PERFORMANCE AUDIT FORMS (FINAL ROUND under TEQIP-II)

INSTITUTIONAL PERFORMANCE PROFILE

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY
DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016
NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

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	INSTITUTIONAL PERFORMANCE PROFILE GRADES AND GRADE DESCRIPTORS
1.	**Substantial evidence of good practice** in the quality and standards achieved (Assessment identifies clear supporting evidence for at least 75% of the relevant practices.)
2.	**Some evidence of good practice** in the quality and standards achieved (Assessment identifies clear supporting evidence for at least 50% of the relevant practices.)
3.	**Not in place**(there may be one of the three primary reasons for this: a) no evidence can be found, b) there is evidence, but it is not of acceptable quality, or c) that there are plans for development but these have not yet taken place – in which case the auditor can indicate the expected date of completion/implementation but the grade should remain 3.)

NOTE: Supporting evidence: The grade descriptors have two elements: one relating to the amount of the evidence (none, some or substantial); and one relating to the quality of the practice about which the evidence is gathered (is it good quality, or not?). So, for example, a grade of 1 means both that the evidence is good quality and that there is a substantial amount to demonstrate that it is of good quality (75% or more for the practices found).

PERFORMANCE AUDIT FORM (1.1)
COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1. STRENGTHENING INSTITUTIONS TO IMPROVE LEARNING OUTCOMES AND EMPLOYABILITY OF GRADUATES

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. Effectiveness of funds utilized for the teaching, training, learning and research equipment, library, computers, etc. by Institutions, including: ▪ Increase in the satisfaction index of student and faculty	**In terms of teaching**, one regular Faculty member has been added in each of the three existing Departments of Electronics and Communication Engg. (ECE), Computer Science and Engg. (CSE) and Electronics and Electrical Engg. (EE) during the last three years of being inducted in the TEQIP-II program. (***Evidence Source: Attendance Register***) **In terms of training**, During the period of last three years when the institute was inducted to the TEQIP – II program, following numbers of training/workshops/seminars were conducted: CSE-20; EC-18 (including 2 seminars); EE-06; 3 workshops on Applied Sciences; 04 workshops for the Office Staff and 1 International Conference. (***Source of Evidence: List signed by the Principal***) This information is also displayed on the following Institute TEQIP-II website : http://www.ceknpy.ac.in/img/teqip/tevents.html **Learning and Research Equipment**: For enhancing the students learning process, Digital Storage Oscilloscopes (57 numbers, Rs. 19,78,275), one 3-D printer (Rs.1,53,000), PLC training kits (Rs.1,63,632), USRP (Rs.5,10,300), Digital Signal Processing kits (15 numbers, Rs. 3,75,000), Power Supplies (40 numbers, Rs. 6,96,733), Function Generators (40 numbers Rs. 3,57,000), One RF signal generator for Rs.4,24,783, High Frequency structure simulator software for Rs.6.6 lakh, Arbitrary Waveform Generators (8 numbers, Rs.1,99,920), 55 Microprocessors and micro controller trainers for Rs.5,44,504, 20 Digital IC trainer kits for Rs. 1.17 lakh, various software for Rs.34,66,315 were procured in the EE and ECE laboratories from the TEQIP-II funds. (***Source of evidence: Asset Register audited by the***

	Internal as well as Statutory Auditors and the physical verification of the labs by the Performance Auditor) **Library**: Chief Librarian was appointed after the TEQIP-II program started in the Institute. During the last three years, 6062 volumes of books were purchased in the Library from the TEQIP-II fund for Rs. 25,89,634. Three e-journals related to three existing departments were also procured during the last three years from the TEQIP-II fund for Rs. 24,25,733 *(Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors)* **Computers**: 208 computers, amounting to Rs. 94,06,608, 20 laptops for 9,96,975 and 7 servers for Rs.7,71,481, FOUR Mac machines for 3,01,984 and 1 workstation for Rs. 1,56,015 were purchased from the TEQIP-II fund that have been distributed to the laboratories of the three existing Departments. *(Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors)* Overall procurement of Rs. 4,77,82,860 along with the civil works for Rs. 46,95,260 was made from the TEQIP-II fund. While meeting students and Faculty, it was found out that the satisfaction index has been substantially increased (more than 90%) among them.
B. Obtaining Academic Autonomy status, including: ▪ **Number of institutions that have obtained *'Autonomous Institution status'* as per University Grants Commission process** within 2 years of joining the Project, or	So far Autonomy status has not been obtained. Applied to the University (CUSAT) for forwarding the application to the UGC for autonomous status; SAR is uploaded in October 2015 *(Source of Evidence: Institution Response)*
▪ Effectiveness of utilization of academic autonomy possessed/ obtained (S*ee Table-26 in PIP*)	So far Autonomy status has not been obtained.
C. Effort made by Institutions for upgrading qualifications of faculty members, including: ▪ Percentage of faculty enrolled in MTech and PhD	Present Regular Faculty – 32 Deputed for PhD: Full time – 1; Part Time – 1; For M.Tech. – 4 40.6% of faculty is deputed for up gradation of qualification by enrolling in M.Tech. and Ph.D. programs. *(Source of Evidence: Institute Office Records and Office Orders signed by the Principal)*

D.	**Existing teaching and staff vacancies and effort made by Institutions for filling the vacancies, including:**
	▪ Percentage of faculty and staff positions filled and vacant
		Sanctioned Faculty Strength – 66 as per the GO dated 14.02.2014
		Present Regular Faculty – 32 *(Source of Evidence: Institute Office Records signed by the Principal and the Attendance Register)*
		Percentage of Faculty Filled – 48.5%
		Percentage of Faculty vacant – 51.5%
		For filling up the vacancy of 34 Faculty Members, 24 Guest Faculty have been appointed *(Evidence: Office Records signed by the Principal)*
		Advertisement has gone for the Professor Posts (sanctioned posts – 3) [see the advertisement in the IHRD website: www.ihrd.ac.in]
		Proposed Action plan to fill up faculty positions: *(Source of Evidence: Institution Response)*
		    1. It has been decided in the Principals' meeting of IHRD to recruit new regular faculty members in the cadre of Assistant Professors after getting permission from Govt.
		    2. Through general transfer from various IHRD Engineering Colleges.
		Sanctioned strength of the Staff Members (Office Staff + Technical Staff) – 69
		Present Number of Staff Members – 48
		Presently there is NO PLAN for the Staff Recruitment Drive.
		Percentage of Staff Filled – 69.6%
		Percentage of Staff vacant – 30.4%
		(Source of Evidence: Institute Office Records signed by the Principal and the Attendance Register)

	▪ Increase in faculty appointed on regular basis	6 Regular Faculty Members have been transferred from other IHRD Engineering colleges during the last three years since the induction of the Institute into the TEQIP-II Program.*(Source of Evidence: Institute Register)*
E.	**Effectiveness of equity at Institutional level, including:** ▪ Transition rate of students from the First to the Second year in Undergraduate programmes	Transition rate of students from the First to the Second year in Undergraduate programmes: It has been increased from 38.55% to 54.5% *(Source of Evidence: CUSAT University Result)*
	OVERALL EVALUATION GRADE FOR 1.1 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	**2**

PERFORMANCE AUDIT FORM (1.2)
COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1.2: SCALING-UP POSTGRADUATE EDUCATION AND DEMAND-DRIVEN RESEARCH & DEVELOPMENT AND INNOVATION

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. **Effectiveness of funds utilised for the teaching, training, learning and research equipment, library, computers, etc. by the institutions, including:** ▪ Increase in the satisfaction index of student and faculty	**In terms of teaching**, one regular Faculty member has been added in each of the three existing Departments of Electronics and Communication Engg. (ECE), Computer Science and Engg. (CSE) and Electronics and Electrical Engg. (EE) during the last three years of being inducted in the TEQIP-II program. (*Evidence Source: Attendance Register*) **In terms of training**, During the period of last three years when the institute was inducted to the TEQIP – II program, following numbers of training/workshops/seminars wee conducted: CSE-20; EC-18 (including 2 seminars); EE-06; 3 workshops on Applied Sciences; 04 workshops for the Office Staff and 1 International Conference. (*Source of Evidence: List signed by the Principal*) This information is also displayed on the following Institute TEQIP-II website : http://www.ceknpy.ac.in/img/teqip/tevents.html **Learning and Research Equipment**: For enhancing the students learning process, Digital Storage Oscilloscopes (57 numbers, Rs. 19,78,275), one 3-D printer (Rs.1,53,000), PLC training kits (Rs.1,63,632), USRP (Rs.5,10,300), Digital Signal Processing kits (15 numbers, Rs. 3,75,000), Power Supplies (40 numbers, Rs. 6,96,733), Function Generators (40 numbers Rs. 3,57,000), One RF signal generator for Rs.4,24,783, High Frequency structure simulator software for Rs.6.6 lakh, Arbitrary Waveform Generators (8 numbers, Rs.1,99,920), 55 Microprocessors and micro controller trainers for Rs.5,44,504, 20 Digital IC trainer kits for Rs. 1.17 lakh, various software for Rs.34,66,315 were procured in the EE

	and ECE laboratories from the TEQIP-II funds. *(Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors and the physical verification of the labs by the Performance Auditor)* **Library**: Chief Librarian was appointed after the TEQIP-II program started in the Institute. During the last three years, 6062 volumes of books were purchased in the Library from the TEQIP-II fund for Rs. 25,89,634. Three e-journals related to three existing departments were also procured during the last three years from the TEQIP-II fund for Rs. 24,25,733 *(Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors)* **Computers**: 208 computers, amounting to Rs. 94,06,608, 20 laptops for 9,96,975 and 7 servers for Rs.7,71,481, FOUR Mac machines for 3,01,984 and 1 workstation for Rs. 1,56,015 were purchased from the TEQIP-II fund that have been distributed to the laboratories of the three existing Departments. *(Source of evidence: Asset Register audited by the Internal as well as Statutory Auditors)* Overall procurement of Rs. 4,77,82,860 along with the civil works for Rs. 46,95,260 was made from the TEQIP-II fund. It is worth mentioning that during 2014 and 2015 four students from the Institute secured I and II ranks in the University result as follows: In 2014 – Arya P. secured II rank in B,Tech. (IT) In 2014 – Arya Chandran secured II rank in M.Tech. CS (Image Processing) In 2015 – Jyothis Mary John secured I rank in M.Tech. CS (Image Processing) In 2015 – Varsha secured II rank in M.Tech. EC (Signal Processing) *(Source of Evidence: University Result and Institute website)* While meeting students and Faculty, it was found out that the satisfaction index has been substantially increased (more than 90%) among them.
B. Effectiveness of scaling-up Postgraduate Technical Education, including: ▪ Increased enrolment for MTech and PhD	Enrolment in M.Tech Program has decreased in 2015-16 by 18 students *(Source of Evidence: Admission Records)*
▪ Establishment of proposed laboratories	Establishment of 3 new laboratories for PG that were proposed 1. Dept of ECE: Signal Processing Lab and Project Lab 2. Dept of CSE: Digital Image Processing Lab (Source of evidence: Physical Lab Visit by the Performance Auditor)

		(Source of Evidence: Physical verification of the labs by the Performance Auditor)
	Cumulative number of assistantships granted	Up to 2015-16, 63 Students enrolled in the M.Tech program have obtained financial assistantship of Rs. 8000 per month per student from the TEQIP-II fund *(Source of evidence: TEQIP file No: T/13/CEK/TRA and the meeting of the Performance Auditor with the PG students)*
C.	**Progress/achievement in <u>starting new Postgraduate</u> programmes, including:** Securing AICTE approval	Since the existing courses are not yet accredited, AICTE do not accept proposal for new programmes. Other formalities including the permission from the Director of IHRD has been obtained to start two new PG programmes, MTech in Embedded Systems and VLSI Design and Computer Information Science as planned. *(Source of Evidence: Institute Records)*
	Establishment of laboratories	Not Applicable
	Adequacy of student enrolments	Not Applicable
D.	**Effectiveness of collaborations made with other Institutions in India and abroad, including** Increase in number of co-authored publications in refereed journals	Number of research publications co-authored with faculty/ researchers/ industry experts from outside the institution is 19 in the last three years since the induction of the Institute into the TEQIP-II program. This is an increase of about 53% with respect to previous two years. *(Source of evidence: copies of published papers)*
E.	**Increased collaboration with industry in research and development, including:** Increase in number of joint and industry sponsored research and development work undertaken	Seed money for 8 project proposals has been given to faculty members from the TEQIP-II fund and they have submitted final proposals for a total amount of Rs181.12 lakhs to various funding agencies. *(Source of Evidence: Institution Response)*
	Increase in financial contribution by industry for R & D	NIL
	Increase in industry personnel registered for Masters and Doctoral programmes	NIL
	Increase in industry personnel trained by the institution in knowledge and/or skill areas	NIL
	Increase in the number of consultancy assignments secured	NIL
	Increase in the number of students' and faculty visits to and/or training in industry	NIL

▪ Improvements in graduate placement rate	In 2013 -14 – No M.Tech. student was placed through campus placement In 2014 -15 – 5 M.Tech students among 46 were placed in Cognizant IT companies In 2015 -16 – 5 M.Tech students among 34 were placed in Cognizant and Ernest and Young IT companies This is an increase of 3.83% in the placement *(Source of evidence: Physical verification of Placement Records, e-mails from the companies and appointment letters)*
▪ Increase in involvement of industry experts in curricula & syllabi improvements, laboratory improvements, evaluation of students and delivering expert lectures	Industry experts are being requested by the coordinator of the M.Tech. curricular development cluster to suggest and propose the changes in the curricula. Apart from that, Industry experts do not participate in laboratory improvements, evaluation of students or delivering expert lectures. *(Source of evidence: e-mail communications between the Industry Experts and the Institute Representative for curricular development cluster)*
▪ Increase in the number of sandwich programmes between industries and the institution.	NIL
F. Increase in percentage of revenue from externally funded research and development projects and consultancies as a percentage of the total revenue of the institution from all sources	NIL
G. Increase in the number of publications in refereed journals	Till 2013 the average number of research publication in International journals was 4.5 which have been enhanced to 16 during the last three years since the induction of the Institute in the TEQIP program. That makes an increase of 72%. *(Source of evidence: Physical verification of publication records)*
H. Increase in the number of patents filed	NIL
OVERALL EVALUATION GRADE FOR 1.2 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	**2**

PERFORMANCE AUDIT FORM (1.2.1)
COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1.2.1 ESTABLISHING CENTRES OF EXCELLENCE

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. Establishing Centres of Excellence Improvement in Research and Development facilities through: ▪ Establishment of new laboratories for applicable thematic research	NA
▪ Establishment of a knowledge resource centre (library) in the thematic area	NA
▪ Procurement of furniture	NA
▪ Civil works	NA
OVERALL EVALUATION GRADE FOR 1.2.1 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	**3**

PERFORMANCE AUDIT FORM (1.3)
COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

1.3: FACULTY DEVELOPMENT FOR EFFECTIVE TEACHING (PEDAGOGICAL TRAINING)

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. Effort made by Institutions providing Pedagogy Training to faculty, including:	Pedagogy Training has been imparted by the Teaching and Learning Centre of IIT Madras that was attended by the Faculty Members.
• Percentage of faculty who have benefitted from the core and advanced modules of pedagogy training	2013-14 -4 Faculty 12.5% 2014-15 – 10 Faculty 31.25% 2015-16 – 33 Faculty 100% *(Source of evidence: Participation certificates)*
• Improvements in (and/or updating, and more relevant) curricula and /or syllabi	B.Tech Curriculum is framed by CUSAT and Kerala Technological University (KTU) and revised in every four years as per market demand. Last revision was in 2012 and 2016 in CUSAT and KTU respectively. For M.Tech, since the syllabus is prepared cluster wise, the institution has a major role in the syllabus revision. Frequency of course revision is decided by the members of the respective cluster. *(Source of evidence: Institution Response)*
• Improvements in (and/or updating, more relevant) course assessment methods	The procedure is set by the CUSAT with two internal tests along with minimum two alignments per semester which is being followed by the Institute,
• Improvements in teaching and learning methods, including provision for students needing extra/remedial support	TEQIP-II fund has been utilised for making two smart class rooms for PG and four smart class rooms for UG students. *(Source of evidence: physical verification by the Performance Auditor)* Remedial classes of mainly mathematics oriented courses are being regularly held From which a total number of 516 General Category Students and 45 SC Students were benefited*. (Source of evidence: Institution Response and meetings of UG and PG students with the Performance Auditor)*
• Percentage of faculty with UG qualification registered/deputed for improving their qualification	Currently there is only one Faculty Member with B.Tech. qualification who has registered for M.Tech. program.

(*see Section-3, 4(b) on page 20 of PIP*)	Percentage of faculty with UG qualification registered/deputed for improving their qualification is 100% (***Source of evidence: Deputation letter from the Principal***)
• Percentage of faculty deputed for subject domain training, seminars, etc. (*faculty are required to share their gains with peers and put reports on training on institution's web site*)	All of the 32 Faculty Members attended subject domain training or seminars. The gain has been shared with the peers and the reports were uploaded on to the Institute TEQIP website: http://www.ceknpy.ac.in/img/teqip/tevents.html (***Source of evidence: Management Information System***)
• Progress in securing accreditation of eligible UG & PG programs (*institutions to achieve target of 60% of eligible UG & PG programmes accredited - appliedfor within 2 years of joining the Project*)	<u>For CSE and ECE Programs:</u> • Fee for Accreditation has been paid. • SAR is submitted in Oct 2015 • Faculty positions will be filled soon by promotion and transfer • Applications are invited to appoint Professors. • For increasing the built up area, construction is progressing under NABARD scheme, construction of second floor of main building with institution fund is finished and the building with PTA fund is also competed. (***Source of evidence: Institution Response and physical verification***)
B. **Effectiveness of Pedagogy Training, including**	Pedagogy training has proved to be very effective for all the Faculty Members, particularly for about 10-15% of the Faculty Members who score less in the students evaluation. For those few Faculty Members, effectiveness in teaching improves by more than 50% after attending the pedagogy training courses. (***Source of evidence: Meetings of UG and PG students, and Faculty Members with the Performance Auditor***)
• Percentage of students satisfied with the quality of teachers and changes/developments specifically undertaken as a result of student evaluations	During the meeting between the Performance Auditor and the students, almost all the students (100%) agreed to the fact that the performance of the Faculty Members improve after attending the pedagogy training courses. (***Source of evidence: Meetings of UG and PG students, and Faculty Members with the Performance Auditor***)
OVERALL EVALUATION GRADE FOR 1.3 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	**1**

PERFORMANCE AUDIT FORM (2.1)
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

2.1: CAPACITY BUILDING TO STRENGTHEN MANAGEMENT

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. Implementation of academic and non-academic reforms, including:	
▪ Improved understanding of the need and ways for increased autonomy, and new instruments for accountability	The faculty and staff are aware about the added responsibility of autonomy. Most of them are involved in different committees formed for obtaining autonomy and accreditation. They are keen to accept and run the autonomy effectively and efficiently. An Academic System Software exists for monitoring, transparency All the stakeholders are given username so that they can verify the data. A dedicated server is maintained for it. *(Source of Evidence: Institute website and meetings of UG and PG students, and Faculty Members with the Performance Auditor)*
▪ Modernization and decentralisation of administration and financial management	1. Computerization and automation of the office is done. The accounting of the revenue and expenditure is automated using Tally software that goes through a three level verification, the last being done at the Headquarters of the IHRD, the parent organization. 2. The collection of fees is facilitated through SBI collect internet banking scheme. 3. The academic administration is made online using a dedicated server, with log in facility for all students, parents and teachers, which adds to the transparency of the academic activities. 4. IHRD, being an autonomous organization, the Principal is endowed with the purchasing power of Rs.100000.00 . Under TEQIP, he is authorized to procure goods

	worth 50 lakh rupees. *(Source of Evidence: Office Orders from the Principal of 20th Jan 2014 and 23rd April 2014; Circular from the Director, IHRD dated 3rd December 2012).*
▪ Extent of delegation of administrative and financial decision making powers to senior functionaries	The heads of Departments are delegated to procure goods worth one lakh under the TEQIP project as per the project implementation plan. But the institution and the number of faculty being small, this delegation is not resorted to. *(As per the TEQIP guidelines)*
▪ Responsiveness to stakeholders (students, faculty, staff, industry, local communities)	The stakeholders of the institution are made aware of the merits, opportunities and the outcomes of the TEQIP project and the consequential developments in the institution through meetings, bulletins etc. The complaints, if any, of students and parents are addressed through the student advisory system. *(Source of Evidence: Discussion with the Students, Faculty, Staff and the Principal)*
▪ Institutional quality assurance and enhancement strategies, including student feedback mechanisms	*Ensuring the Academic Quality.* The academic activities are bounded within the academic calendar, prepared at the beginning of the semester. It is also ensured that sufficient number of contact hours are available for each subject. *(Source of Evidence: Copy of the Academic calendar)* *Academic Information System* The progress of the students and the evaluation is made online with visibility for the management, teachers, students and parents, using a dedicated server. This ensures the accountability of teachers and the commitment of students. *(Source of Evidence: Principal's Order dated 20th Jan 2014)* *Student's feedback* The feedback of the student in every subject is collected by the respective heads of departments and deficiency in teaching, if any, are discussed with the respective teachers and the defects are rectified. *(Source of Evidence: Discussion with the Students and the Faculty)* *Involvement of PTA* Both class PTA and the general PTA meetings are used to ensure and enhance the quality of education. Also, the PTA stives to engage more students in remedial sessions. *(Source of Evidence: Discussion with the Students and the Faculty)*

▪ Maintenance of academic and non-academic infrastructure and facilities, including sufficiency and quality of academic buildings	The buildings are constructed by the state Public Works Department. The academic buildings are constructed following the standards laid out by the AICTE. The maintenance is done by the IHRD with the help of PWD. The maintenance of the instruments, purchased under TEQIP, is done by the respective departments with the help of supporting staff. The maintenance or repairs outside the project duration and or warranty period will be undertaken by the institute. *(Source of Evidence: Discussion with the Principal and the Faculty and the physical verification of related registers)*
▪ Development, maintain and utilisation of institutional resources	Registers are kept in labs in which entries are made by users of the resources. The maintenance and upkeep is the responsibility of the technical supporting staff, who are given sufficient training. *(Source of Evidence: Discussion with the Principal and the physical verification)*
▪ Generation, retention and utilization of Income Revenue Generation.	The tuition fees, collected in the institution, are kept with the institution to meet the establishment expenses. Two percent of the recurring expenditure is deposited with the four TEQIP funds. *(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and the physical verification)*
OVERALL EVALUATION GRADE FOR 2.1 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	**1**

PERFORMANCE AUDIT FORM (2.1.1)
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT
2.1: CAPACITY BUILDING TO STRENGTHEN MANAGEMENT (Continued)

2.1.1: IMPLEMENTATION OF GOOD GOVERNANCE
(See Also Annex 4 of the Good Governance Guide for Governing Bodies for examples of supporting evidence)

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)	
A. PRIMARY ACCOUNTABILITIES		**GRADE**
• **Has the Governing Body approved the institutional strategic vision, mission and plan – identifying a clear development path for the institution through its long-term business plans and annual budgets?** *(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)*	IDP, including strategic vision, mission and plan – identifying a clear development path for the institution through its long-term business plans and long term budgets, has been approved by the BOG in its first meeting held on 22nd June 2013. (***Source of evidence:*** http://www.ceknpy.ac.in/img/teqip/tevents.html	
• **Has the Governing Body ensured the establishment and monitoring of proper, effective and efficient systems of control and accountability to ensure financial sustainability?** *(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)*	Institute Development Plan (IDP) ensures the establishment and monitoring of proper, effective and efficient systems of control and accountability to ensure financial sustainability. This is clearly mentioned in the 4.14 section of the IDP titled : Action plan for sustainability project. This has been approved by the BOG in its first meeting held on 22nd June 2013. **(Source of evidence: IDP and the Institute website:** http://www.ceknpy.ac.in/img/teqip/tevents.html)	
▪ **Is the Governing Body monitoring institutional performance and quality assurance arrangements?**	During the last three years, a total number of 8 BOG meetings were held at an interval of four months. In each of these BOG meetings, all the academic and	

(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)	Departmental activities are discussed. The dates of the BOG meetings are the following: 1st Meeting: 22nd June 2013 2nd Meeting: 30th Oct 2013 3rd Meeting: 18th Dec 2013 4th Meeting: 27th May 2014 5th Meeting: 16th Dec 2014 6th Meeting: 4th May 2015 7th Meeting: 16th Nov 2015 8th Meeting: 12th April 2016 *(Source of Evidence: Minutes of the BOG meetings from 2013 to 2016)*
▪ **Has the Governing Body put in place suitable arrangements for monitoring the head of the institution's performance?** *(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)*	As it is no concrete arrangement has been made for monitoring the performance of the Head of the Institution. However, while discussing and evaluating the overall academic and Departmental activities, the performance of the Head of the Institute is reflected in it. The BOG is planning to form separate committees to evaluate the performance of various activities in point scale. *(Source of Evidence: Discussion with the Principal and the Minutes of the BOG meetings from 2013 to 2016)*

EVALUATION GRADE FOR PRIMARY ACCOUNTABILITIES USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) FOR ALL GOVERNNANCE SECTIONS	**1**

B. OPENNESS & TRANSPARANCY IN THE OPERATION OF GOVERNING BODIES		
• **Does the Governing Body publish an annual report on institutional performance?** *(Give the publication date and type of publication of the most recent annual report, if there is one)*	NO	
• **Does the Governing Body maintain, and publicly disclose, a register of interests of members of its governing body?** *(Given that a formal register is not yet normal practice in colleges, provide evidence of any published information on governing body members' financial and commercial interests)*	All the minutes of the BOG meetings are uploaded onto the Institute website reflecting the information on governing body members' financial and commercial interests. **(Source of evidence: IDP and the Institute website:** http://www.ceknpy.ac.in/img/teqip/tevents.html)	
▪ **Is the Governing Body conducted in an open a manner, and does it provide as much information as possible to students, faculty, the general public and potential employers on all aspects of institutional activity related to academic performance, finance and management?** *(Say whether the governing minutes are published on the institution website, and note any other steps that the governing body takes to communicate with its stakeholders on its work as a Board)*	All the minutes of the BOG meetings are uploaded onto the Institute website. Major decisions concerning the Faculty, Students and Staff are notified to the concerned bodies informally which are also communicated to the PTA executive meetings held quarterly. **(Source of evidence: IDP and the Institute website:** http://www.ceknpy.ac.in/img/teqip/tevents.html)	
GRADE FOR OPENNESS & TRANSPARENCY IN THE OPERATION OF GOVERNING BODIES		**1**
C. KEY ATTRIBUTES OF GOVERNING BODIES		
▪ **Are the size, skills, competences and experiences of the Governing Body, such that it is able to carry out its primary accountabilities effectively and efficiently, and ensure the confidence of its stakeholders and constituents?** *(Specify the range of skills and experience that the members of the governing body, and especially the external members, have)*	BoG has been constituted as per the guidelines of regulating bodies by the Government from the panel suggested by the Institute. The BoG members are as follows: 1. Prof .V.P.N Nampoori,(Chairman), Professor of Emeritus, International School of Photonics, CUSAT, Internationally recognised in Photonics, More than 40 years of experience in teaching, research and administration. 2. Dr. Suresh Kumar.P, (Member), Director, IHRD, Twenty Seven years	

of experience in teaching, research and administration

3. Dr. V P Devassia, (Member), Additional Director IHRD, Thirty years of experience in industry, teaching, research and administration
4. Dr. Sam Thomas, Professor, School of Management Studies, CUSAT (Member, University Nominee), Twenty years of teaching, research in Management
5. Mr. M Sherif, Additional Secretary., Higher Education, Government of Kerala (State Govt Nominee)
6. Mr. James Joseph, Joint. Secretary. Finance, Government of Kerala (State Govt Nominee)
7. Dr. Hari V S, Principal, Member Secretary, Twenty One years of experience in teaching, research and administration
8. Dr. AjilKumar.A, HOD, ME, Institutional Member, Twenty Two years of experience in teaching, research and administration
9. Prof. Manoj Ray D, HOD CS, Institutional Member, Twenty One years of experience in teaching, research and administration

The size, skills and experiences of BoG is such that it is able to carry out its accountabilities effectively and efficiently. The members actively participate in all the meetings and give proper advices and suggestions.

(Source of Evidence: Government order posting BoG members and their experience which are uploaded on to the institute web site.)

▪ **Are the recruitment processes and procedures for governing body members rigorous and transparent?** *(Specify how governing body members are selected, and whether that process is transparent)*	Names are suggested by the Institute and pass on to the State Government through the Director, IHRD. Final list of BOG is finalised by the Government Order. *(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and the physical verification of IHRD letters)*
▪ **Does the Governing Body have actively involved independent members and is the institution free from direct political interference to ensure academic freedom and focus on long term educational objectives?** *(Give examples, where possible, of the role of external*	It is free from all political interferences. BOG members from the state government were instrumental in obtaining sanctions from the central ministries for the foreign delegates for the international conference held in the institute on 8th and 9th July 2016. *(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator)*

members in improving the performance of the institution)	
▪ **Are the role and responsibilities of the Chair of the institution and the Member Secretary serving the governing body clearly stated?** *(If yes, specify the document where these roles are defined)*	Yes. As per the guidelines of the NPIU. *(Source of Evidence: NPIU guidelines)*
▪ **Does the Governing Body meet regularly? Is there clear evidence that members of the governing body attend regularly and participate actively?** (State the number of meetings in the last year, and the average number of those Board members present and those members absent at those meetings)	Yes. It meets every four months. Three BOG meetings were held last year, during 2015-16. On an average, there are 9 members are present and one member is absent. *(Source of Evidence: Physical verification of the Minutes of the BOG meetings)*
GRADE FOR KEY ATTRIBUTES OF GOVERNING BODIES	**1**
D. EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES	
▪ **Does the Governing Body keep their effectiveness under regular review and in reviewing its performance, reflect on the performance of the institution as a whole in meeting its long-term strategic objectives and its short-term indicators of performance/success?** *(If yes, give the date(s) of governing body meetings where the minutes show that such a review has been discussed)*	In each BOG meeting (dates are specified in section 2.1.1 A) a self appraisal of the performance of the Governing Body is held. In 3rd BOG meeting, particularly, the assessment was made in a scale of 1,2,3. *(Source of Evidence: Physical verification of the Minutes of the BOG meetings)*
▪ **Does the Governing Body ensure that new members are properly inducted, and existing members receive opportunities for further development as deemed necessary?** *(If yes, give examples of how these two tasks are carried out)*	Yes. A new member from the industry was proposed by the existing BOG. *(Source of Evidence: Physical verification of the Minutes of the BOG meetings)*
GRADE FOR EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES	**1**
E. REGULATORY COMPLIANCE	

▪ **Does the Governing ensure regulatory compliance*** **and, subject to this, take all final decisions on fundamental matters of the institution.** *(If yes, give the date(s) of governing body meetings where the minutes show that regulatory compliance has been discussed)*	Yes. It is discussed in all the BOG meetings: 1st Meeting: 22nd June 2013 2nd Meeting: 30th Oct 2013 3rd Meeting: 18th Dec 2013 4th Meeting: 27th May 2014 5th Meeting: 16th Dec 2014 6th Meeting: 4th May 2015 7th Meeting: 16th Nov 2015 8th Meeting: 12th April 2016 *(Source of Evidence: Minutes of the BOG meetings from 2013 to 2016)*
▪ **Does the regulatory compliance include demonstrating compliance with the 'not-for-profit' purpose of education institutions?** *(If yes, give evidence that the governing body has been directly involved)*	The Institute is Registered as a non-profit organisation. *(Source of Evidence: Minutes of the BOG meetings from 2013 to 2016)*
▪ **Has there been accreditation and/or external quality assurance by a national or professional body? If so, give name, current status of accreditation etc** *(Provide lists of all courses which have already been accredited, all courses where an application has been made, and all courses where no such application has yet been made)*	NO. *(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator)*
GRADE FOR REGULATORY COMPLIANCE	**1**
OVERALL EVALUATION GRADE FOR GOVERNANCE 2.1.1 A-E USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	**1**

PERFORMANCE AUDIT FORM (2.2)
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

TABLE 2.2: PROJECT MANAGEMENT, MONITORING AND EVALUATION

MONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (NOTE: GRADES MUST BE SUPPORTED BY SOUND EVIDENCE OF ACHIEVEMENT OF THE INSTITUTIONAL DEVELOPMENT PROPOSAL GOALS AND TARGETS)
A. **Effectiveness of mentoring, reviews, surveys and audits conducted, including:** ▪ Increase in the achievement of the institutions goals and targets set out in the Institutional Development Proposal	• Objectives of establishment and development of laboratories are achieved within the limited resources of TEQIP-II funding. Target set for international journal publications is partially achieved. • Research proposals have been submitted amounting Rs181.12 lakhs for external funding. • Placement rate has been slightly improved. • Targets of programmes with industries have been achieved to an extent. • Transition rate of students from first year to second year is improved. • Target of faculty with M Tech qualification is achieved. However, the shortage of regular faculty still continues. *(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and physical verification)*

B. **Effective project management and monitoring, including:** ▪ Precise and reliable information/ data through web based MIS available to stakeholders at all time	• Web based Academic System Software has been developed. All the stakeholders are given username so that they can verify the data. • Financial operation is done through standalone MIS. • All the data regarding TEQIP is published in the Institute web site *(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and physical verification)*
C. **Effectiveness of faculty evaluation by students, including:** ▪ Percentage/ increase in percentage of faculty evaluated by students in one or more subjects ▪ Are results of evaluation properly used for teacher improvement? **If yes, is the procedure adopted for teacher improvement including counseling appropriate and effective?**	Faculty evaluation is done by students for each subject each semester. The feedback is analysed and the concerned faculty member is made aware about deficiencies and counselled by the HOD and Principal for improvement. Further improvement in teaching is done through the subject domain training or seminars attended by the concerned Faculty Member(s). *(Source of Evidence: Discussion with the Principal and the TEQIP Coordinator and physical verification)*
OVERALL EVALUATION GRADE FOR 2.2 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	**2**

DATA AUDIT FORMS

NAME OF THE DATA AUDITOR: Dr.Smitha Dharan

DATES OF DATA AUDIT: 3rd August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

DATA AUDIT FORM (1)

No.	Particulars	Value	Institutional Source of Data
1.	*Information in respect to Bachelors programs in engineering/technology*		
	(a) Number of UG programs conducted during the following academic year		
	(i) 2011 – 12	4	
	(ii) 2012 – 13	4	
	(iii) 2013 – 14	4	AICTE recognition letter
	(iv) 2014-2015	4	
	(v) 2015-2016	3	
	(b) Total number of UG students during the following academic year		
	• 2011 – 12	548	
	• 2012 – 13	606	
	• 2013 – 14	646	College Admission Register in Academic Section (AS)
	• 2014-15	675	
	• 2015-16	592	
	(c) Total number of women students in UG programs during the following academic year		
	(i) 2011 – 12	332	
	(ii) 2012 – 13	283	
	(iii) 2013 – 14	360	College Admission Register Academic Section
	(iv) 2014-15	383	
	(v) 2015-16	322	
	(d) Total number of SC students in UG programs during the following academic		
	(i) 2011 – 12	29	
	(ii) 2012 – 13	32	
	(iii) 2013 – 14	43	College Admission Register in AS
	(iv) 2014-15	39	
	(v) 2015-16	36	

(e) Total number of ST students in UG programs during the following academic year		College Admission Register in AS
(i) 2011-12	2	
(ii) 2012 – 13	2	
(iii) 2013 – 14	1	
(iv) 2014-15	1	
(v) 2015-16	0	
(f) Total number of OBC students in UG programs during the following academic year		Admission Register in AS
(i) 2011 – 12	257	
(ii) 2012 – 13	281	
(iii) 2013 – 14	355	
(iv) 2014-15	378	
(v) 2015-16	299	
(g) Percentage of final year UG students during the following academic years placed through campus interviews		Copy of offer letter conveyed though e-mail
(i) 2011 - 12	Nil	
(ii) 2012 - 13	5.08% (6/118)	
(iii) 2013 - 14	7.69% (9/117)	
(iv) 2014-15	16.6%	
(v) 2015-16	17.5%	
(h) Percentage of final year UG students during the following academic years that passed out with75% or more aggregate marks		Result file from college office (AS)
(i) 2011 - 12	19.35% (24/124)	
(ii) 2012 - 13	18.33% (22/120)	
(iii) 2013 - 14	13.67% (16/117)	
(iv) 2014-15	14.63%(18/123)	
(v) 2015-16	17% (32/188)	
(i)(i) Percentage of all 1st year students [as at 1(b)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2nd year in the 2012-13 academic year	38.55% (69/179)	Result file from college office(AS)

(ii) Percentage of <u>all</u> 1st year students [as at 1(b)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2nd year in the 2013-14 academic year	34.46% (61/177)	
(iii) Percentage of <u>all</u> 1st year students [as at 1(b)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2nd year in the 2014-15 academic year	34.5%	
(iv) Percentage of <u>all</u> 1st year students [as at 1(b)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2nd year in the 2015-16 academic year	54.5%	
(j)(i) Percentage of 1st year women students [as at 1(c)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2nd year in the 2012-13 academic year	42.86% (48/112)	Result file from office(AS)
(j)(ii)Percentage of 1st year women students [as at 1(c)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2nd year in the 2013-14 academic year	43.33% (39/90)	
(j)(iii)Percentage of 1st year women students [as at 1(c)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2nd year in the 2014-15 academic year	40.79%(31/76)	
(j)(iv)Percentage of 1st year women students [as at 1(c)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2nd year in the 2015-16 academic year	63.38%(45/71)	
(k)(i) Percentage of 1st year SC students [as at 1(d)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2nd year in the 2012-13	10% (1/10)	Result file from office(AS)
(k)(ii) Percentage of 1st year SC students [as at 1(d)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2nd year in the 2013-14	0 /10	
(k)(iii) Percentage of 1st year SC students [as at 1(d)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2nd year in the 2014-15	0	
(k)(iv) Percentage of 1st year SC students [as at 1(d)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2nd year in the 2015-16	20%	
(l)(i)Percentage of 1st year ST students [as at 1(e)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2nd year in the 2012-13 academic year	0/1	Result file from office(AS)

	(l) (ii)Percentage of 1st year ST students [as at 1(e)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2nd year in the 2013-14 academic year	NA	
	(l) (iii)Percentage of 1st year ST students [as at 1(e)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2nd year in the 2014-15 academic year	NA	
	(l) (iv)Percentage of 1st year ST students [as at 1(e)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2nd year in the 2015-16 academic year	NA	
	(m) (i)Percentage of 1st year OBC students [as at 1(f)(i)] during 2011-12 that passed all courses fully and successfully got admitted to 2nd year in the 2012-13	35.9% (37/103)	
	(m) (ii)Percentage of 1st year OBC students [as at 1(f)(ii)] during 2012-13 that passed all courses fully and successfully got admitted to 2nd year in the 2013-14	37.36% (34/91)	Result file from office(AS)
	(m) (iii)Percentage of 1st year OBC students [as at 1(f)(ii)] during 2013-14 that passed all courses fully and successfully got admitted to 2nd year in the 2014-15	36.4(28/77)	
	(m) (iv)Percentage of 1st year OBC students [as at 1(f)(ii)] during 2014-15 that passed all courses fully and successfully got admitted to 2nd year in the 2015-16	50.7%	

DATA AUDIT FORM (2)

2.	*Information in respect to Masters programs in engineering/technology*		
	(a) Number of full-time Masters programs during the following academic year		
	(i) 2011-12	1	
	(ii) 2012 – 13	2	
	(iii) 2013 - 14	2	AICTE Recognition letter
	(iv) 2014-15	2	
	(v) 2015-16	2	
	(b) Number of part-time and sandwich (Joint) Masters programs during the following academic year		NA
	(i) 2011-12	0	

(ii)	2012 – 13		0	
(iii)	2013 - 14		0	
(iv)	2014-15		0	
(v)	2015-16		0	
(c) Total number of students enrolled for all Masters programs during the following academic year				
(i)	2011-12		18	
(ii)	2012 – 13		66	College Admission Register in AS
(iii)	2013 - 14		96	
(iv)	2014-15		96	
(v)	2015-16		78	

(d) Number of faculty in-house enrolled for Masters programs during Following academic year				
(i)	2011-12		Nil	
(ii)	2012 – 13		Nil	
(iii)	2013 - 14		Nil	
(iv)	2014-15		Nil	
(v)	2015-16		Nil	
(e) Number of students enrolled for all Masters programs during the following academic year with scholarship				
(i)	2011-12		13	
(ii)	2012 – 13		12	
(iii)	2013 – 14		17	Gate score card Inf from AICTE portal
(iv)	2014-15		3	
(v)	2015-16		4	
(f) Number of students enrolled for all Masters programs during the following academic year with TEQIP assistantship				

(i)	2011-12	Nil	
(ii)	2012 – 13	Nil	
(iii)	2013 – 14	46	
(iv)	2014-15	62	TEQIP file No: T/13/CEK/TRA
(v)	2015-16	63	
(g) Total number of women students in all Masters programs during the following academic year			
(i)	2011-12	15	
(ii)	2012 – 13	58	
(iii)	2013 – 14	88	College Admission Register in AS
(iv)	2014-15	88	
(v)	2015-16	69	
(h) Total number of SC students in all Masters programs during the following academic year			
(i)	2011-12	1	
(ii)	2012 – 13	6	College Admission Register in AS
(iii)	2013 – 14	9	
(iv)	2014-15	7	
(v)	2015-16	4	
(i) Total number of ST students in all Masters programs during the following academic year			College Admission Register in AS
(i)	2011-12	0	

(ii)	2012 – 13	0	
(iii)	2013 – 14	0	
(iv)	2014-15	0	
(v)	2015-16	0	
(j) Total number of OBC students in all Masters programs during the following academic year			College Admission Register in AS
(i)	2011-12	9	
(ii)	2012 – 13	34	
(iii)	2013 – 14	61	
(iv)	2014-15	67	
(v)	2015-16	46	
(k) Percentage of final year Masters students during the following academic year placed through campus interviews			Copy of offer letter
(i)	2011-12	NA	
(ii)	2012 – 13	Nil	
(iii)	2013 – 14	Nil	
(iv)	2014-15	10.87%	
(v)	2015-16	14.70%	
(l) Percentage of final year Masters students during the following that passed out with 75% or more aggregate marks			
(i)	2011-12	NA	
(ii)	2012 – 13	NA	
(iii)	2013 – 14	94.4% (17/18)	
(iv)	2014-15	63.04%(29/46)	Result File from College office in AS
(v)	2015-16	67.4%	

3.	***Information in respect to Doctoral programs***		
	(a)(i) Number of Doctoral candidates on roll up to March 31, 2011	Nil	NA
	(ii) Number of Doctoral candidates on roll up to March 31, 2012	Nil	
	(iii).Number of Doctoral candidates on roll up to March 31, 2013	Nil	
	(iv).Number of Doctoral candidates on roll up to March 31, 2014	Nil	
	(v).Number of Doctoral candidates on roll up to March 31, 2015	Nil	
	(vi).Number of Doctoral candidates on roll up to March 31, 2016	Nil	
	(b) Number of in-house faculty enrolled for Doctoral programs during the following academic year		
	(i) 2011-12	Nil	NA
	(ii) 2012 – 13	Nil	
	(iii) 2013 – 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(c) Number of students enrolled for Doctoral programs during the following academic year with scholarship(other than TEQIP)		
	(i) 2011-12	Nil	NA
	(ii) 2012 – 13	Nil	
	(iii) 2013 – 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(d) Number of students enrolled for Doctoral programs during the following academic year with TEQIP assistantship		
	(i) 2011-12	Nil	
	(ii) 2012 – 13	Nil	

	(iii)	2013 – 14	Nil	NA
	(iv)	2014-15	Nil	
	(v)	2015-16	Nil	

DATA AUDIT FORM (4)

4.	*Information in respect to Faculty*		
	(a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during the following academic year		
	(i) 2011-12	27	Copy of Attendance Register
	(ii) 2012 – 13	28	
	(iii) 2013 – 14	33	
	(iv) 2014-15	33	
	(v) 2015-16	32	
	(b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during the following academic year		
	(i) 2011-12	22	Copy of Attendance Register
	(ii) 2012 – 13	23	
	(iii) 2013 – 14	28	
	(iv) 2014-15	28	
	(v) 2015-16	27	
	(c) Number of regular full-time faculty in engineering disciplines with Masters degree as their highest qualification excluding adjunct and emeritus faculty during the following academic year		
	(i) 2011-12	14	List of staff with qualification attested by Principal
	(ii) 2012 – 13	17	
	(iii) 2013 – 14	21	

(iv)	2014-15	21	
(v)	2015-16	21	
(d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during the following academic year		3	
(i)	2011-12	1	
(ii)	2012 – 13	1	List of staff with qualification attested by Principal
(iii)	2013 – 14	3	
(iv)	2014-15	3	
(v)	2015-16	3	
(e) Number of regular full-time faculty in engineering disciplines with Bachelors degree as their highest qualification faculty during the following academic year			
(i)	2011-12	7	
(ii)	2012 – 13	5	
(iii)	2013 – 14	4	
(iv)	2014-15	4	List of staff with qualification attested by Principal
(v)	2015-16	3	

(f) (i) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2011-12:
  (i) Engineering teachers:
  (ii) Applied Science teachers:
  (iii) Other teachers:
		Nil
		NA
			--------------------------------- 	

(f) (ii)Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2012-13:
   (i) Engineering teachers:
   (ii) Applied Science teachers:
  (iii) Other teachers:
	Nil
	NA
		--------------------------------- 	

(f) (iii) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2013-14:
   (i) Engineering teachers:
   (ii) Applied Science teachers:
  (iii) Other teachers:
	Nil
	NA
		--------------------------------- 	

(f) (iv) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2014-15:
   (i) Engineering teachers:
   (ii) Applied Science teachers:
  (iii) Other teachers:
	Nil
	NA
		--------------------------------- 	

(f) (v) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs in parent institution during academic year 2015-16:
   (i) Engineering teachers:
   (ii) Applied Science teachers:
  (iii) Other teachers:
	Nil
	NA
		--------------------------------- 	

(g) (i) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2011-12: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	2 NA	Certifcates

(ii) Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2012-13:
(i)   Engineering teachers:
   • Applied Science teachers:
  (iii) Other teachers:
	Nil
	NA
		--------------------------------- 	

(iii)Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2013-14: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	1 NA	Order deputing to MTech

(iv)Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2014-15: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	2 NA	Order deputing to MTech
(v)Number of faculty with Bachelors degree which are enrolled in-house for Masters programs at other institutions during academic year 2015-16: (i) Engineering teachers: (ii). Applied Science teachers: (iii) Other teachers:	3 NA	Order deputing to MTech
(h) (i)Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2011-12: (i) Engineering teachers: (ii) Applied Science teachers: (iii) Other teachers:	Nil NA	---------------------------------
(ii)Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2012-13: (i) Engineering teachers: (ii).Applied Science teachers: (iii) Other teachers:	Nil NA	---------------------------------

(iii) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2013-14:
(i)   Engineering teachers:
  (ii).Applied Science teachers:
  (iii) Other teachers
	Nil
	NA
		--------------------------------- 	

(iv) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2014-15:
(i)   Engineering teachers:
  (ii).Applied Science teachers:
  (iii) Other teachers
	Nil
	NA
		--------------------------------- 	

(v) Number of faculty with Masters degree which are enrolled in-house for PhD programs in parent institution during academic year 2015-16:
(i)   Engineering teachers:
  (ii).Applied Science teachers:
  (iii) Other teachers
	Nil
	NA
		--------------------------------- 	

(i) (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2011-12: (i)　　Engineering teachers: (ii)　Applied Science teachers: (iii) Other teachers:	1 NA	Fee Receipt
(ii)Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2012-13: (i)　　Engineering teachers: 　(ii).Applied Science teachers: (iii) Other teachers:	Nil NA	----------------------------------
Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2013-14: (i)　　Engineering teachers: 　(ii).Applied Science teachers: 　(iii) Other teachers:	1 NA	Order deputing to PhD
Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2014-15: (i)　　Engineering teachers: 　(ii).Applied Science teachers: 　(iii) Other teachers:	Nil NA	Nil
Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year 2015-16: (i)　　Engineering teachers: 　(ii).Applied Science teachers: 　(iii) Other teachers:	9 NA	Nil
(j) Number of faculty that have attended a professional training program of 5 or more days duration during the following academic year		
(i)　　　2011-12	4	
(ii)　　　2012 – 13	4	Copy of Certificate of participation
(iii)　　　2013 – 14	44	
(iv)　　　2014-15	34	

(v) 2015-16	56	
(k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during the following academic year		
(i) 2011-12	1	
(ii) 2012 – 13	Nil	Copy of Certificate of participation
(iii) 2013 – 14	4	
(iv) 2014-15	10	
(v) 2015-16	33	
(l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during the following academic year		
(i) 2011-12	Nil	
(ii) 2012 – 13	Nil	
(iii) 2013 - 14	Nil	---------------------------------
(iv) 2014-15	Nil	
(v) 2015-16	Nil	
(m) Number of faculty appraised by students during the following academic year		
(i) 2011-12	****	
(ii) 2012 – 13	*****	
(iii) 2013 - 14	45	Appraisal report
(iv) 2014-15	45	
(v) 2015-16	56	

5.	*Information in respect to Accreditation of Programs*		
	(a) Number of UG programs accredited for the following year		
	(i) 2011-12	Nil	--------------------------------
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(b) Number of UG programs for which accreditation applied for the following year		
	(i) 2011-12	Nil	--------------------------------
	(ii) 2012 – 13	Nil	--------------------------------
	(iii) 2013 - 14	2	Receipt for registration fee
	(iv) 2014-15	Nil	
	(v) 2015-16	2	Receipt for registration fee
	(c) Number of PG programs for the following year accredited		
	(i) 2011-12	Nil	
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	

(d) Number of PG programs for which accreditation the following year applied for				---------------------------------
(i)	2011-12		Nil	
(ii)	2012 – 13		Nil	
(iii)	2013 - 14		Nil	
(iv)	2014-15		Nil	
(v)	2015-16		Nil	

<div align="center">

DATA AUDIT FORM (6)

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6.	*Information in respect to research and patents*			
(a) Number of research publications in Indian referred journals during the following academic year				
(i)	2011-12		Nil	-------------------------------------
(ii)	2012 – 13		Nil	
(iii)	2013 - 14		Nil	
(iv)	2014-15		Nil	
(v)	2015-16		Nil	
(b) Number of research publications in International refereed journals during the following academic year				
(i)	2011-12		1	Copy of published papers

	(ii) 2012 – 13	5	
	(iii) 2013 - 14	5	
	(iv) 2014-15	9	
	(v) 2015-16	13	
(c) Number of research publications co-authored with faculty/ researchers/			
	(i) 2011-12	0	
	(ii) 2012– 13	3	Copy of published papers
	(iii) 2013 - 14	5	
	(iv) 2014-15	8	
	(v) 2015-16	6	
(d) Number of patents in engineering related areas obtained during the following academic year			
	(i) 2011-12	Nil	
	(ii) 201 – 13	Nil	
	(iii) 2013 - 14	Nil	---
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
(e) Number of patents in engineering related areas filed during the following academic year			
	(i) 2011-12	Nil	----------------------------------
	(ii) 2012 – 13	Nil	

(iii)	2013 - 14	Nil	
(iv)	2014-15	Nil	
(v)	2015-16	Nil	
(f) Number of sponsored research project completed during the following academic year			
(i)	2011-12	Nil	-------------------------------------
(ii)	2012 – 13	Nil	
(iii)	2013 - 14	Nil	
(iv)	2014-15	Nil	
(v)	2015-16	Nil	
(g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations			
(i)	2011-12	Nil	Copy of MOUs signed
(ii)	2012 – 13	Nil	
(iii)	2013 - 14	5	
(iv)	2014-15	Nil	
(v)	2015-16	1	
(h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations			

	(i) 2011-12	Nil	----------------------------------
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	

DATA AUDIT FORM (7)

7.	*Information in respect to Finances*		
	(a) Amount received as block grant during the following academic year (Rs. In Lakhs)		
	(i) 2011-12	NIL	
	(ii) 2012 – 13	Nil	
	(iii) 2013 - 14	Nil	
	(iv) 2014-15	Nil	
	(v) 2015-16	Nil	
	(b) IRG[1] from students' tuition fee and other charges during the following academic year (Rs. In Lakhs)		
	(i) 2011-12	225.08	
	(ii) 2012 – 13	313.06	Receipt and expenditure statement
	(iii) 2013 - 14	342.59	

(iv) 2014-15	398.85	
(v) 2015-16	318.72	
(c) IRG from externally funded R&D projects and consultancies during the following academic year (Rs. In Lakhs)		
(i) 2011-12	Nil	
(ii) 2012 – 13	Nil	
(iii) 2013 - 14	Nil	
(iv) 2014-15	Nil	
(v) 2015-16	Nil	
(d) Total IRG during the following academic year (Rs. in Lakhs)	Nil	
(i) 2011-12	225.08	
(ii) 2012 – 13	313.06	Receipt and expenditure statement
(iii) 2013 - 14	342.59	
(iv) 2014-15	398.85	
(v) 2015-16	318.72	
(e) Total annual recurring expenditure during the following academic year (Rs. In Lakhs)		
(i) 2011-12	250.10	
(ii) 2012 – 13	267.29	
(iii) 2013 - 14	310.19	
(iv) 2014-15	436.6	
(v) 2015-16	431.5	

(f) (i) Amount available in Corpus Fund on March 31, 2012			
(ii). Amount available in Corpus Fund on March 31, 2013			
(iii).Amount available in Corpus Fund on Feb 28, 2014	Nil		
(iv).Amount available in Corpus Fund on September 16, 2014	11,643.50		
(v).Amount available in Corpus Fund on July 28, 2016	3,84,695		
(g) (i) Amount available in Faculty Development Fund on March 31, 2012	Nil		
(ii).Amount available in Faculty Development Fund on March 31, 2013	Nil		
(iii).Amount available in Faculty Development Fund on March 31, 2014	34,070		
(iv) Amount available in Faculty Development Fund on September 16, 2014	12,217.50		
(v) Amount available in Faculty Development Fund on July, 28, 2016	3,85,321		
(h)(i) Amount available in Equipment Replacement Fund on March 31, 2012	Nil	Bank Statement	
(ii)Amount available in Equipment Replacement Fund on March 31, 2013	Nil		
(iii)Amount available in Equipment Replacement Fund on March 31, 2014			
(iv)Amount available in Equipment Replacement Fund on September 16, 2014	11,643.50		
(v)Amount available in Equipment Replacement Fund on July 28, 2016	384695		
(i) (i) Amount available in Maintenance Fund on March 31, 2012	Nil		
(ii)Amount available in Maintenance Fund on March 31, 2013	Nil		
(iii)Amount available in Maintenance Fund on March 31, 2014			
(iv)Amount available in Maintenance Fund on September 16, 2014	11,643.50		
(v)Amount available in Maintenance Fund on July 28, 2016	384695		

DATA AUDIT FORM (8)

8.	*With respect to Institutional Governance/ Management*		
8.	(a) Number of BoG meeting held during the following academic year (with minutes on the web)		
	(i) 2011-12	Nil	

(ii) 2012 – 13	Nil	
(iii) 2013 - 14	3	
(iv) 2014-15	2	
(v) 2015-16	3	
(b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training		
(i) 2011-12	Nil	
(ii) 2012 – 13	Nil	
(iii) 2013 - 14	7	
(iv) 2014-15	Nil	
(v) 2015-16	6	

[1] IRG is the total revenue of the institution in a year, whether retained or not

PERFORMANCE AND DATA AUDIT FEEDBACK
(FEEDBACK TO THE INSTITUTION, STATE PROJECT FACILITATION UNITS,
THE NATIONAL PROJECT IMPLEMENTATION UNIT/AND RELEVANT MENTOR)

NAME OF PERFORMANCE AUDITOR: Dr. SOUNAK KUMAR CHOUDHURY

DATES OF PERFORMANCE AUDIT: 6 – 8 August 2016

NAME OF INSTITUTION WITH LOCATION: College of Engineering, Karunagappaly, Kollam, Kerala

KEY POINTS FEED BACK BY THE PERFORMANCE AUDITOR TO THE INSTITUTION AT THE END OF THE VISIT - AGAINST THE SEVEN ASPECTSOF EVALUATION

- Overall, the fund received by the Institute from the TEQIP-II over the last three years has been utilised well for the development of the academic program and the overall functioning of the Institute.
- There is a shortage of Faculty as well as staff in the Institute. Hence, recruitment of the Faculty and Staff for the Institute should be planned at the earliest.
- Library facilities of the Institute should be enhanced with Library Automation in place and proper issuing of books to the students. Library should subscribe more number of e-journals.
- Students Placement should be properly taken care of with a separate cell, a dedicated personal and more contacts with the relevant industries.
- Laboratory space should be expanded and the laboratory equipment and machines should be upgraded.
- Faculty should be encouraged to take up Research, sponsored or consultancy projects. There should be more publications in the peer-reviewed International Journals.
- Overall, the Institute should introduce more B.Tech. and M.Tech. programs.

KEY IMPROVEMENTS NOTICED ON SHORTCOMINGS REPORTED DURING EARLIER PERFORMANCE AUDITS

2nd Performance audit of the College of Engineering, Karunagappaly, Kerala was performed on 16th to 18th September 2014. This is the last performance audit prior to the Final Round of Performance Audit. With respect to the 2nd Performance Audit, the following key improvements have been noticed

- 6 Regular Faculty Members were transferred from IHRD Engineering Colleges
- Transition of students from 1st year to 2nd year has been increased by 16%

- Publications by the Faculty Members in peer-reviewed International Journals have gone up from 10 to 16, which is the increase of 60%
- More Faculty Members (from 12% mentioned in the last performance audit report to 100% presently) have attended and benefitted from the Pedagogy Training courses.
- Increase in the students placement by about 3.83%

BRIEF STATEMENTS ON CONTINUING SHORTCOMINGS, AND REASONS:

Continuing shortcomings of the Institute are:
- Faculty and Staff shortage
- Space crunch
- Lack of sufficient infrastructure

While Faculty and Staff shortage is due to delay in the putting up of advertisement since it needs certain bureaucratic procedure to go through related to permission from the IHRD, space crunch and lack of infrastructure are due to shortage of funds. The Institute is heavily dependent on the fees collected from the students and a top up from the IHRD and the state government. It has been found out that in this situation, the TEQIP funding came very handy for the Institute and major developments have taken place during the last three years since the Institute was inducted to the TEQIP-II program.

RECOMMENDATIONS FOR MENTORS

It is no more applicable. However, in case it is relevant, recommendations to Mentors remain the same as mentioned above in the "Key points feedback by the performance auditor to the Institution…" paragraph.

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME-II (TEQIP-II)

INSTITUTION RESPONSE FORMS (1)
COLLEGE OF ENGINEERING KARUNAGAPPALLY
THODIYOOR P.O., KOLLAM, KERALA-690523
(To be sent from the Head of the Institution to the performance Auditor, 2 weeks before an audit visit)

	PROJECT IMPLEMENTATION	
No.	**INSTITUTIONAL MONITORING AND PROJECT OUTPUT/OUTCOMES**	**RESPONSES**
1.1	Briefly describe the actions taken for obtaining Autonomous Institution status, and the status of your applications as made.	1. Applied to the University (CUSAT) for forwarding the application to the UGC for autonomous status 2. University has forwarded the application to UGC and is under process at UGC. 3. Applied for accreditation for two UG programmes in Electronics & Communication and Computer Science and Engineering. 4. SAR is uploaded in October 2015
1.2	If your institution is already an Autonomous Institution, briefly state actions taken for the following:	Institution is financially autonomous and partially academic autonomous.
	1. Value addition to courses as per market demand	B.Tech Curriculum is framed by CUSAT and Kerala Technological University (KTU) and revised in every four years as per market demand. Last revision was in 2012 and 2016 in CUSAT and KTU respectively. For M.Tech, since the syllabus is prepared cluster wise the institution has a major role in the syllabus revision
	2. Improvements introduced in student evaluation	Staff Advisor system and peer group are in place. 2 series tests per semester, additional class test papers. Continuous evaluation in Labs.
	3. Addition of electives	Freedom to choose electives

		4. Carrying out teacher evaluation by students	Teacher evaluation conducted regularly
		5. Starting of new PG programs, as planned	Since the existing courses are not accredited, AICTE do not accept proposal for new programmes. Other formalities including the permission from the Director of IHRD has been obtained to start two new PG programmes as planned.
		6. For enhancing qualification, deputing to other institutions and/or admitting within the institution those teachers that have a Bachelors degree only	In the beginning of the project 4 faculty were there with BTech degree. Now, three of them completed MTech and joined the institution and one more is deputed for PG last year. Within the institute, one seat in each PG Programme is reserved for faculty from IHRD Institutions
		7. Conducting continuing education and/or skill enhancement programs for industry	Nil
		8. Inviting experts from industry and eminent institutions for special lectures	Already 15 programs were conducted and more is planned.
1.3	The amount of financial powers assigned / delegated to the following. If no delegations has been done so far, state the proposed action for each level with the corresponding timeline:		Yes
		1. Governing Body	Above 50 Lakhs
		2. Head of Institution for: (a) single purchase of equipment, and (b) recurrent expenditure	50 Lakhs
		3. Dean	As per existing staff pattern, no post of Dean at College of Engineering Karunagappally
		4. Heads of Department	1 Lakh

1.4	Progress in starting new PG programs, as proposed	Since the existing courses are not accredited, AICTE do not accept proposal for new programmes. Other formalities including the permission from the Director of IHRD has been obtained to start two new PG programmes, MTech in Embedded Systems and VLSI Design and Computer Information Science as planned.
1.5	Actions taken to fill up seats in the existing PG programs	1. The allotment of students to the MTech programmes is done by the Director of Technical Education through a centralised allotment process. If any seat is vacant after the final allotment, spot admission is done by the institution to fill up the vacancy. 2. Assistantship for an amount Rs 8000 per month is given to non GATE students
1.6	Actions taken to reduce vacancies in faculty positions	1. Contract Faculty are appointed against the vacancies. 2. Transfer from other IHRD Engg Colleges has been affected. Seven faculty members (One Associate Professor and six Assistant Professors) were transferred to CE Karunagappally during the project period. 3. Applications were invited to appoint Professors.
1.7	Status of faculty appointed on regular basis, and proposed actions to fill up all faculty positions on regular basis	Number of regular faculty: 33 Proposed Action plan to fill up faculty positions: 3. It has been decided in the Principals' meeting of IHRD to recruit new regular faculty members in the cadre of Assistant Professors after getting permission from Govt. 4. Through general transfer from various IHRD Engineering Colleges. 5. Applications were invited to appoint Professors.

1.8	Progress in getting pedagogical training in both the modules	It was informed that the institute does not have to organize pedagogical training as the SPFU will organize the same. The SPFU in collaboration with IIT Madras organise pedagogical training on a regular basis. Almost 100% of faculty including guest faculty attended such training at IIT Madras.
1.9	New Activities (since project start or the last performance audit) undertaken for enhancing interaction with industry	• Signed MoU with 6 companies • Conducted **2** short term programs for staff and **2** for students • Conducted 15 expert lectures • 17 Expert tutoring • 21 Industrial visits • 190 students undergone Internship
1.10	Generation, retention and utilization of the non-tuition fee revenue generated through various activities	**Generation**: Through FDPs, workshops, seminars, conferences etc. An amount of Rs. 15,39,406 has been generated so far. **Retention**: The amount is retained within the institute **Utilization**: The amount shall be utilized after the project period
2.1	Progress in instituting practice of teacher evaluation by students	Two teacher evaluations per semester are being conducted.
2.2	Current percentage of teachers evaluated by students in one subjects taught	100
2.3	Current percentage of teachers evaluated by students in more than one subjects taught	100
2.4	State the incentives being offered to the faulty for participation in consultancy assignments, R&D, and continuing education programs conducted by the institution for industry	Seed money for 8 project proposals have been given to faculty members and they have submitted final proposals for a total amount of Rs170 lakhs to various funding agencies. Since the proposals are under processing and no funding has been sanctioned yet, no incentives being offered.

3.1	Are the 4 funds established?	Yes.
3.2	If yes, what is the amount in each fund?	The amount received is deposited equally in all the four funds Maintenance fund: Rs.3,84,695.50 Corpus fund: Rs.3,84,695.50 Faculty Development Fund: Rs.3,85,321.50 Equipment replacement fund: Rs. 3,84,695.50
3.3	Is the contribution to each fund as per the requirement in the PIP?	Yes.
3.4	State the quantum of financial powers delegated to: (a) Governing Body; (b) Head of Institution; (c) Deans, and (d) Heads of Departments	A) Governing Body: Above 50 Lakhs B) Head of the Institution: Up to 50 Lakhs C) Dean: As per existing staff pattern, no post of Dean at CE Karunagappally. D) HoD: 1 Lakh
3.5	If less than those recommended in the PIP, state the reasons for the shortfall, and actions planned to comply with the project recommendations.	NA
4.1	Number of ongoing sponsored projects from industry	Seed money for 8 project proposals have been given to faculty members and they have submitted final proposals for a total amount of Rs181.12 lakhs to various funding agencies.
4.2	Number of industry awarded consultancy assignments completed	NIL
4.3	Number of ongoing industry awarded consultancy assignments	NIL
4.4	Number of organizations and industries with whom MOUs have been signed for joint R&D	6 MoUs.
5.1	List the UG programs accredited on date by name	Two eligible UG programmes applied for accreditation.

5.2	• State program-wise action taken to get accredited the eligible UG program that are yet to be accredited.	For CSE and ECE Programs: • Fee for Accreditation has been paid. • SAR is submitted in Oct 2015 • Faculty positions will be filled soon by promotion and transfer • Applications are invited to appoint Professors. • For increasing the built up area, construction is progressing under NABARD scheme, construction of second floor of main building with institution fund is finished and the building with PTA fund is also competed.
	• Describe difficulties faced, if any.	• Shortage of Professor/Associate Professor/Assistant Professor. The vacancies will be filled shortly.
5.3	List the PG programs accredited on date by name	The two PG programmes are eligible PG for accreditation.
5.4	• State program-wise action taken to get accredited the eligible PG program that are yet to be accredited.	For Image Processing and Signal Processing Programs • Fee for Accreditation will be paid in the month of Aug 2016 • SAR will be submitted in Sept 2016 • Senior Faculty positions will be filled soon by promotion and transfer
	• Describe difficulties faced, if any.	Few new posts are not created in staff pattern
6.1	Give the number of papers published in national refereed journals from the date of joining the Project.	Nil
6.2	Give the number of papers published in Foreign refereed journals from the date of joining the Project.	32
6.3	• Number of patents filed since joining the Project • List the titles of patents filed since joining the Project along with names of contributors.	Nil
6.4	• Number of patents obtained since joining the Project • List the titles of the patents obtained since joining the Project along with the names of contributors	Nil

7.1	Actions being taken for identifying weak students	- Diagnostic test is conducted for identifying weak students in the first year. Bridge classes are conducted for those students whose performance in diagnostic test is poor. - For supplementary examination, the students those who were failed in their University examination have been identified - Students who scored less than 50% marks in their first series test have been identified and remedial classes are conducted for those students in the related subjects.
7.2	Number of students that have benefited from remedial teaching since joining the Project	516 General Category Students , 45 SC Students
7.3	Number of students that have benefited from specialized soft skills and professional skills training programs conducted since joining the Project	872 (19 programmes)
7.4	Status of establishment and functioning of Finishing School	Finishing school has been established and conducted 9 soft skill development training programs.

INSTITUTIONAL ACADEMIC GRID (2)
(Engineering disciplines)
COLLEGE OF ENGINEERING KARUNAGAPPALLY
Table-1 (a) : CONSOLIDATED STATEMENT

S.No.		PRE-TEQIP (2012-13)			POST-TEQIP (2015-16)		
1	NO. OF DEPARTMENTS	4			4		
2	LEVELS OF PROGRAMMES (NOS.)	B.TECH	M.TECH	PhD	B.TECH	M.TECH	PhD
	(Number of Programmes)	4	2	Nil	3	2	Nil
3	COLLABORATION WITH INDUSTRY (MoUs SIGNED)	Nil			6		

Table-1 (b): DETAILS OF STUDENT ENROLMENT

S.No.	NAME OF THE DEPARTMENT		PRE-TEQIP (2012-13)			POST-TEQIP (2015-16)			INCREASE IN PERCENTAGE
			B.TECH	M.TECH	PhD	B.TECH	M.TECH	PhD	
		NO. OF FRESH STUDENTS ADMITTED IN 1st SEMSTER	178	48	NA	113	31	NA	
1	Electronics and Communication Engineering		54	24	NA	35	19	NA	
2	Computer Sceince and Engineering		54	24	NA	39	12	NA	

S.No.	NAME OF THE DEPARTMENT								
3	Electrical and Electronics Engineering		53	NA	NA	39	NA	NA	
4	Information Technology		17	NA	NA	Nil	NA	NA	

Table-1 (c) : FACULTY DETAILS

S.No.	NAME OF THE DEPARTMENT		PRE-TEQIP (2012-13)			POST-TEQIP 2015-16			INCREASE IN PERCENTAGE
			B.TECH	M.TECH	PhD	B.TECH	M.TECH	PhD	
1.	Electronics and Communication Engineering	NO. OF FACULTY HAVING HIGHEST QUALIFICATION							
		Regular	2	7	0	0	8	2	
		Contract	3	4	0	0	5	0	
		Total	5	11	0	0	13	2	
2.	Computer Science and Engineering	Regular	3	5	0	1	8	0	
		Contract	6	1	0	0	6	0	
		Total	9	6	0	1	14	0	
3.	Information Technology	Regular	0	0	0	0	0	0	
		Contract	2	2	0	0	3	0	
		Total	2	2	0	0	3	0	
4.	Electrical and Electronics Engineering	Regular	0	2	0	0	3	0	
		Contract	2	0	0	0	7	0	
		Total	2	2	0	0	10	0	
5.	General Engg and	Regular	1(Mech	2(Mech	1(Mech)	0	M.Tech-4	1(Maths)	

	Applied Science		)	) 4(PG)	1(Maths)		PG-4	1(Mech)	
		Contract	2(Mech) 1(Civil)	1(PG)	1(TCS)	0	PG-1 1(TCS) 1(Civil)	0	
		Total	**4**	**7**	**3**	**0**	**11**	**2**	

Table-1 (d) : COLLABORATION WITH INDUSTRY

S.No.	NAME OF THE DEPARTMENT	NAME OF THE INDUSTRY WITH WHOM MOU SIGNED	
		PRE-TEQIP (2012-13)	POST-TEQIP (2015-16)
1.	**Electronics and Communication Engg**	Nil	1. Early Bird Security Solutions 2. Zynware Software Solutions 3. Texas instruments (to be signed) 4. NEST (to be signed) 5. United Electrical Industries Limited (to be signed) 6. Seaview Support System Pvt. Ltd 7. Soften Digital Pvt Ltd 8. Regional Cancer Centre (Institution) 9. ICT Academy Kerala (Institution)
2.	**Electrical & Electronics Engg**		
3.	**Computer Science/IT**		

Table-2 : SUMMARY SHEET FOR ACADEMIC GRID

Name of NPIU Official : Dr. Ajilkumar

Name of Institute: College of Engineering Karunagappally, Kollam, Kerala. Sub-component:1.1

Category of Institute: Government

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)	Financial (Rs. Lakh)		
				(No.*/%age)	(No.*/%age)	(Rs.Lakh)	(Rs.Lakh)				
A.0	**Goal : Improve Quality of Education in Selected Institutions**										
A.1	**Student**										
A.1.1	*Improvement in Students Knowledge and Skills* - Diagnostic test - Remedial teaching - E-enabled learning - Research projects at UG levels - Assistantship	Share (percentage) of female students against total engineering students in all years • Undergraduates • Postgraduates	54.8 % 87.9 %	60 % 60 %	60 % 60 %			54.16% 89.74 %		More than 50% are girls students in UG and very high in PG courses	
A.1.2		Students transition rate (percentage) from first year to second year of UG programs (clearing all subjects/ courses of 1st year in first attempt)	28.2 %	50%	50 %	2	10	54.5%	3.05	Target achieved	
A.1.3		Average scores (%/CGPA) at passing-out • Undergraduates • Postgraduates	69.57% 9.11 CGPA	70% 9.00	70% 9.00			Not Calculated			

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)	Financial (Rs. Lakh)		
				(No.*/%age)	(No.*/%age)	(Rs.Lakh)	(Rs.Lakh)				
A.1.4		No. of students enrolled in MTech programs	48	96	96	10	40	78	60.48	Planned for starting 2 New PG programmes	
A.1.5		No. of students registered in PhD programs in engineering	Institution is not a Research centre	NA	NA	NA	NA	NA	NA		
A.1.6		No. of Masters students enrolled with TEQIP teaching assistantship	Nil	60	60		3.6/month	63	60.48 per year	Improved	
A.1.7		No. of PhD students enrolled with TEQIP research assistantship	Institution is not a Research centre	NA	NA	NA	NA	NA	NA		
A.1.8		No. of Research projects taken by UG students	Nil		5		2	1	0.05		
A.1.9		Any other									
A.2	**Faculty**										
A.2.1	*Capacity Development of Faculty* - Recruitment of faculty - Subject domain training - Qualification upgradation - Pedagogical Training	**Percentage of faculty positions filled-in** (as per AICTE/MHRD required Teacher-Student ratio): • Regular • Regular + Contract	51.9% 96.3%	70 % 100 %	70 % 100 %	10 /month		55.17 % 94.91%		Improved	Transfer of faculty from other engg colleges

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)	Financial (Rs. Lakh)		
				(No.*/%age)	(No.*/%age)	(Rs.Lakh)	(Rs.Lakh)				
	- E-enabled training										effected.
A.2.2	- Management development training - Continuing Education Programme	Percentage of Faculty with BTech enrolled for MTech against total BTech faculty	33.33%	50 %	50 %	10	2	100 %	1.1	Improved	
A.2.3		Percentage of Faculty with MTech enrolled for PhD in engineering against total MTech faculty	18.75%	20 %	20 %	12	1	42.85 %	3.4	Improved	
A.2.4		Percentage of regular faculty with Masters degree in engineering against total engineering faculty	73.91 %	80 %	80 %	10	2	96.21 %	--	Improved	
A.2.5		Percentage of regular faculty with PhD degree in engineering against total engineering faculty	4.35 %	20 %	20 %	25	2	11.11 %	--	Improved	
A.2.6		Number of faculty members attended training in subject domain	7	54	54	10	10	100%	34.71	All faculty attended programmes including in house programmes	The expenditure shown is for out station programmes only
A.2.7		Number of faculty members attended management	Nil	15	15	5	5	7	2.34		

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)	Financial (Rs. Lakh)		
				(No.*/%age)	(No.*/%age)	(Rs.Lakh)	(Rs.Lakh)				
		development training									
A.2.8		Number of faculty members attended pedagogical training	Nil	15	15	5	5	48 Nos.	4.62		Almost all the faculty including guest faculty attended pedagogical training
A.2.9		Any other									
A.3	**Institutional Reforms**										
A.3.1	*of reforms* - Academic reforms - Non-academic reforms - Enhance interaction with industry	Percentage of NBA accredited UG & PG programs including Applied-For cases, against total eligible programs	0	66.67 %	66.67 %	2	10	Accreditation fee paid for CS and EC	8.99		SAR prepared and uploaded in Oct 2015
A.3.2		Autonomous institution status concurred by UGC	Non Autonomous	NA	NA	1	2	Applied to the University for forwarding application for autonomous status to the UGC. University has forwarded the application to UGC and is under process at UGC.			
A.3.3		No. of academic programs i.e. MTech/PhD etc. with industry	NIL	NA	NA	NA	NA	NIL			
A.3.4		No. of short term programs with	NIL	5	30	1	8	Conducted 2 short term	6.14	Conducted 56	The settlement

60

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)	Financial (Rs. Lakh)		
				(No.*/%age)	(No.*/%age)	(Rs.Lakh)	(Rs.Lakh)				
		industry						programme for students, 15 expert lectures, 18 Expert tutoring, 21Industrial visits,190 students undergone Internship,		programmes	of Few internship has not been done
A.3.5		Academic networking with other institutions (No.)	NIL		2		3	1(QEEE)	1.5		With IIT Madras
A.3.6		ICT enabled learning (No. of programs/ courses)	NIL		2		6	NPTEL			
A.3.7		Curricula revised/restructured (No.)	Curriculum is framed by CUSAT and KTU and revised in every four year as per market demand. Last revision was in 2012 by CUSAT and 2016 by KTU.								
A.3.8		Total IRG	313 Lakhs					318.72 Lakhs			
A.3.9		Percentage revenue from externally funded R&D projects and consultancies in total revenue	NIL								Applied fro external funding for an amount of Rs.181.12 Lakhs
A.3.10		IRG as percentage of annual recurring expenditure	117.09%	100%				135.38%*			

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional (No.*/%age)	TEQIP (No.*/%age)	Institutional (Rs.Lakh)	TEQIP (Rs.Lakh)	Physical (No.*/%age)	Financial (Rs. Lakh)		
A.3.11		Any other									
B.0	**Enhance Access to Knowledge Resources**										
B.1	***Improvement in Teaching, Training and Learning facilities*** - New PG programmes - Updation of learning resources - Equipment details - Modernization of Labs and class rooms	Laboratories: • New laboratory (Nos.) for new PG programs	NIL		4	10	60	NIL	3.49		
		Laboratories: • New laboratory (Nos.) for existing PG programs	NIL		5	20	72	5	64.26	Improved	
		Laboratories: • Existing laboratory (Nos.) modernized	2	10	10	50	185	7	210.7	Improved	Procurement progressing
B.2		Library • Books (print) (Nos.)	7898	1000	4500	5	25	14998	37.71	Improved	
		Library • e-books (Nos.)	NIL		200		5	NIL			
		Library • Journals (print) (Nos.)	18	10	25	0	0.75	10			
		Library • e-journals (Nos.)	3	6	6	11	11	3	13.4		
		Library • Course specific software (Nos.	NIL								

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)	Financial (Rs. Lakh)		
				(No.*/%age)	(No.*/%age)	(Rs.Lakh)	(Rs.Lakh)				
B.3		Membership of online journals/consortia (No.)									
B.4		No. of digitally/virtually accessible courses/subjects									
B.5		Any other	12 MAGAZINE					12 MAGAZINE			
C.0	Enhancement of Research & Development Activities										
C.1	Promoting R&D culture in the Institution - Modern R&D equipment - Conferences / Workshops organized	No. of Research publications in engineering in refereed journals: • Indian journals • Foreign journals	0 11	10 8	10 8	0	1.5	0 32		Improved	
C.2	- Conferences / Workshops	No. of Books Publication	Nil					(2 about to publish)			
C.3	attended	No. of Patents obtained/ filed	Nil					Nil			
C.4		Any other									
D.0	Improve Employability of Graduates										
D.1	Improving competencies of graduates - Industrial	Campus placement percentage: • Undergraduates • Postgraduates	5.04 %	40	40	2	6	20 %	2		

	Strategy/Activities	Indicators	Institutional Baseline (Pre-TEQIP) in 2012-13	Proposed Target for 2 years 31st Dec 2014		Proposed Budget Estimate		Status due to input of TEQIP as on date of final round of performance auditing		Outcome against Goals (TEQIP)	Remarks
			Physical (No.*/%age)	Institutional	TEQIP	Institutional	TEQIP	Physical (No.*/%age)	Financial (Rs. Lakh)		
				(No.*/%age)	(No.*/%age)	(Rs.Lakh)	(Rs.Lakh)				
	collaboration		NA	50	50	1	2	15.63%			
D.2	- Finishing School - Industrial training	Average annual salary (Rs. Lakh) of: • Undergraduates • Postgraduates	2.5 /year NA		3.5/year			3.2/year 3,5/year			
D.3		Share of UG students attended industrial internship (percentage)	Nil	5	100	-	5	190 Students			**Amount not settled**
D.4		Any other									

Table-3 : Institutional Project Budget*

TEQIP funds received (Instalment)   : 1st / 2nd / 3rd/ 4th
1stInstalment   :   Amount Rs.100 Lakhs   Date : 18/04/2013
2ndInstalment   :   Amount Rs.150 Lakhs   Date : 12/10/2013
3rdInstalment :   AmountRs.50Lakhs Date: 07/01/2014
4thInstalment: Amount Rs**.1**50 Lakhs Date: 06/08/2014
5thInstalment: Amount Rs**.**50 Lakhs   Date: 23/10/2014
6thInstalment: Amount Rs**.4**0 Lakhs   Date: 06/03/2015
7thInstalment: Amount Rs**.1**10 Lakhs Date: 27/05/2015
8thInstalment: Amount Rs**.**50 Lakhs   Date: 09/10/2015
9thInstalment: Amount Rs**.20**0 Lakhs Date: 09/10/2015

Total funds received : Rs.900 Lakhs

S. No	Activities	Project Life Allocation (Lakhs)	Expenditure in Financial year	
			2012-13 (Pre TEQIP)	2016-17 (As on 31st July.16)) Lakhs
1	Improvements for teaching, training and learning facilities through:	**550**	The first Instalmentwas released on 18/04/2013 (Financial Year 2013-14)	**524.77**
	(i) Starting new PG programmes	3.49		3.49
	(i) Modernization and strengthening of laboratories+	264.8		259.70
	(ii) Establishment of new laboratories for existing UG and PG programmes and for new PG programmes	89.9		84.72
	(iii) Modernization of classrooms+	10.4		4.90
	(iv) Updation of Learning Resources			
	(v) Procurement of furniture	28.8		24.86
	(vi) Establishment/Upgradation of Central and Departmental Computer Centers+	40.11		36.22
	(vii) Modernization/improvements of supporting departments+	15.3		12.89
	(viii) Modernization and strengthening of libraries and increasing access to knowledge resources	47.2		51.03
	(ix) Minor Civil Works	50		46. 96
2	Providing Teaching and Research Assistantships to increase enrolment in existing and new PG programmes in Engineering disciplines	70		109. 99
3	Enhancement of R&D and institutional consultancy activities	30		13.17
4	Faculty and Staff Development (including faculty qualification upgradation, pedagogical training, and organising/participation of faculty in workshops, seminars and conferences) for improved competence	120		97.07
5	Enhanced Interaction with Industry	45		6.54
6	Institutional Management Capacity enhancement	30		6.10

7	Implementation of institutional academic reforms	20		8.99
8	Academic support for weak students	45		12.03
9	Incremental Operating Cost	90		43.15
	TOTAL	**1000**		**821.80**

Not applicable (NA) can be mentioned as appropriate.

Note :- CE Karunagappally has been selected in TEQIP II in the financial year of 2012-13. But the first Instalment was released on 18/04/2013 (Financial Year 2013-14)