GOVERNMENT ENGINEERING COLLEGE IDUKKI

MINUTES OF THE 17th MEETING OF THE BOARD OF GOVERNORS

(SELECTED UNDER SUB-COMPONENT 1.1 OF TEQIP PHASE – II)

Date: 03-10-2019   Venue: GEC Idukki   Time: 10:30 hours

Members Present

1.	Prof. A. Veeraragavan, IIT Madras	Chairman
2.	Prof. K. Najeeb	Director, SPFU
3.	Shri. Raveendra Kumar	Government Nominee
4.	Smt. M. Pennamma	Government Nominee
5.	Shri.Jaisukhlal N.	Additional Secretary to Govt., H Edn Department, Govt. of Kerala
6.	Shri.Sabu John	Finance Department, Govt. of Kerala
7.	Dr. Sathish Kumar C.	Principal
8.	Dr. Leena Mary	Institutional Member
9.	Dr. Sangeetha Jose	Institutional Member

Prof. A. Veeraragavan, Chairman, Board of Governors presided over the meeting. The Chairman welcomed the members to the 17th BoG and invited the Principal to present the agenda items for discussions and approval.

<div align="center">**Minutes**</div>

<div align="center">Part A</div>

<div align="center">*Procedural*</div>

Item No.A1: Confirmation of minutes of 16th Meeting of BoG held on 28-10-2017.

Minutes of the 16th BoG meeting held on 28-10-2017 were read and confirmed.

Item No.A2: Report on the action taken/action pending on the pertinent decisions in the Minutes of the 16th Meeting of the Board of Governors held on 28-10-2017 at GEC Idukki.

Prof. A. Veeraragavan, Chairman, Board of Governors enquired about current status of the following

- Collaborative research jointly by GEC Idukki and institutions like IISC, IIT Guwahati, IIT Palakkad, IIT Banglore, Mathworks India PvtLtd.

  - ❖ Four graduates of the M.Tech course in Computer Science and Engineering of GECI are presently pursuing Ph.D Degree at IIIT Bangalore under the Guidance of the investigators of the a funded project.
  - ❖ Another graduate of MTech from Computer Science and Engineering Prathibha Prakash is working as a research associate with Prof. Deepak D'Souza at IISc Bangalore. Also, seven other PG students got opportunity to do internship at IISc.
  - ❖ Two MTech IT Network Engineering students from 2016-18 Batch and four MTech IT students from 2017-19 Batch undertaken internship at IIT Guwahati. Two students among them got admission to Ph D programme at NIT Calicut.

- Obtained Newton Bhabha fund from the Royal Academy of Engineering London for a collaborative research project.

BoG instructed to submit a report regarding Newton Bhabha fund from the Royal Academy of Engineering London for a collaborative research project.

Report on International Research Collaboration

Project funded by Royal Academy of Engineering, London

The Department of Computer Science & Engineering has got an award of grant for a collaborative research, from Royal Academy of Engineering, London. University of York, UK; Indian Institute of Science, Bangalore, Indian Institute of Information Technology, Bangalore and MathWorks India Private Ltd. are partnering Institutions in this project.

The total project cost is Rs. 44 lakhs including the matching fund raised by the partnering Institutions. The duration of the project is 2 years from 1st March 2016.

List of Participating Collaborators

1. Dr. Meenakshi D'Souza, Associate Professor, Department of Computer Science, International Institute of Information Technology, Bangalore.
2. Dr. Jim Woodcock FREngg, Professor and Head, Department of Computer Science, University of York, U.K.
3. Dr. Deepak D'Souza, Department of Computer Science, Indian Institute of Science, Bangalore.
4. **Dr. Sumesh Divakaran, Professor and Head, Department of Computer Science, Government Engineering College, Idukki**
5. Dr. Prahladavaradan Sampath, Senior Team Lead, Mathworks India Private Limited.
6. Dr. Jeremy Jacob, Department of Computer Science, University of York, U.K.
7. Dr. Ana Cavalcanti, Department of Computer Science, University of York, U.K.
8. Dr. Sujith Kumar, Department of Computer Science, International Institute of Information Technology, Bangalore.

About the research proposal

The proposed research is in the area of formal methods for embedded software. Simulink® and Stateflow® (by Mathworks) are industry-standard languages for modelling design of embedded software. Their semantics is available in open domain and they constitute an interesting

class of design models for embedded software, amenable to smooth transition from continuous/discrete time design to discrete implementation. As an area, a formal method has gained increased industry importance, especially for embedded software and hardware, where safety is of primary concern. Formal methods, when applied to design models, identify errors in early stages of development life-cycle and also guarantee full coverage.

The idea was to work on refinement-based verification and symbolic testing and verification of Stateflow and Simulink models. These formal methods techniques will guarantee correctness of design models arrived through iterative design process and hence, correctness of the code of embedded software too.

Working on problems in formal methods exposed our students to focus their research on mathematically challenging problems that have industry relevance. Methodologies for verification and validation of industrial embedded software models can be immediately proto-typed and illustrated with real-life examples from Mathworks.

Project Workshop @ GEC Idukki from 19ᵗʰ May 2016 to 21ˢᵗ May 2016

The first workshop of the project was conducted at GEC Idukki from 19ᵗʰ May 2016 to 21ˢᵗ May 2016. Investigators from University of York, Indian Institute of Science, IIIT Bangalore and Mathworks India participated in the workshop.

The workshop mainly focused on related works in the literature. Papers were presented and discussed in the workshop.

Project Workshop @ University of York conducted in October 2016

The second workshop was conducted at University of York in October 2016. The agenda of this workshop was to decide the roadmap for future works in the project. Dr. Sumesh Divakaran, Professor of Computer Science and Engineering presented the progress made by the team at GECI.

The project ended after the initially defined period of 2 years. The time allowed was not enough to propose a complete solution for the selected problem. However, the students who joined with the investigators are proceeding with related works towards getting their PhD Degree.

- SPFU Director suggested to circulate the important information among all BoG Members by creating a group email for the same. The meeting of the BoG approved the proposal and entrusted the TEQIP coordinator to comply.

Part B

Items for Discussion, Consideration and Approvals

Item No. B1: Approval of the status of various heads under TEQIP Four Fund.

. BoG discussed the status of various heads under TEQIP Four Fund as per the details given in Annexure B1.

Chairman and other members suggested that an action plan shall be prepared to effectively spend the remaining fund.

Item No. B2: Approval of the expenditure incurred under various heads under TEQIP Four Fund.

The BoG analyzed the detail which is given as Annexure B2.

The BoG commented about the underutilization of fund and suggested to spend money effectively.

Item No. B3: Ratification of expenditure incurred since the last BoG Meeting

The BoG discussed about the expenditure incurred since the last BoG Meeting as given in Annexure B3.

BoG suggested posting the information to all BoG members through email.

Part C

Reports

Item No. C1: Status of Faculty Position

Principal presented the current faculty position.

BoG chairman inquired that whether there is enough faculty strength to go for accreditation. Other BoG members discussed about the importance of getting accreditation to the programmes. BoG chairman and other members suggested to get some of the courses accredited.

Item No. C2: Result Analysis

The Principal presented the result analysis for B. Tech. Second, Fourth, Sixth and Eighth semester students as given in Annexure C2.

BoG chairman instructed to consolidate the overall pass percentage of each branch in 2019.

Department	Course	Total Number of Students	Number of Students Passed	Pass Percentage
CSE	B Tech	53	40	75.47
	M Tech	18	18	100
ECE	B Tech	52	31	59.62
	M Tech	18	18	100
EEE	B Tech	62	29	46.77
	M Tech	18	18	100
IT	B Tech	42	27	64.28
	M Tech	17	17	100
ME	B Tech	62	25	40.32

Principal discussed the various measures to improve the pass percentage.

BoG suggested that all students must be encouraged and recommended to take MOOC courses.

Item No. C3: Status of placement

The Principal presented the status of placement for the academic year 2018-19 and current academic year 2019-20 and explained the placement activities.

Mr. Raveendra Kumar discussed about requirement of the skill set to be built up for placements like programming skills and soft skills. He also suggested that first year orientation programme should introduce learning opportunities like MOOC, SWAYAM etc.

Mr. Raveendra Kumar also informed that volunteers are available as part of CSR (Corporate Social Responsibility) activity to impart programming skills

to the students from TCS. Mentorship and co-guide facility for projects is also assured from TCS.

SPFU director pointed out the effectiveness of involvement of Alumnus in placement activities.

Ms. M. Pennamma discussed about taking help of Institutions like Institution of Engineers, IEEE etc for training.

Part D

Miscellaneous

Item No. D1. Faculty Contributions

BoG discussed the publications and achievements of faculty as given in Annexure D1.

BoG suggested that in addition to the following list of publications in Journals or conferences as given in Annexure D1, ranking of papers and count of each category of publications (Student Authors, Faculty Authors, External Authors) are also required. The following format will be used in the next agenda notes.

Sl No	Authors	Venue Confernece/Journal/International	Ranking	Faculty author	Student Author	External Author

Item No. D2. Any other item with the permission of chair

- Principal put forward the following proposals to the BoG for discussion and approval.

    1. Request of increase in the maximum number of remedial class hours which was limited to 15% of the total number of hours.

       BoG discussed about the request of increase of the maximum number of remedial class hours which was limited to 15% of the total number of hours as in the university curriculum as per 16th BoG Meeting on 28-10-

2019. 17th BoG decided that maximum number of remedial class hours can be limited as 15 hours per course.

2. TEQIP funding was limited to attend training programmes, and meeting in connection with any collaborative research with IITs, IISc, IIITs, NITs and National Universities. Faculty members who are from Basic Sciences want to attend short term courses of their specific subject choices, are not able to attend courses since the courses are not offered by IITs and IISc.

   BoG discussed the above matter and decided that faculty members will be permitted to attend training programmes in IITs, IISc, National Universities, IIITs, or similar premier institutes only after getting recommendation from TEQIP academic and finance committees. A prior permission from BoG chairman is also required.

3. At present, TEQIP does not fund paper presentations and conference participation of students.
   In order to promote participation of students in conferences, a registration fee (maximum Rs.5000) of conference (like ieee, springer, elsevier, or similar) with faculty as co-author will be offered from TEQIP. Second class sleeper TA may be paid to students to attend such conferences. Students should forward the request through proper channel and get prior permission from TEQIP academic and finance committee. A prior permission from BoG chairman is also required.

4. In the BoG meeting held on 28/10/2017, it was decided to give low priority for the in-house training programs except training programmes in connection with NBA accreditation.
   BoG discussed the matter and permitted that one in-house faculty training programme per semester can be conducted for each department.

5. Due to a limited amount of fund, 16th BoG decided that refreshment shall not be given for the student's programme to be conducted.
   17th BoG decided to have refreshments expense of Rs.20 per student, per day is allowed for workshop/training to students. For remedial classes Rs.10 per student is allowed for 2 hours classes.

- BoG also recommended to form a Maintenance and Replacement committee coordinated by a Maintenance Nodal Officer. Committee should approve and forward all repair/replacement requests funded by TEQIP.

- Smt. M. Pennamma raised concern over her continued tenure as BoG after her retirement from Govt. Services. BoG instructed Principal to provide written notification to DTE/Higher Education Department for getting clarification regarding the matter.

- BoG chairman also suggested to restart the campus newsletter.

- SPFU director prompted out the usage of Campus Managment Software for the data collection and analysis.

- BoG also discussed the effectiveness of the involvement of Alumni for Institutional development activities and suggested to plan an alumni meet.

- BoG also instructed to conduct BoG meeting once in every 6 months.