthu Kumaran, Director /MCA & Vice-Principal
9. Dr. G. Pradeep, Dean (Academic)
10. Dr. S. Vijayaraj, HOD/Mech & R&D Director
11. Dr. P. Balasubramanian, Professor/ Mech & T&P Officer
12. Dr. C. Swaminathan, Assoc. Prof/ Mech & IQAC – Co-Ordinator
13. Dr. N. Dhanasekar, Assoc. Prof/ EEE & IQAC - Co-Coordinator
14. Mrs. Ka. Suriyaprabha, Asst.Prof / ICE, IQAC Member
15. Ms. B. Vidya, IV B.Tech (IT), IQAC Student Member

**Minutes:**

Principal welcomed the gathering and presented the details based on the agenda of the meeting. The Action-Taken-Report (ATR) for the previous IQAC meeting was overviewed by the Principal and Dr. P. Balasubramanian elaborated the detailed ATR after the presentation given by the Principal. Then, Dr. C. Swaminathan presented the AQAR based on various criteria.

### **Agenda No.1: To review the previous meeting minutes for compliance.**

The Action-Taken-Report (ATR) for the previous IQAC meeting was overviewed. The members of the committee have shared their views in response to the ATR presented.

1. It has been recorded that training has been given to students of various departments in Hindi – other national language as insisted by Secretary in the last meeting.

2. The external expert appreciated that faculty of one department shall be permitted to do research in another discipline to promote interdisciplinary research.

3. It has been recorded that students admission decreased due to the fear about Regulation 2017 of Anna University Affiliated institutions and the members advised to find an innovative idea to improve the enrollment.

4. Expert member appreciated the efforts taken by the institution to conduct career guidance programme in schools in-and-around Mayiladuthurai, to create awareness about Engineering courses among the school students.

5. External expert appreciated that the students of each class are categorised into A,B,C & D to improve the results.

6. It has been recorded that effectiveness of the program is monitored based on the feedback of trainee to ensure all the trainers are effectively taking classes during skill development programme and language training as resolved in the previous meeting.

7. A resolution has been taken that permanent affiliation has to be received for all the departments soon.

### **Agenda No.2: To review and record the Institution's admission status for the academic year 2018-2019**

1. Programme-wise admission status for the academic year 2018-19, has been reviewed and recorded.

2. The members shared their views about the reduction of admission for the current year and based on the demand on different programmes admission were increased in some courses CSE and IT.

3. The external expert recommended that NBA and Autonomous status will

help to improve admission and hence initiatives to be taken during the end of this semester after completing the academic works.

4. It has been recommended that eligible courses as per the norms of NBA may start the process to apply for NBA accreditation to improve the standard of the institution.

**Agenda No. 3: To review the initiatives taken by IQAC for monitoring the quality practices of the Institution.**

The committee appreciated the following initiatives taken by IQAC:

1. Dr. S. Selvamuthukumar, Vice-Principal, presented about the importance of Accreditation process, on 01.08.2018 to create awareness for faculty members. 50 faculty members of various disciplines got benefited.

2. Research progress monitoring committee reviewed the progress of the faculty pursuing Ph.D programmes.

3. Two proposals from each department have been submitted under AVCCERPS and the presentation were given by the respective coordinators in front of scrutinizing committee.

4. A series of meetings were conducted by IQAC Cell to create awareness about revised process of NAAC accreditation implemented from August 2018 onwards for all the stake holders.

5. Innovative group assignments, Improvement tests for the Continuous Internal Assessment (CIA) Tests are in practice in order to obtain a minimum of 14 internal marks by the slow learners.

6. Lecture materials are uploaded in college website and classle cloud campus for the effective utilization of students.

7. Publication achievement award has been constituted to encourage faculty towards quality publication.

8. ED cell organized "Entrepreneurship Awareness Camp" for students to kindle their interest to become entrepreneurs.

9. Software development teams were formed and a software has been developed to prepare mark statements and attendance percentage calculation of students towards paperless office communication.

10. Internships were arranged by placement officer and IIP cell. Industry oriented projects were arranged by the department to interested students.

11. Through Industry Institute Partnership, industry oriented training and skill development programmes by industrial experts were arranged for the students.

12. To improve the industry interaction through guest lectures and training programmes, 19 Alumni and 18 industrial persons were invited by various departments.

**Agenda No. 4: To review and record the research activities and faculty research publications in the academic year 2018-19 and support offered by the Management.**

1. It has been recorded that Research progress monitoring committee meeting was conducted during 15.12.2018 and 18.12.2018 for monitoring the progress of faculty pursuing Ph.D.

2. It has been recorded that totally 60 faculty members from all departments are pursuing Ph.D in various Universities under part-time mode and 33 faculty members are Ph.D holders.

3. It has been recorded that a total of 3 research scholars received their Ph.D out of which 2 scholars received under the research centres of MCA department and one scholar received from mechanical department.

4. Two proposals from each department have been submitted under AVCCERPS and the presentation has given by the respective coordinators in front of scrutinizing committee. Totally 8 staff projects (EEE-2; Mech-2; ECE-1; MBA-2; MCA-1) and 12 student projects (EEE-4; MECH-1; ECE-2; ICE-2; Civil-1; CSE-2) were presented.

5. It is recommended to initiate incubation centre immediately.

6. It is recommended that h-index checking for the institution to be initiated.

**Agenda No. 5: To discuss and recommend initiatives to promote submission of funded project proposals by the Faculty members in their area of specialization / Interdisciplinary domain.**

1. It has been recorded that total number of projects submitted under AICTE Research Promotion Scheme is 8; Modernisation and Removal of Obsolescence is 5

(MCA- 1; MBA-1; Engg-3) and Conference Grant applied by S&H is 1 and Seminars/FDP Grant is 13 by all eligible departments.

2. After scrutinizing, three RPS project proposals have been uploaded in AICTE portal by CSE, ECE & MECH departments.

3. It has been recorded that five STTP have been uploaded for fetching funding by EEE, S&H, MECH, ICE & IT departments in AICTE portal.

4. It has been recorded that three proposals have been uploaded in MODROBS scheme by CSE, ICE & ECE departments in AICTE portal.

5. It is recommended that the process of applying for funded projects in various funding agencies by each faculty having doctorate degree has to be continued in the future.

**Agenda No. 6: To recommend domain specific and students-centric learning initiatives like value added programme, vocational education and certificate programme.**

1. It has been recorded that Mechanical Engineering department conducted five days Value added course through 'Trycare Industrial Engineering', by Er. M. Vivekanandan from 27.12.18 to 31.12.18 on the topic "Piping design Engineering". 25 final year students were participated.

2. It has been recorded that Department of civil Engineering conducted value added course on 'Autocad fusion 360" from 21.8.18 to 28.8.18. 65 students were participated.

3. It has been recorded that Quantitative aptitude programme has been conducted from 13.8.18 to 20.8.18 for all final year students.

4. It has been recorded that course on 'IOSH NEBOSH' given by Er. Mohamed ali Jinnah, Alumni of our institution working in 'M2Y Global Academy' at Dubai, from 7.8.18 to 11.8.18. Fifteen internal and five external participants were attended the programme.

5. It has been recorded that Department of EEE conducted "Advanced Industrial Automation (PLC)" by 'Axis global automation (Pvt) Ltd., (AGIIT), Chennai, from 20.1.19 to 10.1.19. 40 students were participated in the programme.

6. It has been recorded that 33 faculty members and 1238 students were

benefited by IIT spoken tutorial courses.

7. It has been recorded that 10 certificate programmes were conducted for the benefit of 478 students of various departments.

8. It has been recorded that 16 industry-oriented skill upgradation programmes handled by experts from industry and 14 other technical guest lectures/ workshops/ seminars were conducted.

9. It has been recorded that 33 faculty members and 1238 students were benefited by IIT spoken tutorial courses.

10. It is recommended that faculty and students of all the departments obtaining certification in suitable courses of IIT spoken tutorial courses to be continued in the next academic year also.

11. It is recommended that Value added courses and certificate programs being arranged for students is to be continued in future in latest software, domain specific courses on industrial standards in ISO, fire safety, industrial safety, food safety and design thinking cutting edge technology areas in circuit branches, Industry- 4.0 concepts like IOT, machine learning, virtual and augmented reality, Big data analytics and human-machine interface, 3D printing, cloud computing which are not covered in the University syllabus to enhance student's employability.

**Agenda No. 7: To review and record the placement activities and training inputs offered to students through Training & Placement Cell / Departments for improving the employability skills of students.**

1. The details of on-campus and off-campus drives offered to students and the 168 placement offers obtained by the students, along with pre-placement training programmes conducted has been recorded in placement cell.

2. It has been recorded that training has been given to 62 final year students of various departments during February-March 2019 in Hindi – our national language.

3. It is recorded that totally 224 students were attended various industry based training programmes.

4. Students have been placed in core engineering areas during the On-

campus and off-campus interviews. (CIVIL-7; MECH-73; EEE-23)

5. It is recommended that the problems regarding offering foreign language training has to be find out immediately and hostel students can be targeted first to join German, Japanese and French languages courses to improve the employability of students.

6. It is recommended that giving importance to students placement in core engineering areas to be continued in the next academic year also while conducting on-campus and off-campus interviews.

7. It is recommended to monitor the students regularly to avoid absenteeism during training programmes.

**Agenda No. 8: To review and record the FDP / Seminar / Symposium / Workshop etc., initiatives undertaken by the Institution.**

1. It has been recorded that 197 papers were published in international journal by our staff and students.

2. The members appreciated that 13 programmes were conducted by various department and 92 faculty members were attended various programmes.

3. The IQAC co-ordinator recorded that the total number of citations of our faculty member's publications is 152 and the h index is 18 as per Google citations.

4. External expert appreciated that paper publication in various national and international journals by our staff members includes 4 journals are indexed by web of science with the citation of 10 and 6 journals are indexed by scopus with the citation of 10.

5. It has been recorded that 47 papers have been presented in various national and international conferences.

6. The cell appreciated that the financial assistance of Rs. 26,640 have been provided by the Management to the faculty members towards their registration/ travelling expenses.

7. It has been recorded that 10 faculty development programmes were organized by the college.

8. The members appreciated that the management is offering financial aid upto Rs. 1.5 Lakhs for students innovative projects and Rs. 2 Lakhs for faculty

members.

**Agenda No. 9: To review and recommend activities under the various forums like Alumni Association, Industry Institute Partnership Cell (IIPC), Research and Development (R&D) Cell and ED cell.**

1. It is recorded that Alumni Meet was conducted on 7<sup>th</sup> September 2018, 1<sup>st</sup> October 2018 and 22<sup>nd</sup> December 2018 and it is insisted to continue the efforts in the subsequent years on 3<sup>rd</sup> week of December every year.

2. It is recorded that alumni from IT department of “Varsharathi Tech solutions” had given internship to IV year students.

3. It is recorded that Industrial collaboration lab has been established with UNIPRO software solution, Singapore which is in CSE department providing on-campus training for the pre-final year students from March 2019 onwards. Ten students have been placed and 10 students are undergoing training.

4. It is recorded that prospective alumni were identified by department alumni coordinators and measures are taken for obtaining job opportunities through those alumnus by interacting with the HR of their companies.

5. It is recorded that Ms. Danvarshini an alumni of IT department placed 2 students from department of CSE in “Varsharathi Tech solutions”.

6. It is recorded that Er. Mohamed ali Jinnah, Alumni of our institution working in ‘M2Y Global Academy’ at Dubai, placed 10 students of final year mechanical Engineering.

7. It is recorded that Department of Management Studies has organized “Entrepreneurship Awareness Camp” sponsored by (DST – NIMAT Project 2018 – 2019 Implemented by EDI, Ahmadabad Under the aegis of NSTEDB, DST, GOI, and New Delhi). Nearly 180 students have participated in the camp during 16<sup>th</sup> to 20<sup>th</sup> August 2018 and 2<sup>nd</sup> to 14<sup>th</sup> March 2019.

8. It is recommended to continue the efforts taken by ED cell to conduct ED programmes for students of all branches to stimulate their interest to become entrepreneurs.

**Agenda No. 10: To record the success rate in the University results and rank holders list in the recently announced Anna University results.**

1. The cell appreciated effort taken by the Principal and faculties for maintaining the academic pass percentage of outgoing students at above 68%
2. It is recorded that the number of University rank holders were 22 from all branches in the academic year 2018-19 published by Anna University .
3. It is recommended to find out the root-cause of decline in the pass percentage of students in Anna University End semester examination and to take appropriate preventive and remedial measures to improve the same.

**Agenda No. 11: To consider and approve the Annual Quality Assurance Report (AQAR) prepared for the academic year 2018-19**

The prepared Annual Quality Assurance Report (AQAR) for the academic year 2018-19 was presented by the IQAC coordinator and it got approved by the cell with some amendments suggested by the IQAC members for e-submission to NAAC office.

**Agenda No. 12: Further initiations for setting quality benchmarks in academic, administrative, research and extension activities in the Institution apart from the existing best practices towards NAAC & NBA accreditation process.**

The members of the committee have suggested the following quality initiatives to be adopted:

1. To initiate a fully automated software to acquire and review the details uploaded by the faculty members regarding journal publications, Faculty Development Programmes and workshops attended. Programmes organized in the department along with photos may be sent immediately to newspaper through the concern person. Board of management may monitor the activity from anywhere by login, e-forward and faculty appraisal may be done electronically.
2. Scholarship scheme to the talented students may be received from sponsors.
3. Practical sessions for students to be given earnest importance to transform

students as capable professionals to face the real time industrial problems during job opportunities.

4. Instead of dictating important points during lecture periods, interactive session with students to be enhanced to improve their participative learning skills.

5. Ensure job for current final year students to attract more students towards Engineering education.

6. Establish interactive e-classroom facility to improve creativity and to familiarize students about industrial practices.

7. Training programmes have to be started from the second year onwards to prepare students for placement in their final year.

8. Students have to be motivated to participate in sports and cultural competitions organised by other institutions.

9. To improve admission, device various promotion schemes and conduct activities for higher secondary school students in the adjoining towns and villages.

10. The faculties should publish their articles in Annexure - I journals, Web of Science, Scopus Indexed Journals and UGC - CARE Approved Journals to improve the h-index and citations of the institution.

The meeting ended at 3.30 p.m. with vote of thanks.

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