

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME

Phase II

Sub Component 1.1

**8th MEETING OF
THE BOARD OF GOVERNORS**

DETAILED AGENDA NOTES

Date: 06-03-2014 Time: 09.30 am

Venue: Government Engineering College Kozhikode

GOVERNMENT ENGINEERING COLLEGE Kozhikode

Westhill., Kozhikode-673 005 KERALA

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Background:

The meeting of Board of Governors is convened regularly to monitor the progress of implementation of TEQIP-II activities at GEC Kozhikode, under Sub component 1.1, and to accord the necessary approvals and clearance for the ongoing activities as required in the implementation guidelines of the scheme. The 8th meeting of the BoG is being convened on 6th of March, 2014.

The agenda items are given below:

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Part A
Procedural Items

A1. Confirmation of the Minutes of the 7th Meeting of the Board of Governors held on 29-10-2013 at GEC Kozhikode

The Minutes of the 7th Meeting of Board of Governors of TEQIP Phase II of GEC Kozhikode held on 29-10-13 at GEC Kozhikode was sent to the Chairman and upon his consent copies were circulated among the other members of the BoG. A copy of the Minutes is appended as **Appendix I** for confirmation.

BoG may consider the Minutes for approval.

A2. Report on the action taken/action pending on the pertinent decisions in the Minutes of the 7th Meeting of the Board of Governors held on 29-10-2013 at GEC Kozhikode

The decisions taken by the Board as recorded in the Minutes of the 7th Meeting of the Board of Governors of TEQIP Phase II held on 29-10-2013 have been noted and actions have been initiated. A report on the action taken and actions pending is presented in the Table A2.I given below.

Table A2.I

Sl. No	Decision Item	Action Taken
1	The BoG suggested including the video conferencing system with recording facility in the procurement packages.	Procurement process initiated.
2	BoG approved the various Faculty and staff development programs as per the agenda notes presented by the TEQIP Coordinator.	Faculty and Staff attended training program and details are presented in the agenda notes C3 .
3	BoG approved the appointment of Senior Research Advisor (SRA) and research Guidance Committee (RGC) for enhancing R&D and Consultancy activities.	The activities conducted under R&D are presented in agenda notes C2 .
4	BoG meeting conducted self-review of the Governing body.	

Part B
Reports

B1. Status of fund position as on 28.02.2014

Sl. No	Head of Activity/Category of Expenditure	Amount Spent Lakhs
1	Improvement in teaching, training and learning facilities	359.87
2	Providing Assistantship for increased enrolment in existing and new PG	14.47
3	Enhancement of R&D and Institutional Consultancy activities	0.68
4	Faculty and Staff Development (FSD)	36.63
5	Enhanced Interaction with Industry	8.71
6	Institutional Management Capacity Enhancement	4.81
7	Implementation of Institutional Reforms	10.77
8	Academic Support for weak students	6.10
9	Incremental Operating Cost	12.11
TOTAL		454.15

B2. Status of Procurement as on 28.02.2014

Details of Completed packages			
Department	Total No. of Packages	No. of Packages completed	Amount, Rs.
Applied Electronics and Instrumentation	33	26	1,03,16,032
Applied Science	5	5	8,02,392
Chemical Engineering	17	11	38,54,018
Civil Engineering	22	21	1,07,13,875
Mechanical Engineering	22	20	1,03,00,766
Total	99	83	3,59,87,083

B3. Status of Faculty position as on 28.02.2014

Electrical and Electronics Department				
	Sanctioned Nos.	Available Nos.	Vacancy Nos.	Qualification
Associate Professor	1	1	0	1 Ph.D.
Assistant Professor	2	1	1	1 M. Tech
Contract Faculty		1		1 M. Tech
Applied Electronics Department				
	Sanctioned Nos.	Available Nos.	Vacancy Nos.	Qualification
Professor	1	1	0	1 Ph.D.
Associate Professor	3	2	1	2 M. Tech
Assistant Professor	9	8	1	7 M. Tech, 1 B. Tech
Contract Faculty		6		6 M. Tech
Chemical Engineering Department				
	Sanctioned Nos.	Available Nos.	Vacancy Nos.	Qualification
Professor	2	1	1	1 Ph.D.
Associate Professor	4	2	2	1 Ph.D., 1 M. Tech
Assistant Professor	9	10	0	1 Ph.D., 8 M. Tech 1 B.Tech
Contract Faculty		2		2 M. Tech
Mechanical Engineering Department				
	Sanctioned Nos.	Available Nos.	Vacancy Nos.	Qualification
Professor	1	1	0	1 M. Tech
Associate Professor	4	3	1	3 Ph.D.
Assistant Professor	9	9	0	1 Ph.D. 7 M. Tech, 1 B. Tech
Contract Faculty		5		1 M. Tech, 4 B. Tech
Civil Engineering Department				
	Sanctioned Nos.	Available Nos.	Vacancy Nos.	Qualification
Professor	1	1	0	1 M. Tech
Associate Professor	3	1	2	1 M. Tech
Assistant Professor	9	5	4	1 Ph. D., 4 M. Tech
Contract Faculty		6		2 M. Tech, 4 B. Tech
Applied Science Department				
	Sanctioned Nos.	Available Nos.	Vacancy Nos.	Qualification
Assistant Professor	8	8	0	4 Ph.D., 4 M. Sc.

B4. Status of UG University Result (%)

Semester	Civil Engineering	Mechanical Engineering	Chemical Engineering	Applied Electronics & Instrumentation
S1S2	76	74.6	76	77.8
S3	93	61.76	78	67.2
S4	87	58.8	82.6	62.7
S5	83	68.1	55.9	65
S6	81	66.7	72	61.4
S7	85	68.1	76.12	69.9
S8	94	92.75	80.5	93.2

B5. Status of the Construction projects as on 28-02-2014

Sl. No.	Name of work	Current status
1	Ladies' Hostel	Completed and Inaugurated on 07-02-2014
2	Civil Engineering Block	60% Completed
3	Mechanical Workshop	Work about to start
4	Production lab	Tendering stage

B6. Status of Teaching Assistantship to PG students

S.No.	Name of the program	No. of Teaching Assistantship under TEQIP II	
		2012-13	2013-14
1	Computer aided process design (Chemical Engineering Department)	13	16
2	M. Tech in Energy Systems- Analysis and design (Mechanical Engineering Department)	7	9
3	M. Tech in Signal Processing (Applied Electronics Department)	0	0

C1. Consideration of newly created procurement packages

C1.1. Ratification of the cancelled procurement package

Mechanical Engineering					
S. No	Name of the Package	Items in the package	Quantity (Total)	Total estimated amount, Rs	Reason for Cancellation
1	158 – Server for Edureform Pilot Program	Server	1	9,00,000	Change in Spec as per the meeting conducted by IITM
2	159 – Communication System for Edureform Pilot Program	HDMI Capture System 24 port Gigabit Ethernet Switch DTH dish & Set top Box	1 2 1	1,67,000	”
3	145	All-in-one PC Desktop PC		8,40,000	Change in Spec & Procurement method

Decision needed: The board may kindly ratify.

C1. 2. Ratification of newly created procurement packages

S. No	Name of the Package	Items in the package	Quantity (Total)	Total Package amount, Rs.	Name of the laboratory for which items procured
1	161- QEEE Multimedia Projector	Multimedia Projectors	2	85,000	Edusat Room
2	162 – QEEE Computer	MT Desktop Server Web Cam	1 1 1	1,60,000	Edusat Room
3	163 – QEEE P A System	Public Address System	1 set	75,000	Edusat Room
4	164 – Server Rack	Server Rack	1	40,000	AE&I Dept.
5	145 – Mini Tower Desktop	M T Desktop i5 M T Desktop i7	20 1	9,88,995	CCF

Decision needed: The board may kindly ratify.

C2. Discussion, Consideration and Ratification of activities under Research and Development

Prof. L.M. Patnaik, the Senior Research Advisor of the institute addressed the faculty and post graduate students on 17.01.2014. **Prof. L.M. Patnaik** delivered a talk on “Research Avenues in Engineering and Technology”

On the same day Prof. L.M. Patnaik (SRA) and other Research Guidance Committee (RGC) members approved the following research proposals presented by the faculty members.

S.No.	Name of the faculty	Research Title	Sanctioned amount (Rupees)
1	Mr. Abdu Rahiman V. AE & I Dept.	Pattern Recognition System for Smart Class Rooms	Rs. 40,000
2	Mr. B.S. Shajee Mohan AE & I Dept.	Content based Image Retrieval System for Biological Images	Rs. 50,000
3	Dr. Muhammed Arif M. Applied Science	Accelerated Curing of Urea-Formaldehyde-Malamine resin for the manufacture of rubber wood boards	Rs. 70,000
4	Dr. Muhammed Arif M. Applied Science	Construction and design of plastic and solid waste incinerator.	Rs. 60,000
5	Mrs. Sindhu N, Chemical Engg.	Microwave Assisted Pyrolysis of Plastic Wastes	Rs. 1,00,000
6	Dr. Anirudhan P., Mechanical Engg.	Wear behavior of Titanium on steel	Rs.1,32,000
7	Dr. Anirudhan P., Mechanical Engg.	Vegetable Oil based Metal Working Fluids	Rs. 1,32,000
8	Dr. Anirudhan P., Mechanical Engg.	Green Boundary Lubricants	Rs. 42,000
9	Mr. Pradeep V Dept. of Mechanical Engineering	Characterization of fuel sprays of low pressure solenoid injectors for spark ignition engines	Rs. 75,000

10	Dr. Sajith P.P. Dept. of Mechanical Engineering	Design and fabrication of passive Cooling System for Heat Generating devices & Equipment	Rs. 52,000
11	Dr. Sreejith B. Dept. of Mechanical Engineering	Savonius wind turbine with guide blades	Rs. 85,000
12	Jaseela S. Dept. of Mechanical Engineering	Estimation of liquid film thickness during flow boiling in rectangular mini/micro channels	Rs. 50,000

Other program conducted:

1. Research trends in Phased Array Feed Design and Digital Receiver Design Project, Dr.Anish Roshi, Scientist, National Radio Astronomy Observatory (NRAO), West Virginia, USA

Decision needed: The board may kindly ratify the proposals.

**C3. Discussion, Consideration and Ratification of activities under
Faculty and Staff Development**

Sl. No	Name	Designation	Training provider	Duration and date	Name of program	Expenditure
Mechanical Engineering Department						
1	Dr. Shaji K.	Associate Professor	IIT Bombay	18-22 November 2013	Energy Management	Rs. 29,932
2	Dr. Sreejith B.	Associate Professor	IIT Bombay	18-22 November 2013	Energy Management	Rs. 29,932
3	Prof. Prajeeth Kumar P.	Assistant Professor	IIT Bombay	18-22 November 2013	Energy Management	Rs. 29,932
4	Dr.Rejini V O	Professor	IIT Kharagpur	18-27, November 2013	Vacuum Technology & Process Applications	Rs. 63,656
5	Subin Poulose	Assistant Professor	IIT Kharagpur	18-27, November 2013	Vacuum Technology & Process Applications	Rs. 63,656
6	Dr.Mary Lubi C	Assistant Professor	IIT Kharagpur	18-27, November 2013	Vacuum Technology & Process Applications	Rs. 63,656
7	Subin Poulose	Assistant Professor	India Habitat Centre, New Delhi	15-19, December 2013	Asian Congress on Biotechnology 2013	Rs. 26,370
8	Sajitha C M	Assistant Professor	GEC Thrissur	6-8 November 2013	Materials for the future innovative materials, processes, products and applications	Rs. 4609
9	Haseena P V	Assistant Professor	GEC Thrissur	6-8, November 2013	Materials for the future innovative materials, processes, products and applications	Rs. 4609
10	Sreela P K	Assistant Professor	Transportation Research group(CTR G) at Agra	12-15, December 2013	International conference of Transportation Research Group	Rs. 23,247
11	Dr.Abdul Hameed K M	Professor	IIT Bombay	13-15, December 2013	Scipy India 2013 conference on Scientific Computing with Python	Rs. 10,844
12	Prof. Shajee Mohan	Associate Professor	IIT Hyderabad	21-27 Jan	WISSAP 14	17,000

Technical Staff

Sl. No	Name	Designation	Training provider	Duration and date	Name of program	Expenditure
1	Vinod P.C	Trade Instructor, Civil	IIT Madras	25-29, November 2013	Laboratory Testing of Soils	Rs. 22,487
2	Abid Tharavattath	Computer Programmer	Engineering staff college of India, Hyderabad	29,October 2013-2 November 2013	Web designing using PHP&MY SQL	Rs. 34,843

Decision needed: The board may kindly ratify the programs.

Publications:

1. Anirudhan P., Ashita K. B., Antony Neeraj Pius, Ajai Ghosh A. V. and Satish V. Kailas, *Vegetable Oil based Metal Working Fluids and Testing*, Proceedings of 1st International Conference on Mechanical Engineering: Emerging Trends for Sustainability, C. M. Krishna, A. R. Siddiqui, M. K. Pradhan (eds.), January 29-31, 2014, MANIT Bhopal (IC MEETS - 2014), pp-196-202.
2. Anirudhan P., Sanjay K. Biswas and Satish V. Kailas, *Surface Studies related to Lubricity of Oil In Water Emulsions*, Proceedings of International Conference on Advances in Tribology, K. Prabhakaran Nair, P. K. Rajendra Kumar, M. L. Joy (eds.), February 21-24, 2014, NIT Calicut (ICAT 14), pp-229-232.
3. Sreela P.K , Sheena Melayil, Anjaneyulu M.V.L.R., “Modeling Shopping participation and duration models of workers in Calicut city”, 2nd Conference of Transportation Research Group of India (CTRG), December 12-15, 2013 Agra
4. Sreela P.K , Sheena Melayil, Anjaneyulu M.V.L.R. “Modeling of Shopping participation and duration of workers in Calicut city” *Procedia -social and behavioural sciences* 104 (2013) 543-552.
5. N.Ganesan, P.V.Indira, Anjana Santhakumar, “Effect of steel fibres on the mechanical properties of geopolymer concrete” – published in *Advances in Concrete Construction*, TechnoPress, Vol. 1, No. 4 (2013), 305-318 .
6. N.Ganesan, P.V.Indira, Anjana Santhakumar, “Influence of Steel Fibres on Tension Stiffening and Cracking of Reinforced Geopolymer Concrete” - accepted for publication in *Magazine of concrete Research*, ICE, UK.

Proposed Programs under Faculty and Staff Development (FSD)

1. National Conference on Emerging Trends in Engineering

Engineering and Technology are in the phase of rapid transitions and development. This conference aims to achieve a confluence of developments from all areas of engineering by bringing together leading academicians, scientists, research scholars and students to a common platform. The conference will serve as a forum to discuss the new avenues for research, practical challenges encountered and the solutions adopted to track them. The students will be benefitted with the opportunity to interact with the outside world, know the recent developments and research areas.

The conference will be for two days in **August 2014**, consisting of oral and poster presentations of genuine research works. Each section will have a keynote talk by an eminent researcher followed by oral presentations.

2. National workshop on Instrumental Methods of Analysis

The working principles and usage of equipment purchased under TEQIP II will be discussed. The program will be for three days in June 2014. Training will be provided for following instruments.

1. GCMS (Gas Chromatography/Mass Spectroscopy)
2. HPLC (High Pressure Liquid Chromatography)
3. FTIR (Fourier Transform Infrared Spectroscopy)
4. AAS (Atomic absorption Spectrophotometer)
5. Laminar flow apparatus
6. COD analyzer (Chemical Oxygen Demand)

3. Faculty and staff Development program on Teaching – a multi-tasking

service, 17th to 21st March 2014. The following are the resource persons

1. Prof. Radhakrishna Pillai, IIM Calicut
2. Dr. K.P.P. Pillai, Former Principal CET
3. Dr. Ashalatha Thampuran, Former Principal CET
4. Dr. Anil B., Principal, GEC Waynadu
5. Dr. Anandakuttan B Unnithan, IIM Calicut
6. Dr. Unnikrishnan, NIT Calicut

Decision needed: The board may kindly consider and approve the programs.

C4. Discussion, Consideration and Ratification of activities under Industry Institute Interaction Cell (IIIC)

As per Project Implementation plan (PIP), the Central Advisory Board of Education (CABE) has suggested a strong need for developing effective synergies between research in the Universities and their application in and utilization by the Industry to the mutual advantage of both the systems. Industry-Institute-Interaction Cell (IIIC) of the institution is to promote links to benefit students and faculty, and to promote collaborative interdisciplinary research for offering real life solutions.

Status of IIIC of GEC Kozhikode

	2010-11	2011-12	2012-13	2013-14
MOU	0	1	6	13
Projects	10	10	15	18
Student Training	0	1	3	16
Visiting Faculty	12	7	10	7
Visiting Expert	1	1	2	1
Workshop	0	1	1	1

Proposed Programs under IIIC

Program	Beneficiary	Period	Expenditure
Design of Pressure vessels as per ASME code, Section-VIII, Division-1.	8 Faculty (Mech. Engg.) and 4 Faculty (Chem. Engg.)	3 days, May 2014	Rs. 2,20,000
Pneumatic Control System Training at PSG Tech. Coimbatore	10 Faculty (Mech.+Chem.+AE&I)	5 Days, May 2014	Rs. 1, 50,000
Industry Institute Meet	25 Faculty, Industries 100 Students (60 M. Tech., 40 B. Tech)	3 Days, May-June 2014	Rs. 1,20,000

Decision needed: The board may kindly consider and approve the programs.

C5. Institution Management Capacity Enhancement

Training programs attended by faculty members under Management capacity enhancement are

Sl.No	Name	Designation	Training provider	Duration and date	Name of program	Expenditure
1	Dr.Abdul Hameed K.M.	Professor	IIM Kozhikode	1-8, November 2013	Technology Enabled Teaching & Learning	Rs. 13,561
2	Dr.Rejini V.O.	Professor	IIM Kozhikode	11-16, November 2013	Academic Leadership	Nil
3	Prof. Biju I.K.	Asst. Professor	IIM Kozhikode	11-16, November 2013	Academic Leadership	Nil
4	Rahmathulla Noufal.E	Assistant Professor	ASCI, Hyderabad	18-22 November 2013	Knowledge Management Practice & Application	68,617

Decision needed: The board may kindly ratify the programs

C6. Accreditation status of the UG programs

Accreditation of eligible UG & PG programs: Accreditation of programs is one of the quality assurance mechanisms. The accreditation target to be achieved by the end of the Second Project-Year is 60% of the eligible UG and PG programs (obtained and applied for) and 100% accreditation (obtained and applied) for the eligible UG and PG programs by the end of the Project. Institutions need to take appropriate actions to obtain accreditation of eligible PG and UG programs within the specified timeframe.

Current status of Accreditation process:

1. Applied for accreditation of eligible UG programs.
2. Self-assessment report has been prepared.
3. Started online uploading of the documents.

C7. Discussion, Consideration and ratification of activities under Equity Assurance Plan (EAP)

1. Pilot program on Quality Enhancement in Engineering Education (QEEE), live classes for B. Tech program by faculty members of IIT Madras, IIT Bombay, IIT Delhi and IIT Kanpur. Ongoing courses selected by GEC Kozhikode under this program are Thermodynamics (Prof. P.M.V. Subbarao, IIT Delhi), Fluid Mechanics (Prof. B.S. Murthy, IIT Madras) and Computer Organization and Architecture (Prof. V. Kamakoti, IIT Madras).
2. Fundamentals and physical modelling in Geotechnical Engineering by Dr. R.G Robinson, Professor, Civil Engineering, IIT Madras, 7th December 2013
3. Bridge Course in English by Prof. Mohandas, Rtd. Principal, Govt. Arts and Science College, Kozhikode, Professor, October- December 2013.
4. Employability Skill and Aptitude training programs in October 2013, Coordinated by Prof. Raveendran C.K., Placement Officer.

Details of Remedial Classes:

Semester & Branch	Subject	No. of Beneficiaries	No. of Hrs	Expenditure Rs.
S7 AE&I	Process Control & Instrumentation	35	4 1/2	2700
S3 AE&I	Electric Circuit and Network Theory	12	5	3000
S1S2 AE&I	Computer Programming in C	55	13	7800
S1S2 ECE	Computer Programming in C	57	9 1/2	5700
S1S2 ME	Basic Electronics & Communication	58	10	6000
S1S2 CE	Basic Electronics & Communication	58	9	5400
S5 ME	Advanced Mechanics of Solids	15	4	2400
S3 ME	Electrical Technology	59	5	3000
S3 ME	Engineering Mathematics III	34	7	4200
S7 Chem.	Transport Phenomenon	16	6	3600
S7 Chem.	Chemical Engg. Design	23	10	6000
S5 Chem.	Heat Transfer	29	3	1800
S5 Chem.	Mass Transfer Operations	29	3	1800
S3 Chem.	Chemical Process Principles	42	7	4200

Decision needed: The board may kindly ratify the programs

D1. Ratification of the appointment of EAP nodal Officer, Clerk cum Junior Accountant and MIS Officer, and Enhancement of remuneration of TEQIP II Project staff.

1. Prof. Shanthini K.S., Assistant Professor, Electronics department has been appointed as EAP nodal Officer.
BoG may kindly ratify the appointment.
2. Subsequent to the resignation of Smt. Divya, MIS Officer, and Sri. Sobharaj, Clerk cum Junior Accountant, Smt. Priya Nair has been appointed as MIS Officer and Smt. Neethu has been appointed as Clerk cum Junior Accountant.
BoG may kindly ratify the appointment.
3. As per the minutes of the 7th State Steering Committee (SSC) meeting (Item No. SSC-K7- Other Item No. 2), permitted to enhance the remuneration of Clerk cum Junior Accountant and Data Entry Operator to Rs. 15,000/month as consolidate pay.
BoG may kindly ratify the revision.

D2. Other Items with the permission of Chairman