# PERFORMANCE AUDIT FORMS (FINAL ROUND under TEQIP-II)

## INSTITUTIONALPERFORMANCE PROFILE

NAME OF PERFORMANCE AUDITOR: **Prof. J. Srihari Rao**

DATES OF PERFORMANCE AUDIT: 22-24, August 2016

NAME OF INSTITUTION WITH LOCATION: BMS College of Engineering, Bull Temple Rd, Bangalore 560019

| PIP REF | INSTITUTIONAL PERFORMANCE PROFILE | OVERALL EVALUATION GRADES |
|---|---|---|
| | COMPONENT 1: IMPROVING THE QUALITY OF EDUCATION IN SELECTED INSTITUTIONS | |
| 1.1 | STRENGTHENING INSTITUTIONS TO IMPROVE LEARNING OUTCOMES AND EMPLOYABILITY OF GRADUATES | 1(one) |
| 1.2 | SCALING-UP POSTGRADUATE EDUCATION AND DEMAND-DRIVEN RESEARCH AND DEVELOPMENT AND INNOVATION | 1(one) |
| 1.2.1 | ESTABLISHING CENTRES OF EXCELLENCE | 1(one) |
| 1.3 | FACULTY DEVELOPMENT FOR EFFECTIVE TEACHING (PEDAGOGICAL TRAINING) | 1(one) |
| | COMPONENT 2: IMPROVING SYSTEM MANAGEMENT | |
| 2.1 | CAPACITY BUILDING TO STRENGTHEN MANAGEMENT | 1(one) |
| 2.1.1 | IMPLEMENTATION OF GOOD GOVERNANCE | 1(one) |
| 2.2 | PROJECT MANAGEMENT, MONITORING AND EVALUATION | 1(one) |

| | 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).

J Srihari

# PERFORMANCE AUDIT FORM (1.1)

**COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS**

NAME OF PERFORMANCE AUDITOR: **Prof.J.Srihari Rao**

DATES OF PERFORMANCE AUDIT: 22-24, August 2016

NAME OF INSTITUTION WITH LOCATION: BMS College of Engineering, Bull Temple Rd, Bangalore 560019

**1.1: 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:**<br>▪ Increase in the satisfaction index of student and faculty | Efforts were made to augment various resources for providing quality higher education. Addition of sophisticated equipment and important Learning Resources and Software has augmented various Laboratories.<br>The campus wide networking facility enabled the institution ubiquitous network connectivity through WIFI. The centralized data/computer centre has enhanced optimum utilization of the resources by the faculty and students thereby providing:<br>• Research facilities through high end work station<br>• Campus-wide access to online international journals<br>• Enabling the available Software through single source<br>• Anti-Virus & Email Spam Control using Symantec bright mail<br>• Hosting of college website & official mailing and messaging<br>• 24x7 Internet facility<br>• Intrusion Prevention through Firewalls & Virus wall<br>• Content filtering through Fortigate<br>• Internet and Intranet facility at hostels<br>Many new laboratories such as GIS Laboratory, Networking and Applications Laboratory, Vibration Measurement System Lab, Structural Loading Frame Facility etc were established and many more were strengthened. Implementation of TEQIP-II augmented the activities initiated during TEQIP-I resulted in<br>• Giving impetus to research activities by faculty and students.<br>• Increased professional publications<br>• Increased quality projects<br>• Improved interface with Industry<br>• Participation of Staff and Students in Community service<br>• Supplemented the student's projects, research and developmental activity. |
| **B. Obtaining Academic Autonomy status, including:**<br>▪ **Number of institutions that have obtained *'Autonomous Institution status'* as per University Grants Commission process** within 2 years of joining the Project, or | Participation of the institution in TEQIP Phase-I has paved for the institution to become Autonomous institution at the end of Phase-I.<br>The UG Programs of the institution became autonomous from the academic year 2008-09. |
| ▪ Effectiveness of utilization of academic autonomy possessed/ obtained (*See Table-26 in PIP*) | Central facilities and departmental clusters were formed to ensure optimum utilization and devoid of duplication of resources in all the programme components of the project.<br>Implementation of Autonomy helped the institution in developing the curriculum by including the topics that are more relevant to the industry and also to implement alternate assessment methods for evaluation as part of the continuous internal evaluation. |

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|---|---|
| **C. Effort made by Institutions for upgrading qualifications of faculty members, including:**<br>▪ Percentage of faculty enrolled in M Tech and PhD | The institution continued its efforts in upgrading qualifications of faculty that resulted in, all the faculty with minimum M. Tech. qualification.<br>Considerable improvement can be seen in the number of faculty with Ph. D. |
| **D. Existing teaching and staff vacancies and effort made by Institutions for filling the vacancies, including:**<br>▪ Percentage of faculty and staff positions filled and vacant | The institution has filled all the vacancies and is maintaining teacher student ratio of 1:14 |
| ▪ Increase in faculty appointed on regular basis | All the faculty are appointed on regular basis |
| **E. Effectiveness of equity at Institutional level, including:**<br>▪ Transition rate of students from the First to the Second year in Undergraduate programmes | The transition rate from first year to second year without any failures, is improved from 71% to 75% |
| Evidence: Visits to the laboratories, interaction with students and faculty, data audit reports and the institutional response. | |
| **OVERALL EVALUATION GRADE FOR 1.1**<br>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) | **1(one)** |

# PERFORMANCE AUDIT FORM (1.2)

## COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

NAME OF PERFORMANCE AUDITOR: **Prof. J. Srihari Rao**

DATES OF PERFORMANCE AUDIT: **22-24, August 2016**

NAME OF INSTITUTION WITH LOCATION: **BMS College of Engineering, Bull Temple Rd, Bangalore 560019**

### 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:**<br>▪ Increase in the satisfaction index of student and faculty | • New Equipment, Software, Workstations and Netbooks have been procured. **(Annexure I)**<br>• Thrust is given for procurement of equipment for PG Labs and R & D activities<br>• Out of seven new laboratories two are established during 2015-16,Other 5 were established earlier.<br>• 18 existing laboratories are modernized by the addition of new equipment<br>• ANSYS 16.2 Academic Multi Physics Campus Solution, LIBSYS Library Software and Turnitin Anti-plagiarism Software have been added to the Library,<br>• Campus license with unlimited number of users for MATLAB<br>• Modernized Audio Visual Classroom has been setup under QEEE.<br>• Significant number of in-house FDPs, Workshops and Seminars have been conducted<br>• Faculty members have been sponsored for participating in various academic programs.<br>• PG Students/Ph.D. scholars are encouraged to present research papers in conferences in addition to providing Assistantships<br>• Students and faculty members expressed satisfaction with facilities provided and the activities of TEQIP-II<br>Evidence: Personal interaction |
| **B. Effectiveness of scaling-up Postgraduate Technical Education, including:**<br>▪ Increased enrolment for M.Tech. and PhD | College offers 13 PG (M. Tech.) Programmes with an annual intake of 258 seats.<br>Admissions to these Programmes are through KEA-PGET based on either GATE scores or the rank obtained at the PGET conducted by the Govt. of Karnataka.<br>College has been attracting good number of (about 60%) GATE scholars and 91% of seats are filled-up in the current year.<br>210 scholars have registered for Ph.D. (Including 26 full time research scholars) during TEQIP-II. |
| ▪ Establishment of proposed laboratories | Seven new laboratories are established for PG programs |
| ▪ Cumulative number of assistantships granted | Teaching Assistantships are awarded to 310 non-Gate students under TEQIP II. |

**C. Progress/achievement in starting new Postgraduate programmes, including:**

- Securing AICTE approval

Five Post Graduate (M.Tech) Programmes have been started during the project period with the approval of AICTE enhancing the total intake by 114 seats (from 144 to 258). The details are provided hereunder:

| SNo | Name of the M.Tech. Program | Year of Commencement | Intake |
|---|---|---|---|
| 1 | Computer Network Engineering [IS] | 2011-12 | 18 |
| 2 | Bio-Chemical Engineering[CH] | 2013-14 | 24 |
| 3 | Bio-medical Signal processing & instrumentation [ML] | 2013-14 | 24 |
| 4 | VLSI & Embedded Systems [EC] | 2014-15 | 24 |
| 5 | Manufacturing Science & engineering [ME] | 2014-15 | 24 |

- Establishment of laboratories

Established 4 new laboratories for new PG Programmes, 3 new laboratories for existing PG Programmes and strengthened 18 existing laboratories as detailed in the **Annexure-II**

- Adequacy of student enrolments

Adequate number (234/258) of students are enrolled in the PG Programmes including those newly started.

| S.No. | Name of the new M. Tech. Program | Intake | Enrolment 2015-16 |
|---|---|---|---|
| 1 | Computer Network Engineering [IS] | 18 | 18 |
| 2 | Bio-Chemical Engineering [CH] | 24 | 11 |
| 3 | Bio-medical Signal processing & instrumentation [ML] | 24 | 18 |
| 4 | VLSI & Embedded Systems [EC] | 24 | 22 |
| 5 | Manufacturing Science & engineering [ME] | 24 | 23 |

**D. Effectiveness of collaborations made with other Institutions in India and abroad, including**

- Increase in number of co-authored publications in refereed journals

College has forged collaborations with institutions like Maastricht University, Netherlands, GENT University, Belgium, Entrepreneurship Development Institute [EDI], Allahabad and through Projects under Council of Scientific Research [CSIR]. Actively participating in Quality Enhancement in Engineering Education [QEEE], an MHRD initiative wherein live classes, Programmes on MOOCs are conducted by Professors from IITB, IITM, IITK and IITD. A report on QEEE activities is at **Annexure III**

**E. Increased collaboration with industry in research and development, including:**

- Increase in number of joint and industry sponsored research and development work undertaken

- Industry sponsored R&D projects are in vogue [ABB, Forus, Nanopix, DUCOM & NI] **Annexure-IV**
- Academic linkages (13) through MOUs have been executed for Joint Research and Development. Details are provided in **Annexure-V**

| 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---|---|---|---|
| 02 | 02 | 02 | 05 | 02 |

- Increase in financial contribution by industry for R & D

Department of Medical Electronics has set up 'Digital X-Ray Machine facility' at a cost of Rs.6 lakhs sponsored by M/s. EHE Pvt. Ltd, Bangalore.

Department of ECE has established "Keysight-BMSCE Advanced Communication Lab" in collaboration with M/s. Keysight Technologies.

Department of TCE is working towards establishment of NI Lab with contribution from M/s National Instruments

- Increase in industry personnel registered for Masters and Doctoral programmes

PG Programmes in Power Electronics, Machine Design, Environmental Engineering have admitted students based on sponsorship from employers during the academic years 2013-14 and 2014-15 **[Annexure-VI]**

- Increase in industry personnel trained by the institution in knowledge and/or skill areas

The college has conducted a six weeks skill enhancement/training programme for the employees of SCANIA during 10th June 2013 to 2nd August 2013. The training featured lectures and hands on training sessions. It focused on aspects related to machine drawing, metrology, thermal and managerial aspects.

National/international conferences conducted by the college has resulted in presentation of research papers co-authored by the faculty with the industry personnel.

- Increase in the number of consultancy assignments secured

The number of consultancy assignments received by the college is as under

| Year | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|---|
| Number of consultancy assignments | 43 | 57 | 85 | 82 | 85 | 88 |
| Evidence: Audited statements dated 31 March 2015 | | | | | | |

- Increase in the number of students' and faculty visits to and/or training in industry

The details of industrial visits organised : **[Annexure-VII]**

| Period | 2010 | 2011 | 2012 | 2013-2014 | Sep 2014 to July 2016 |
|---|---|---|---|---|---|
| Number of industrial visits | 32 | 52 | 45 | 57 | 72 |

**34% of students have taken up industrial internship**

- Improvements in graduate placement rate

Placement details

| | 2012 | 2013 | 2014 | 2015-16 |
|---|---|---|---|---|
| UG | 83% | 75% | 77% | 88% |
| PG | 48% | 38% | 44% | 58% |
| Evidence: MIS and Data Auditor's Report | | | | |

- Increase in involvement of industry experts in curricula & syllabi improvements, laboratory improvements, evaluation of students and delivering expert lectures

(i) Experts from Industries are inducted in the Board of Studies [BOS] of the departments and Academic Council [AC]. Meetings of BOS and Academic Council are held regularly to discuss the updating of curricula & Syllabi.

(ii) BOS &AC are constituted as per V T U regulations.

(iii) More than 300 guest lectures by industry experts have been organized.

(iv) On recommendations by the industry personnel [members of BOS & AC], the syllabus of the following courses have been updated.

| Name of the Department | Name of the course | Industry that recommended the course |
|---|---|---|
| Industrial Engineering & Management | Statistical Quality Control | SAP |
| Computer Science & Engineering | Building Enterprise Applications | Infosys |
| Electronics & Communications Engineering | Embedded System & Micro controllers | ARM |
| Mechanical Engineering | Mechatronics | BOSCH |
| Medical Electronics | Medtech Invention & Medical Device Development | InnAceel (2015) |

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|---|---|
| | (v) Experts are drawn from the industry to evaluate the final year UG student projects, since 2014. Institute is adjudicating the best projects at both department and institute level and honoring the winners in collaboration with the industry. This is to be seen from the minutes of the BOG displayed on the college website.<br><br>**(vi)** College is conducting an annual Technical Symposium in collaboration with the personnel from the Industry. The event is named as PHASE SHIFT. The PHASE SHIFT has its focus on enhancing industry institution interaction, associating the industry personnel in the co-curricular activities of the institution. It created a unique platform for the panel discussion on Industry-Institute Interaction, presentation of student projects, technical paper presentations by students, product presentations by the industry, interaction among the faculty and experts from the industry, workshops/seminars to the students from experienced resource persons from the industry, student competitions on various technical skill sets, interactions with Alumni having successful entrepreneurship background. PHASE SHIFT 2016 is scheduled during September 23-25, 2016.<br>**[Annexure-VIII]**<br><br>The presentation by the TEQIP Coordinator included the outcomes of PHASE SHIFT 2014 & 2015 i.e., the enhanced industry-institute interaction by active participation of all the stakeholders, creating a stage for show-casing the students' talent by various technical competitions, organizing talks by eminent resource persons focused on the necessity of innovation in the technical field. |
| ▪ Increase in the number of sandwich programmes between industries and the institution. | ○ Year 2011-12- ZTE, Robert Bosch, NI(Total 3)<br>○ Year 2012-13- ZTE, Robert Bosch, NI, BSNL, Infosys & EMC$^2$ (Total 6)<br>○ Year 2013-14- ZTE, Robert Bosch, NI, Infosys, EMC$^2$, SAP (Total 6)<br>○ Industry driven Institutional electives are being offered since 2014. |
| 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 | The details of percentage of revenue from externally funded R&D projects & Consultancies as a percentage of total revenue of the institution are as mentioned below : |

| 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|
| 2% | 2% | 2% | 2.26 | 2.30 |

The external funded R& D projects' details are as mentioned below:

| Year | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|
| Amount received | Rs. 64 lakhs | Rs.35 lakhs | Rs.59 lakhs | Rs.96 lakhs | Rs.118 Lakhs |

The consultancy projects' details are as mentioned below:

| Year | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|
| Amount received | Rs.18 lakhs | Rs.63 lakhs | Rs. 55 lakhs | Rs.41 lakhs | Rs.31 lakhs |
| Number | 57 | 85 | 83 | 85 | 88 |
| Evidence: Audited financial statements | | | | | |

<table>
<tr><td>G. Increase in the number of publications in refereed journals</td><td>The increase in the publications in refereed journals is noticed as mentioned below:<br><table><tr><td>Year</td><td>2011-12</td><td>2012-13</td><td>2013-14</td><td>2014-16</td></tr><tr><td>Publications in refereed journals</td><td>96</td><td>142</td><td>169</td><td>577</td></tr></table><br>Evidence: TEQIP Records and Interaction</td></tr>
<tr><td>H. Increase in the number of patents filed</td><td>Total Number of Patents obtained by faculty is 12<br>Total Number of Patents filed so far is 49. [Annexure- IX]</td></tr>
<tr><td colspan="2">OVERALL EVALUATION GRADE FOR 1.2<br>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)</td><td>1(one)</td></tr>
</table>

J Sinha

# PERFORMANCE AUDIT FORM (1.2.1)

**COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS**

NAME OF PERFORMANCE AUDITOR: **Prof.J.Srihari Rao**

DATES OF PERFORMANCE AUDIT: 22-24, August 2016

NAME OF INSTITUTION WITH LOCATION: BMS College of Engineering, Bull Temple Rd, Bangalore 560019

**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**<br>Improvement in Research and Development facilities through:<br>▪ Establishment of new laboratories for applicable thematic research | Four labs have been created under Centre of Excellence in Advanced Materials Research so far.<br>1. Polymer Composites Lab<br>2. Abrasive Water Jet Cutting Facility<br>3. Phase Change Memory (PCM) Materials Lab and<br>4. Scanning Electron Microscope (SEM) and X-Diffractometer (XRD)<br><br>Evidence: Physical visits |
| ▪ Establishment of a knowledge resource centre (library) in the thematic area | E-resources have been added by the college in the past two years in the thematic area. |
| ▪ Procurement of furniture | College has provided the required infrastructure from its own funds.<br><br>Evidence: Physical visits |
| ▪ Civil works | Building with requisite interiors for the aforesaid laboratories is provided by the college.<br><br>Evidence: Physical visits |
| **OVERALL EVALUATION GRADE FOR 1.2.1**<br>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) | **1(one)** |

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# PERFORMANCE AUDIT FORM (1.3)

**COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS**

NAME OF PERFORMANCE AUDITOR: **Prof.J.Srihari Rao**

DATES OF PERFORMANCE AUDIT: 22-24, August 2016

NAME OF INSTITUTION WITH LOCATION: BMS College of Engineering, Bull Temple Rd, Bangalore 560019

## 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:** | |
| • Percentage of faculty who have benefitted from the core and advanced modules of pedagogy training | The institution has been conducting training on pedagogy and orientation to the new faculty members to equip themselves for better performance.<br><br>From 2014 till date, 189 faculty members have undergone pedagogical trainings that include:<br><br>• Two weeks ISTE online Workshop on 'Pedagogy for Effective use of ICT in Engineering Education' conducted by IIT, Bombay during 12.06.14 and 02.08.14<br><br>• IUCEE-International Educators Training Programmes-since 2015 onwards<br><br>• Workshops on Outcomes based Education: Teaching, Learning and Evaluation by BMSCE-IQAC sponsored by NAAC<br><br>• FDP on "Essentials of Pedagogy" with the resource persons from NITTTR-Chennai during July 25-29, 2016<br><br>Details are provided at **Annexure- X** |
| • Improvements in (and/or updating, and more relevant) curricula and /or syllabi | Curricula /Syllabi are revised/updated regularly, meeting the current industry demands. Some changes in curriculum were made recently in the month of February 2016. |

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|---|---|
| • Improvements in (and/or updating, more relevant) course assessment methods | • Continuous monitoring & assessment of academic progression of a student is in vogue<br>• Continuous Internal Evaluation [CIE] through tests, quizzes and alternate assessment tools (seminars, assignments, mini projects, writing technical papers, etc.,)<br>• The Alternate Assessment Tool (AAT) was at 10% of internal assessments, and now is being increased to 20% of the internal assessment.<br>• Comprehensive course consisting of theory, lab component and self-study have been introduced. Students are encouraged to work on open ended experiments, mini projects.<br>• Process of evaluation of Semester End Examinations [SEE]<br>a) If number of scripts >20, valuation is done by the internal examiner & 30% of scripts are reviewed by the external examiner.<br>b) If number of scripts ≤20, double evaluation is done (internal and external valuers), average of the scores awarded is considered for award of final grade.<br>c) In case of double evaluation, if difference in marks is >15 marks, then the paper will go for third evaluation and the third valuation is by an external examiner. Once third valuation is over, average of closest two scores is considered for the award of final grade.<br>d) Usually, valuation process will get over within a week from the last day of the examination.<br>Evidence: Office records and Interactions with COE, faculty and students. |
| • Improvements in teaching and learning methods, including provision for students needing extra/remedial support | Conduction of diagnostic tests for identifying weak students and conduction of remedial classes, proctoring, introduction of need based curriculum including integrated courses, mini projects, Enhanced industrial visits, usage of language labs, continuous internal evaluation of students through quizzes and tests, online courses in collaboration with IITs through QEEE, conduction of Fast track/supplementary semesters, conduction of pre-placement training etc., are in vogue. |
| • Percentage of faculty with UG qualification registered/deputed for improving their qualification (*see Section-3, 4(b) on page 20 of PIP*) | All the six faculty members with UG qualification were supported to improve their qualification to PG during TEQIP period and currently all the engineering faculty members have the minimum qualification of PG (ME/M.Tech). |
| • 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*) | Faculty members have been deputed for subject domain training, seminars, workshops, etc. Almost all the faculty members have undergone training or participated in Seminars, workshops in their respective domain. Details in the **Annexure XI** |
| • Progress in securing accreditation of eligible UG & PG programs *(institutions to achieve target of 60% of eligible UG & PG programmes accredited – applied for within 2 years of joining the Project)* | Out of 12 UG Programmes 11 have been accredited by NBA under Tier-I Format of Washington Accord. Five programmes have been accredited for a period of 05 years and the rest for a period of 03 years. One programme vis., Electronics & Communication Engineering is under process.<br>Out of 13 PG (M. Tech.) Programmes, 9 programmes are eligible and college has applied for accreditation of these programs on 30.05.2016 under Tier-II format and other four programmes are newly started programmes after 2013.<br>BMSCE has also been accredited by National Assessment & Accreditation Council [NAAC] with CGPA of 3.41 on four point scale at 'A' grade valid upto January 04, 2018. **[Annexure XII]** |
| **B. Effectiveness of Pedagogy Training, including** | |
| • Percentage of students satisfied with the quality of teachers and changes/developments specifically undertaken as a result of student evaluations | Based on the student feedback, it is evident that the students are satisfied with the quality of teachers. A nominal number of faculty with low feedback are counseled by a committee and deputed for further training on pedagogy and are kept under observation. Subsequent feedbacks have shown improvement in the performance of such faculty. (Evidence: Institutional Response Form and personal interactions) |
| | **OVERALL EVALUATION GRADE FOR 1.3** USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) — **1(one)** |



J Srihari

# PERFORMANCE AUDIT FORM (2.1)

**COMPONENT 2: IMPROVING SYSTEM MANAGEMENT**

NAME OF PERFORMANCE AUDITOR: **Prof.J.Srihari Rao**

DATES OF PERFORMANCE AUDIT: 22-24, August 2016

NAME OF INSTITUTION WITH LOCATION: BMS College of Engineering, Bull Temple Rd, Bangalore 560019

## 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 | **Academic Autonomy – UG Programmes**<br>Academic autonomy has been awarded to the college by the Government/University for UG Programs from the academic year 2008-09 onwards. UGC vide its letter dated 09.3.2016 has granted extension of autonomous status for 2014-15 and 2015-16 academic years and UGC expert committee's visit is scheduled during August 26-27,2016 for continuation of autonomous status of the institution.<br><br>Institution has framed need-based curriculum from the inputs of industry representatives on the BOS & AC, keeping employability factor and also introduced new courses. Parts of these courses are also imparted by the experts from the industry.<br>**Academic Autonomy – PG Programmes**<br>The Academic Autonomy for PG Programmes is being implemented with effect from the academic year 2016-17.<br>Evidence: Institutional Response Form |
| ▪ Modernization and decentralisation of administration and financial management | Various department/section level Committees involving all stake holders in the decision making processes are formed.<br>The tuition and miscellaneous fee constitutes the major financial resource. Grants are also received from DST, AICTE, VTU towards R&D activities etc.<br>The Head of each program in consultation with the faculty and staff arrives at annual requirement of Department and submits the same to the Principal. The finance committee makes budgetary allocation to the department after a scrutiny of the proposals received. The Proposals with thrust on academic excellence, research and Development are favourably considered and encouraged. The recommendations of the finance committee are placed before BOG for its approval. The Finance Committee meets at least twice in a year and monitors the utilisation of the budget.<br>Four funds (Corpus Fund, Staff development fund, Maintenance Fund, Equipment replacement fund) are established to ensure financial sustainability. At present, the accounting system is semi-automated. Efforts are on to make the accounting system fully automated for better and effective control. |

| | |
|---|---|
| ▪ Extent of delegation of administrative and financial decision making powers to senior functionaries | Departments are autonomous in terms of their academic functioning and have separate bodies to regulate their academic works. A GOOD GOVERNANCE DOCUMENT approved by the BOG is in place. The roles and responsibilities of the Chairman, Member-Secretary and other committee members are well-defined.<br><br>As documented in the GOOD GOVERNANCE DOCUMENT, in addition to the statutory committees like Finance committee, academic council; various other committees such as Library Committee, Hostel Committee, Building & Works committee, Sports & Cultural Committee, Departmental Procurement Committee, Departmental academic committee etc., are constituted with senior faculty members of the departments to facilitate smooth functioning and administration.<br><br>The HODs enjoy financial powers upto Rs.1 Lakh and the Principal upto Rs.25 Lakhs as evidenced in the minutes of the BOG. It is observed that the decentralization of powers and functioning exists to maximum possible extent through the appointment of Vice Principal, Dean (Academic), Dean (Student affairs), Dean (First Year), Dean (PG Studies) and Controller of Examinations. Majority of decisions are taken at the meetings of the HODs [College Council]/College Core Committee comprising of Principal, Vice-Principal and Deans. |
| ▪ Responsiveness to stakeholders (students, faculty, staff, industry, local communities) | Representatives of faculty and students participate in the proceedings of the BOG and academic council. Minutes of the meetings of BOG, AC are placed on the College website. Atleast 50% of the faculty members are involved in decision making process through various committees.<br><br>All the important decisions are being brought to the notice of the concerned through circulars, information booklet etc., in addition to maintaining the same on the college website (www.bmsce.ac.in).<br>o The academic progression of a student is continuously monitored and assessed. The system of Continuous Internal Evaluation helps to ascertain the academic standard of the student from time to time and impart remedial measures<br>o Grievance Redressal Committee [GRC] is constituted to redress the grievance of students and parents.<br>o Student Feedback Committee facilitates the evaluation of teachers' performance by students and on all aspects.<br>o The Institution provides financial incentives for the students who excelled in academics and those who are proficient in sports and represented the Institution at the National/State/University level.<br>o Best student projects are identified and the students felicitated on the occasion of Engineers Day.<br>o College offers support services for students and promotes student participation in organizational aspects of all academic, social, cultural, recreational and governance programs.<br>o Periodical Parent-Teacher Meetings are conducted.<br>o Faculty are involved in all the student activities.<br>o NCC, NSS units and various student clubs under the guidance of faculty are organising community service programmes like Blood Donation Camps, Swacha Bharath, Special Social Service Camps in a group of selected villages, training to school children in the schools adopted by the college, Awareness programmes and activities with NGOs. |

| | |
|---|---|
| ▪ Institutional quality assurance and enhancement strategies, including student feedback mechanisms | • Proctor System: Each student is assigned to a faculty advisor (Proctor), who keeps track of academic progress of the students.<br>• Academic Progression of a student is continuously monitored and assessed<br>• Remedial measures are incorporated from time to time<br>• Internal quality assurance cell (IQAC), departmental academic committees(DAC) are working towards maintaining standards through periodical result analysis<br>• Views of student representatives are heard in BOG and academic council and discuss the same before arriving decisions on the concerned viewpoints. Minutes of these meetings are placed on the college website for information of the stake holders.<br>• Laboratories & Library are augmented and made available for the users (students/faculty) at extended hours.<br>• New faculty members are encouraged to pursue R&D activities by providing seed money.<br>• Institution has a strategic plan drawn for both long term and short term goals. Implementation of strategic plan is regularly monitored by BOG.<br>• Parent – proctor meetings are conducted at regular intervals.<br>• Evaluation of teachers through online student feedback, thrice in a semester is in place.<br>• Online student feedback on the course work, facilities of institution, academic activities is received once in a semester.<br>• Each department is mandated to conduct a minimum of 4 Industrial visits by students during a semester.<br>• Experts from industry are invited to deliver guest lectures.<br>• Personnel from industry are invited to be the members of BOS and academic council<br>• Faculty are collaborating with industry personnel for guiding the student projects and other R&D activities.<br>• College is offering industry driven institutional electives.<br>• Regular academic audits by both internal and external experts are in vogue<br>• Efforts are being made to incubate the ideas of students and develop products in collaboration with industry<br>• An Entrepreneur Development Cell (EDC) is working towards nurturing the idea of entrepreneurship among the students.<br>• Grievance Redressal Cell constituted deals with the redressal of grievances if any of students, parents and others in the college. |
| ▪ Maintenance of academic and non-academic infrastructure and facilities, including sufficiency and quality of academic buildings | ▪ All Major equipment and software are under AMC.<br>• The Data Centre monitors Campus Wide Networking in the college.<br>• Sufficient budgetary allocations are made by the Management for maintenance and upkeep of Physical infrastructure. The Building & Maintenance Section of the college oversees the requirements of all the stake holders and maintenance of all physical facilities. The Building & Works Committee monitors the activities/improvements related to the infrastructure facilities. |
| • Development, maintain and utilisation of institutional resources | • Available space has been utilised optimally.<br>• Water and energy harvesting methods are in vogue<br>• Maintenance activities of the institution are being met out of the income generated by the institution |
| • Generation, retention and utilization of Income Revenue Generation. | Tuition and miscellaneous fee constitutes the major financial resource. Grants are also received from DST, AICTE, VGST, KCST, VTU towards R&D activities etc. The details of External R&D grants received is at **Annexure-XIII**<br>CII TDB T NET Centre facilitates the consultancy activities. The consultancy amount is shared on 50:50 if the consultancy work is carried out inside the college and 70:30 if the consultancy work is carried outside the college. The audited financial statements for the year 2014-15 and 2015-16 are enclosed in **Annexure – XIV.**<br>The amount generated by way of conducting training programs, conferences etc., through FDPs is treated as IRG and has been credited to Staff Development fund. |
| | **OVERALL EVALUATION GRADE FOR 2.1** USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) — **1(one)** |



J Srihari

# 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?**<br>*(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)* | Yes, a Copy of the BMSCE Strategic Plan for the Period 2013-2020 is enclosed herewith. The Strategic Plan has been prepared with a clear objectives and strategies for long term and short term goals. The Management periodically reviews its implementation | |
| • **Has the Governing Body ensured the establishment and monitoring of proper, effective and efficient systems of control and accountability to ensure financial sustainability?**<br>*(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)* | Annual Budget: A proper system for the financial management and control by way of both internal and external audits is in place. Annual Budget is prepared by the Head of the Departments and Principal. The BOG approves the annual institutional budget. Four funds (Corpus Fund, Staff development fund, Maintenance Fund, Equipment replacement fund) are established to ensure financial sustainability.<br><br>Evidence:<br>The Annual budget for the financial year 2016-17 is approved by BOG in its 62nd meeting held on 31.3.2016.<br>Major amount of four funds are kept as Fixed deposits and is noted as per the Fixed deposit receipts produced during the audit. | |
| • **Is the Governing Body monitoring institutional performance and quality assurance arrangements?**<br>*(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)* | • Transparency in Governance is practiced by way of publicising minutes of meeting of the statutory committees like BOG, AC etc., on the college website.<br>• Active participation of all the stake holders in arriving at decisions is seen.<br>• The BOG has approved the strategic plan, vision and mission, short term and long term goals and budget based on the strategic plan.<br>• The BOG has adopted a well-knit review system to assess the performance of the Principal, faculty and staff. The annual report presented by the Principal is discussed in the BOG meeting.<br>• The input quality is measured in terms of CET/COMEDK Ranks etc. and the output in terms of placement, results etc., is evaluated by the BOG in its meetings. | |

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| | • The feedback on whether the institution is achieving the intended outcome in comparison with its strategic plan is also seen as one of the parameters of evaluation.<br><br>Evidence:<br><br>The BOG in its meeting held on 20.11.14 reviewed the accreditation status (NAAC and NBA).<br>The BOG in its meeting held on 15.7.13 introduced performance based incentive scheme for research in order to enhance research outcomes.<br>The BOG started inviting student & staff representatives to its meetings with effect from 21.11.13 for hearing their views on various academic and administrative matters. | |
| • **Has the Governing Body put in place suitable arrangements for monitoring the head of the institution's performance?**<br>*(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)* | Duties and Responsibilities of Principal are clearly defined and approved by the BOG in its meeting held on 16.3.12.<br><br>A system to review the performance of Head of the Institution is in place. An online feedback from the faculty on the performance of the head of the institution is registered and the same is reviewed by the Chairman BOG every year. The Chairman-BOG also reviews the annual performance report of the Principal.<br><br>The Principal presents periodical reports on the institutional activities to the BOG. The Principal also provides periodical report on the extent of compliance to the strategic plan. | |
| | **EVALUATION GRADE FOR PRIMARY ACCOUNTABILITIES**<br>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) FOR ALL GOVERNNANCE SECTIONS | **1(one)** |

| **B. OPENNESS & TRANSPARANCY IN THE OPERATION OF GOVERNING BODIES** | | **GRADE** |
|---|---|---|
| • **Does the Governing Body publish an annual report on institutional performance?**<br>*(Give the publication date and type of publication of the most recent annual report, if there is one)* | Annual report is presented and discussed in the BOG. The same is published in the College website.<br><br>Evidence: The list of important academic/other activities of the college are noted by the BOG in almost all of its meetings and the latest meeting was held on 4.8.2016.<br><br>The BOG meeting minutes are published on the College. website www.bmsce.ac.in | |
| • **Does the Governing Body maintain, and publicly disclose, a register of interests of members of its governing body?**<br>*(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)* | BMSCE being an aided institution is an Autonomous institution under VTU adhering to the norms of UGC/AICTE/VTU/DTE as is the case. The BOG composition is as per UGC guidelines. Process of collecting register of interests of BOG members is currently under process. | |

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|---|---|---|
| ▪ **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?**<br>*(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)* | Meetings of BOG are held in a transparent manner. Representatives of Faculty and students are invited to participate in the proceedings of the BOG. The minutes of the meetings are published in the College website (www.bmsce.ac.in).<br>The relevant information is shared with HODs, faculty and staff through various meetings/circulars. | |
| | **GRADE FOR OPENNESS & TRANSPARENCY IN THE OPERATION OF GOVERNING BODIES** | **1(one)** |
| **C. KEY ATTRIBUTES OF GOVERNING BODIES** | | **GRADE** |
| ▪ **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?**<br>*(Specify the range of skills and experience that the members of the governing body, and especially the external members, have)* | The BOG of BMSCE has been constituted as per the UGC guidelines (UGC XI Plan). The BOG consists of independent representatives from State Government, UGC, University & Industry, two senior faculty members of the institute in addition to three members from the Trust. BOG interacts with student and faculty representatives during board meetings. | |
| ▪ **Are the recruitment processes and procedures for governing body members rigorous and transparent?**<br>*(Specify how governing body members are selected, and whether that process is transparent)* | The BOG is constituted as per UGC guidelines. The Management nominees are decided by the Council of Trustees, BMSET | |
| ▪ **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?**<br>*(Give examples, where possible, of the role of external members in improving the performance of the institution)* | The BOG comprises of members with strong academic background and administrative experience. This has vastly contributed to the success of the Institution. The BOG is free from any political interference.<br>The Academic Council, the highest academic body is responsible for setting academic standards, policies and procedures. | |
| ▪ **Are the role and responsibilities of the Chair of the institution and the Member Secretary serving the governing body clearly stated?**<br>*(If yes, specify the document where these roles are defined)* | The role and responsibilities of the Head of the institution, who is also serving as the secretary of the BOG are clearly defined. | |
| ▪ **Does the Governing Body meet regularly? Is there clear evidence that members of the governing body attend regularly and participate actively?**<br>(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. The BOG meets at regular intervals and the participation of the members is evident from minutes of the meetings. | |
| | **GRADE FOR KEY ATTRIBUTES OF GOVERNING BODIES** | **1(one)** |
| **D. EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES** | | **GRADE** |
| ▪ **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?**<br>*(If yes, give the date(s) of governing body meetings where the minutes show that such a review has been discussed)* | The Management monitors the strategic plan, both short term goals and long term goals, through periodical reviews (quarterly) of the implementation of strategic plan.<br>Evidence: The Strategic plan of BMSCE (2013-2020) was approved by the Council of Trustee in their meeting held on 04.04.13 and by the BOG in its meeting held on 15.07.13. The periodical reports on implementation of Strategic Plan (period from the previous meeting) are reviewed by BOG. | |

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|---|---|---|
| • **Does the Governing Body ensure that new members are properly inducted, and existing members receive opportunities for further development as deemed necessary?**<br>*(If yes, give examples of how these two tasks are carried out)* | The BOG is constituted as per the guidelines of statutory and regulating Bodies. The existing members are continuously involved in the developmental activities, in various capacities such as Institutional Academic Auditors, Mentors/counsellors for faculty, Board of Appointments etc. | |
| | **GRADE FOR EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES** | **1(one)** |
| **E. REGULATORY COMPLIANCE** | | **GRADE** |
| • **Does the Governing ensure regulatory compliance* and, subject to this, take all final decisions on fundamental matters of the institution.**<br>*(If yes, give the date(s) of governing body meetings where the minutes show that regulatory compliance has been discussed)* | The BOG ensures compliance to various regulatory bodies like VTU, State Government, AICTE and COA on regular basis.<br>Evidence: The BOG in its meeting held on 2.9.15, 23.11.15, 31.3.16 and 4.8.16 reviewed the compliance /approvals accorded by the various regulatory bodies. | |
| • **Does the regulatory compliance include demonstrating compliance with the 'not-for-profit' purpose of education institutions?**<br>*(If yes, give evidence that the governing body has been directly involved)* | Institution collects the fee as prescribed by the Government/University.<br>Criteria for admissions are drawn by the Government of Karnataka.<br>Annual Budget of the institution demonstrates that the institution is not-for-profit. | |
| • **Has there been accreditation and/or external quality assurance by a national or professional body? If so, give name, current status of accreditation etc**<br>*(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)* | BMSCE is accredited by National Assessment & Accreditation Council [NAAC] with CGPA of 3.41 on 4 point scale at 'A' grade valid upto January 04, 2018.<br>Out of 12 UG Programmes, five programmes have been accredited for a period of 05 years and six programmes for a period of 03 years. Institution has applied for accreditation of the lone UG programme left out, Electronics & Communication Engineering.<br>Out of 13 PG programmes, the college has applied for accreditation for 9 eligible PG programmes on 30.05.2016.<br>Evidence: Certificate of accreditation from NAAC, Letters of accreditation received from the NBA and the acknowledgement received by the college for applications submitted. | |
| | **GRADE FOR REGULATORY COMPLIANCE** | **1(one)** |
| | **OVERALL EVALUATION GRADE FOR GOVERNANCE 2.1.1 A-E**<br>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) | **1(one)** |

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# PERFORMANCE AUDIT FORM (2.2)

**COMPONENT 2: IMPROVING SYSTEM MANAGEMENT**

NAME OF PERFORMANCE AUDITOR: **Prof.J.Srihari Rao**

DATES OF PERFORMANCE AUDIT: 22-24, August 2016

NAME OF INSTITUTION WITH LOCATION: BMS College of Engineering, Bull Temple Rd, Bangalore 560019

## 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) | GRADE |
|---|---|---|
| **A. Effectiveness of mentoring, reviews, surveys and audits conducted, including:**<br>▪ Increase in the achievement of the institutions goals and targets set out in the Institutional Development Proposal | Three mentoring sessions and two performance audits have been conducted so far. The institution has implemented the suggestions of mentor and auditor effectively as evidenced from the reports of mentor and previous audit.<br><br>The institution has achieved its targets set forth in its IDP. Based on its performance the institution is selected for grant of additional funds based on the revised IDP submitted by the college during May 2015. | **1(one)** |
| **B. Effective project management and monitoring, including:**<br>▪ Precise and reliable information/ data through web based MIS available to stakeholders at all time. | The data updated by the college on the web based MIS is reliable as evidenced through the data audit reports. The information is available to the stakeholders. | **1(one)** |
| **C. Effectiveness of faculty evaluation by students, including:**<br>▪ Percentage/ increase in percentage of faculty evaluated by students in one or more subjects<br>▪ Are results of evaluation properly used for teacher improvement?<br>**If yes, is the procedure adopted for teacher improvement including counseling appropriate and effective?** | College has been implementing an online feedback system for more than seven years. The system records the feedback of students on all the teachers and on all courses conducted, thrice in a semester. The faculty having below par rating (less than 60 percent) are being counselled by a committee constituted for the said purpose. The faculty are advised to improve their performance and further deputed for training Programmes to overcome the deficiencies. The feedback report for the Odd and Even Semesters of 2015-16 is provided at **Annexure-XV** | **1(one)** |
| | **OVERALL EVALUATION GRADE FOR 2.2**<br>USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1) | **1(one)** |

J Srihari

**ANNEX 4. (FEEDBACK)**
**PERFORMANCE AND DATA AUDIT FEED BACK**
**(Feedback to the Institution, state project facilitation units, the national project Implementation unit / and relevant Mentor)**

**Name of the Performance Auditor: Prof. J. SRIHARI RAO, Former Professor & Dean, NIT Warangal.**
**Dates of Performance Audit : 22-24, August, 2016.**

Name of the Institution with location: **B.M.S.COLLEGE OF ENGINEERING, BENGALURU – 560019, KARNATAKA**

Key points feedback by the Performance Auditor to the Institution at the end of the visit – against the seven aspects of evaluation

| | |
|---|---|
| 1.1 | **Strengthening Institutions to Improve learning outcomes and employability of graduates**:<br><br>The teaching-learning process has significantly improved by strengthening of lab facilities, training of faculty, technicians and procuring e-resources which in turn resulted in quality of student projects.<br>There is substantial improvement in the campus placements of graduate & post graduate students. |
| 1.2 | **Scaling-up postgraduate education and demand driven research and development and innovation** :<br><br>During the project 5 New P.G. Programs were started as committed in IDP, which resulted in increased Enrolment of students into M.Tech programs. Students expressed happiness at the financial assistance given under TEQIP.<br><br>Innovative R&D projects are being done by the M.Tech students resulting in increased no. of publications in reputed journals.<br><br>It is also notice that collaboration with industries has been significantly Improved.<br><br>There is a substantial improvement in the enrolment of PhD scholars, due to the state of art equipment procured and installed through the TEQIP Grants.<br>Students expressed their happiness at the financial assistance given to attend conferences and present papers. It is hoped that this process will definitely lead to substantial increase in filing and obtaining of patents.<br>However, the college should also plan for continued assistantship to PhD students, after the TEQIP Project.<br><br>It is visible that confidence level in faculty has improved substantially and the same is noticed during the interaction. This is due to the support given by the institution for training and R & D Activity. It will have a direct impact on the overall growth of the institution.<br><br>The center of Excellence in 'Advanced Materials Research' has been established in Mechanical Engineering department. Equipment such as SEM, XRD Water jet cutting machine etc., were procured and the same being effectively utilized by faculty and students which resulted in an increased number of collaborative research publications.<br>This activity will definitely result in motivating other and establishment of COE in other departments through other funding agencies. |

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| 1.3 | **Faculty Development for effective teaching (Pedagogical training)** :<br><br>A Substantial number of faculty have attended training program in pedagogy and domain areas. The same has been noticed during the interaction. The faculty expressed their satisfaction about the quality of training obtained. This resulted in improving in Pedagogical skills. |
| 2.1 | **Capacity Building to strengthen Management** :<br><br>Most of the senior faculty attended management training programs at IIM & IITs resulting in an improvement in their managerial and administrative skills. |
| 2.1.1 | **Implementation of Good Governance :**<br><br>It is noticed that there is a decentralization of authority and responsibility at various levels. The college is practicing the good governance. A Document pertaining to the Good governance has been published.<br>There is transparency in the total process. It is quite impressive. |
| 2.2 | **Project Management , Monitoring and evaluation :**<br><br>Apart from TEQIP team, HODs and a good no. of faculty participated enthusiastically, resulted in the successful implementation of the project and achieving the project goals & objectives.<br>Data collection and documentation has been done effectively through MIS |

Key improvements noticed on shortcomings reported during earlier Performance Audits

The results are being announced within 15 days. The institute is now conducting CEPs very frequently for the industry persons and others. There is significant improvement in Institution -Industry interactions.

Brief statements on continuing shortcomings, and reasons

**There are no major shortcomings except a little space constraint that is being addressed.**

Interacted with the Chairman-BOG and Sri. K. Srinath, State Project officer (M & E), SPFU.
The BOG shall continue the good practices and ensure sustenance of achievements by allocating the required budget after the closure of the project.
On the whole, the performance of the college is quite impressive. The impact of the project is quite visible under the guidance of the BOG and mentorship of Prof. B.S. Sonde.
Congratulations to the Principal and the entire TEQIP team.

J Srihari

(J. SRIHARI RAO) 24/8/2016.

# B.M.S.COLLEGE OF ENGINEERING, BANGALORE-560 019

## ANNEXURE 5: INSTITUTIONAL RESPONSE FORM (1)

| No. | Institutional monitoring and project output/outcome | INSTITUTIONAL RESPONSE |
|---|---|---|
| 1.1 | Briefly describe the actions taken for obtaining Autonomous Institution status, and the status of current application | The UG Programmes of BMSCE were awarded academic autonomy from the academic year 2008-09 onwards. UGC vide its letter dated 09.3.2016 has granted extension of autonomous status for 2014-15 and 2015-16 academic years.<br>The Academic Autonomy for PG Programmes shall be effective from 2016-17.<br>(Relevant orders/communications are enclosed herewith-**Annexure I**) |
| 1.2 | If your institution is already an Autonomous Institution, briefly state actions taken for the following: | |
| 1.2.1 | Value addition to courses as per market demand | Please refer to **Annexure-II** |
| 1.2.2 | Improvements introduced in student evaluation | a) The academic progression of a student is continuously monitored and assessed<br>b) Continuous Internal Evaluation [CIE] through tests, quizzes and alternate assessment tools (seminars, assignments, mini projects, writing technical papers, etc.,)<br>c) The Alternate Assessment Tool (AAT) was at 10% of internal assessments, and now it is increased to 20% of the internal assessment.<br>d) Introduction of Comprehensive course consisting of theory, lab component and self-study. (Students are encouraged to work on open ended experiments, mini projects).<br>e) Process of evaluation of Semester End Examinations [SEE]<br>(i) If number of scripts >20, valuation is done by the internal examiner & 30% of scripts are reviewed by the external examiner.<br>(ii) If number of scripts ≤20, double evaluation is done (internal and external valuers), average of the scores awarded is considered for award of final grade.<br>(iii) In case of double evaluation, if difference in marks is >15 marks then the paper will go for third evaluation and the third valuation is by an external examiner. Once third valuation is over, average of closest two scores is considered for the award of final grade.<br>(iv) Valuation process will get over within a week from the last day of the examination.<br>Academic council of the College amends the Academic Rules & Regulations time to time. |
| 1.2.3 | Addition of electives | Electives are being offered from 5th semester onwards in a three tier system, i.e., departmental electives, cluster electives and institutional (open) electives.<br>The details are shown at **Annexure-III** |

<table>
<tr><td>1.2.4</td><td>Carrying out teacher evaluation by students</td><td>The BMSCE has a well-established feedback system that is operative for last seven years with a software solution of M/s Sun-plus Solutions.<ul><li>The online feedback on all the teachers and on all courses conducted is captured thrice in a semester.</li><li>The feedback on HODs and Principal is obtained from the faculty members once in a semester.</li><li>The feedback on the institution is also obtained both from students and faculty once in every semester.</li><li>The feedback from Alumni, Parents and Industries are obtained once in a year.</li></ul>The faculty having below par rating (less than 60 percent) are being counselled by a committee constituted for the said purpose. The faculty are advised to improve their performance and further deputed for training Programmes to overcome the deficiencies. The feedback report for the Odd and Even Semesters of 2015-16 is provided at Annexure-IV</td></tr>
<tr><td>1.2.5</td><td>Starting of new postgraduate Programmes, as planned</td><td>A total of 05 PG (M.Tech) Programmes have been started during the project period with the approval of AICTE enhancing the total intake by 114 seats (from 144 to 258). The details are provided hereunder:<table><tr><th>SNo</th><th>Name of the M.Tech. Program</th><th>Year of Commencement</th><th>Intake</th></tr><tr><td>1</td><td>Computer Network Engineering [IS]</td><td>2011-12</td><td>18</td></tr><tr><td>2</td><td>Bio-Chemical Engineering[CH]</td><td>2013-14</td><td>24</td></tr><tr><td>3</td><td>Bio-medical Signal processing & instrumentation [ML]</td><td>2013-14</td><td>24</td></tr><tr><td>4</td><td>VLSI & Embedded Systems [EC]</td><td>2014-15</td><td>24</td></tr><tr><td>5</td><td>Manufacturing Science & engineering [ME]</td><td>2014-15</td><td>24</td></tr></table>Copy of the AICTE Approvals are provided at Annexure V</td></tr>
<tr><td>1.2.6</td><td>For enhancing qualification, deputing to other institutions and/or admitting within the institution those teachers that have a Bachelor's degree only</td><td>Six graduates (branch toppers) of the college recruited as faculty were deputed to other institutions for completing their M.Tech. Degree.<br>From the academic year 2014-15 onwards, candidates with minimum qualification of Master's Degree are only considered for faculty positions and at present, there are no faculty with only bachelor's degree.</td></tr>
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| | | |
|---|---|---|
| 1.2.7 | Conducting continuing education and/or skill enhancement Programmes for industry | The department of Mechanical Engineering has conducted a six weeks skill enhancement/training programme for the employees of SCANIA during 10th June 2013 to 2nd August 2013. The training featured lectures and hands on training sessions. The training focused on aspects related to machine drawing, metrology, thermal and managerial aspects.<br><br>About eight national/international conferences conducted by various departments resulted in presentation of research papers co-authored by the faculty with the industry personnel. |
| 1.2.8 | Inviting experts from industry and eminent institutions for special lectures | The institution has been inviting experts and distinguished speakers from industry and academicians from premier institutions over the years as part of its extension lecture series Programmes. From the inception of the project, a total of 317 guest lectures have been organized. The details are shown at **Annexure-VI.**<br>From the academic year 2015-16 onwards, certain elective courses are offered jointly by the faculty and experts from industry. |
| 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: | The details are shown at **Annexure-VII** |
| 1.3.1 | Governing Body | Above Rs. 50Lakhs |
| 1.3.2 | Head of Institution for:<br>(a) single purchase of equipment and (b) recurrent expenditure | Above Rs. 1Lakh & below Rs.25 Lakhs |
| 1.3.3 | Dean | NA |
| 1.3.4 | Heads of Department | Upto Rs. 1 Lakh |
| 1.4 | Progress in starting new postgraduate programmes, as proposed | Achieved. Same as at 1.2.5. |

| | | |
|---|---|---|
| 1.5 | Actions taken to fill up seats in the existing postgraduate programmes | A total of 13 PG (M. Tech.) Programmes with an annual intake of 258 seats are currently being offered. Admissions to these Programmes are through KEA-PGET based on either GATE scores or the rank obtained at the PGET conducted by the Govt. of Karnataka. The College has been attracting good number of (about 60%) GATE scholars. Almost all the seats are being filled-up. The college has offered Teaching Assistantships to non-Gate students and fiscal incentives for project works, paper presentations under TEQIP. |
| 1.6 | Actions taken to reduce vacancies in faculty positions | Institution has been making continuous efforts to augment its faculty strength through regular recruitment. From March 2013 to till date, a total of 54 faculty members have been recruited to various regular faculty positions. The total faculty strength as on date is 314.<br><br>A few GIA positions are vacant and approval awaited filling. However, the college has recruited faculty members over and above the sanctioned posts in the management cadre and is maintaining a student ratio of 1:14. |
| 1.7 | Status of faculty appointed on regular basis, and proposed actions to fill up all faculty positions on regular basis | |
| 1.8 | Progress in getting pedagogical training in both the modules | The institution is conducting training regularly to the newly recruited faculty members on the pedagogy (basic module) to enable them to deliver technology based TLP for the benefit of students since years.<br>Departments are encouraged to organize Advanced Pedagogical Programmes at the college as well as depute faculty members to attend Programmes conducted by various institutions. In addition to the orientation & induction training programmes conducted in the college every year for the benefit of newly joined faculty, each of the faculty members is deputed to undergo training programmes in their chosen field, during the project period. Following are a few pedagogical Programmes conducted at the college and well received by the faculty:<br>(i) Two weeks ISTE online Workshop on 'Pedagogy for Effective use of ICT in Engineering Education' conducted by IIT, Bombay during 12.06.14 and 02.08.14<br>(ii) IUCEE-International Educators Training Programmes-since 2015 onwards<br>(iii) Workshops on Outcomes based Education: Teaching, Learning and Evaluation by BMSCE-IQAC sponsored by NAAC<br>(iv) FDP on ''Essentials of Pedagogy'' with the resource persons from NITTTR-Chennai during July 25-29, 2016<br>Details are provided at **Annexure- VIII.** |

| | | |
|---|---|---|
| 1.9 | New Activities (since project start or the last performance audit) undertaken for enhancing interaction with industry | The Industry Institution Interaction Cell [IIIC] is active and helped the departments in enhancing the interaction with experts from industry. Personnel from the industry are invited as members of the BOS, as Adjunct Faculty, to offer training during conduction of FDPs, to guide student projects, to offer industry driven elective courses, Incubating the innovative ideas in collaboration with industry etc.<br><br>Since 2010-11 till date, 41 MOUs have been signed with industries. **[Annexure-IX]**.<br><br>Regular Industrial visits by students and faculty to the industry are in vogue.<br><br>**The BMSCE initiated an important activity under IIIC named PHASE SHIFT** – a two day technical event, encouraging the students and industry presenting/displaying the ongoing projects/ideas/products in the exhibition in the college, conduction of seminars/symposia/workshops by the experts from industry for the benefit of students. The students are encouraged to design and execute various programs during Phase shift. The events conducted during 2014 and 2015 are very well attended by the students of BMSCE and other institutions. Brief report and details are provided at **Annexure-X.**<br><br>The Phase shift for the year 2016 is scheduled during September 23-25, 2016. |
| 1.10 | Generation, retention and utilization of the non-tuition fee revenue generated through various activities | CII TDB T NET Centre facilitates the consultancy activities. The consultancy amount is shared on 50:50 if the consultancy work is carried out inside the college and 70:30 if the consultancy work is carried outside the college. The audited financial statements for the year 2014-15 and 2015-16 are enclosed in **Annexure – XI**<br><br>The amount generated by way of conducting training programs, conferences etc., through FDPs is treated as IRG and has been credited to Staff Development fund. |
| 2.1 | Progress in instituting practice of teacher evaluation by students | Details are provided above at 1.2.4 and in **Annexure-IV.** |
| 2.2 | Current percentage of teachers evaluated by students in one subjects taught | 100%.<br>(as provided at 1.2.4 and at **Annexure-IV**) |

| | | |
|---|---|---|
| 2.3 | Current percentage of teachers evaluated by students in more than one subjects taught | 100%<br>(as provided at 1.2.4 and at **Annexure-IV)** |
| 2.4 | State the incentives being offered to the faculty for participation in consultancy assignments, R&D, and continuing education programs conducted by the institution for industry | (i) Performance based incentives are offered for securing externally funded Research Projects<br>(ii) Faculty are facilitated by the management to participate and present research papers in two national conferences per year and one international conference abroad once in every three years.<br>(iii) Financial incentives are provided to publish research papers in peer reviewed national/international journals with impact factor above 0.6<br>Details provided at **Annexure XII** |
| 3.1 | Have the four funds been established? | Yes |
| 3.2 | If yes, what is the amount in each fund? | The amount in SB account and Fixed deposit are as below:<br>Corpus Fund-Rs. 1,33,08,773/-<br>Faculty Development Fund-Rs. 1,42,18,823/-<br>Equipment Replacement Fund-Rs. 1,31,92,310/-<br>Maintenance Fund-Rs.1,32,34,167 /-<br>Copy of FDs at **Annexure XIII** |
| 3.3 | Is the contribution to each fund as per the requirement in the PIP? (see Annex-1, item-4 on | YES, each fund is being contributed |
| 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) BOG- Above Rs.50.00 Lakhs<br>b) Head of the Institution- Above Rs.1 Lakh & below Rs.25 Lakh<br>c) HODs- Upto Rs. 1.00 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 |

<table>
<tr><td>4.1</td><td>Number of on-going sponsored projects from industry</td><td>32</td></tr>
<tr><td>4.2</td><td>Number of industry awarded consultancy assignments completed</td><td>51</td></tr>
<tr><td>4.3</td><td>Number of on-going industry awarded consultancy assignments</td><td>30</td></tr>
<tr><td>4.4</td><td>Number of organizations and industries with whom Memorandum Of Understanding have been signed for joint research and development.</td><td>The Total number of MOUs with industry is 41.<br><br>A total of 13 linkages through MOU have been executed for Joint Research and Development. Details are provided in Annexure – XIV.<br><table><tr><td>2011</td><td>02</td></tr><tr><td>2012</td><td>02</td></tr><tr><td>2013</td><td>02</td></tr><tr><td>2014</td><td>05</td></tr><tr><td>2015</td><td>02</td></tr></table></td></tr>
<tr><td>5.1</td><td>List the undergraduate programmes accredited on date by name</td><td>Out of 12 UG Programmes 11 have been accredited by NBA under Tier-I Format of Washington Accord. Five programmes have been accredited for a period of 05 years and rest for the period of 03 years.<br><br>It may be noted that, BMSCE has also been Accredited by National Assessment & Accreditation Council [NAAC] with CGPA of 3.41 on four point scale at 'A' grade valid upto January 04, 2018.<br><br>The details of Accreditation for UG Programmes are shown at Annexure-XV.</td></tr>
<tr><td>5.2</td><td>State program-wise action taken to get accredited the eligible undergraduate programmes that are yet to be accredited</td><td>Out of 12 UG Programmes, 11 Programmes are accredited and one programme vis., Electronics & Communication Engineering is under process.</td></tr>
<tr><td>5.3</td><td>List the postgraduate Programmes accredited on date by name</td><td>The details are shown at Annexure-V</td></tr>
</table>

| | | |
|---|---|---|
| 5.4 | State programme-wise action taken to get accredited the eligible postgraduate Programmes that are yet to be accreditation | Out of total 13 Programmes, applications have been submitted to accredit the 9 eligible Programmes. |
| 6.1 | Give the number of papers published in national refereed journals from the date of joining the Project | **61**<br>[Details are placed at **Annexure- XVI**] |
| 6.2 | Give the number of papers published in Foreign refereed journals from the date of joining the Project | **577**<br>[Details are placed at **Annexure- XVII**] |
| 6.3 | Number of patents filed since joining the Project<br>List the titles of patents filed since joining the Project along with names of contributors | **49**<br>[The details are shown at **Annexure-XVIII**] |
| 6.4 | Number of patents obtained since joining the Project<br>List the titles of the patents obtained since joining the Project along with the names of contributors | **12**<br>[The details are shown at **Annexure-XIX**] |
| 7.1 | Actions being taken for identifying weak students | (i) The feedback received from the companies visiting the campus offering internship/placement is considered for identifying the areas of weaknesses among the PG students.<br>(ii) All the students admitted to I year BE program are subjected to tests in English and Mathematics. The students performing below average mark are being judged as weak students.<br>(iii) Diagnostic tests are conducted to identify the weak students of both UG/PG students. |
| 7.2 | Number of students that have benefitted from remedial teaching since joining the Project/since the last performance audit | Remedial classes in Mathematics were conducted to make them ready to catch up with the regular classes. Separate English classes [both theory and language labs] are held.<br>Programs are conducted under EAP (Equity Assurance Plan of TEQIP-II) in the domain areas as well as in the life skills. A total of **878** students have been benefited from the remedial classes and fast track semester support since inception of the project. |

| | | |
|---|---|---|
| | | Details are at **Annexure- XX** |
| 7.3 | Number of students that have benefited from specialized soft skills and professional skills training Programmes conducted since joining the Project/ since the last performance audit | All the students are provided with training on specific Soft & Professional skills by experts drawn from reputed trainers through BMSCE Placement Cell. A total of 5090 student have benefited since the inception of the project. However, the expenses for the said trainings are met out of college funds.<br><br>Details are at **Annexure- XXI** |
| 7.4 | Status of establishment and functioning of remedial options and activities | Remedial soft skill trainings, Text/workbooks, free hardware and course specific software from the library are provided as a part of remedial options. |

PRINCIPAL
B.M.S. College of Engineering
Bangalore - 560 019.

# INSTITUTIONAL RESPONSE FORMS (2)
## (Engineering disciplines)

## Table-1(a): CONSOLIDATED STATEMENT

| S.No. | | TEQIP (2010-11) | | | TEQIP (2015-16) | | |
|---|---|---|---|---|---|---|---|
| 1 | NO. OF DEPARTMENTS | 12 | | | 12 | | |
| | | | | | | | |
| 2 | LEVELS OF PROGRAMMES | B.TECH | M.TECH | PhD | B.TECH | M.TECH | PhD |
| | (Number of Programmes) | 12 | 08 | 07 | 12 | 13 | 13 |
| 3 | COLLABORATION WITH INDUSTRY (Number of MoUs SIGNED) | 09 | | | 41 | | |

## Table-1(b): DETAILS OF STUDENT ENROLMENT

| S.No. | NAME OF THE DEPARTMENT | | TEQIP (2010-11) | | | TEQIP (2015-16) | | | INCREASE IN PERCENTAGE |
|---|---|---|---|---|---|---|---|---|---|
| | | | B.TECH | M.TECH | PhD | B.TECH | M.TECH | PhD | |
| | | NO. OF FRESH STUDENTS ADMITTED IN THE INSTITUTE | 890 | 144 | 15 | 1141 | 234 | 58 | UG – 28%<br>PG – 63%<br>PHD – 287% |

## Table 1(c): FACULTY DETAILS

| S.No. | NAME OF THE DEPARTMENT | | TEQIP (2010-11) | | | TEQIP (2015-16) | | | INCREASE IN PERCENTAGE | Total |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | B.TECH | M.TECH | PhD | B.TECH | M.TECH | PhD | B.Tech, M.Tech, Ph.D. | |
| | 1 Civil Engineering<br>2 Mechanical Engineering,<br>3 Electrical & Electronics,<br>4 Electronics & Communication,<br>5 Industrial Engineering & Management,<br>6 Computer Science & Engineering,<br>7 Telecommunication Engineering,<br>8 Information Science & Engineering,<br>9 Electronics &Instrumentation Engineering,<br>10 Medical Electronics,<br>11 Chemical Engineering,<br>**12** Biotechnology. | **NO. OF FACULTY HAVING HIGHEST QUALIFICATION** | | | | | | | | |
| **1** | | **Regular** | 06 | 152 | 47 | 0 | 174 | 140 | B.Tech to M.Tech: 100% and PhD: 53% | 314 |
| **2** | | **Contractual** | | | | | | | | |
| **3** | | **Total** | 06 | 152 | 47 | 0 | 174 | 140 | | 314 |

# Table 1(d): COLLABORATION WITH INDUSTRY

| S.No. | NAME OF THE DEPARTMENT/ Institute | NAME OF THE INDUSTRY WITH WHOM MOU SIGNED | | |
|---|---|---|---|---|
| | | TEQIP No. 09 (2010-11) | | TEQIP No. 41 (2015-16) |
| **S.No.** | **NAME OF THE DEPARTMENT/ Institute** | **NAME OF THE INDUSTRY WITH WHOM MOU IS SIGNED TILL 2010-11** | **NAME OF THE DEPARTMENT/ Institute** | **NAME OF THE INDUSTRY WITH WHOM MOU IS SIGNED FROM 2011-12 TO JULY 20 16** |
| **1** | BT | M/s Dakshah Biosciences Pvt. Ltd | EC | M/s Nihon Communication Solutions Pvt. Ltd |
| **2** | EC | M/s NXP Semiconductor Pvt. Ltd | EE & ME Cluster | M/s ROBERT BOSCH – |
| **3** | ML | Advanced Digital Imaging Solutions Laboratory | IM | M/s SAP Labs |
| **4** | IM | M/s Cranes Software International Ltd | EE | M/s Centum Electronics Ltd |
| **5** | TCE | M/s National Instruments [India] Pvt.Ltd | EE | M/s Cranes Software |
| **6** | TCE | M/s ZTE Telecom India Pvt.Ltd | ALL | M/s INFOSYS |
| **7** | TCE | M/s TEXAS Instruments | ALL | M/s TCS |
| **8** | ALL | M/s WIPRO Technologies | TCE | BSNL |
| **9** | BT | M/s Biocos Life Sciences Pvt.Ltd | CSE, ISE | M/s $EMC^2$ |
| **10** | | | TCE | M/s Tektronix |
| **11** | | | ECE | M/s ARM |
| **12** | | | ECE | M/s Chip Edge |
| **13** | | | ML, IT | M/s TMI Systems |

| | | | | |
|---|---|---|---|---|
| **14** | | | All | M/s Rao Advisors LLC |
| **15** | | | ECE, MEE | M/s Nasscom |
| **16** | | | EEE & CS Cluster | M/s Nanopix |
| **17** | | | ECE | M/s Novoton |
| **18** | | | CSE,ISE | M/s Novell Software Development(I) Pvt.Ltd. |
| **19** | | | CHE | M/s Yokogawa |
| **20** | | | ME | M/s Sical Abrasives |
| **21** | | | ME | M/s DUCOM Ltd |
| **22** | | | EC | M/s ABB GISL |
| **23** | | | BMSCE (RnD) | SAII USA |
| **24** | | | BMSCE (RnD) | NIPER |
| **25** | | | ML | M/s Vinyas Innovative Technologies Pvt Ltd |
| **26** | | | BMSCE (Placement) | HUAWEI |
| **27** | | | ML | BMSHT, Aventyn |
| **28** | | | CS,IS,ML | Ellipsonic PVt Ltd |
| **31** | | | BMSCE (Placement) | Juniper |
| **32** | | | BT | Cleanergis Biosciences Pvt. Ltd. |

# Table 2: SUMMARY SHEET FOR REVIEW

**Name of NPIU Official :**

**Name of Institute: BMS College of Engineering, Bangalore** **Sub-component:1.2**

**Category of Institute: GIA**

| | *Strategy*/Activities | Indicators | Institutional Baseline (Pre-TEQIP) in 2010-11 | Proposed Target for 2 years (31st Dec 2012) | | 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.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 - Assistantships | **Percentage of female students against total engineering students in all years** • Undergraduates • Postgraduates | 26% 37% | 29% 30% | 29% 30% | NA NA | NA NA | 28% 33% | NA NA | Achieved. [ 97% in UG and 110% in PG ] | |
| 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)** | 67% | 69% | 69% | NA | NA | 63% | NA | | |
| A.1.3 | | **Average scores (%/ CGPA) at degree completion** • Undergraduates • Postgraduates | 80% 73% | 7.99 (CGPA) 73% | 7.99 (CGPA) 73% | NA | NA | 8.31 (CGPA) 74% | 3.05 | Achieved | **PG results of 2014-15 are given as 2015-16 PG results are awaited as viva is going on.** |
| A.1.4 | | No. of students enrolled in M.Tech programs | 144 | 182 | 182 | NA | NA | 234 | NA | Achieved | **Project Total : 995 AY 2015-16: 234** |
| A.1.5 | | No. of students registered in PhD programs in engineering | | 15 | 15 | NA | NA | 55 | NA | Achieved | **Project Total : 225 AY 2015-16: 55** |
| A.1.6 | | **No. of Masters students enrolled with TEQIP teaching assistantship** | 15 | 49 | 49 | NA | NA | 310 | 249.66 | Achieved | **Project Total :310 AY 2015-16: 115** |
| A.1.7 | | **No. of PhD students enrolled with TEQIP research assistantship** | - | 6 | 6 | NA | NA | 26 | 79.87 | Achieved | **Project Total :26 AY 2015-16: 26** |
| A.1.8 | | **No. of Research projects taken by UG students** | 24 | 23 | 23 | NA | NA | 161 | 21.74 | Achieved | **352 Students benefited** |

| | *Strategy*/Activities | Indicators | Institutional Baseline (Pre-TEQIP) in 2010-11 | Proposed Target for 2 years (31st Dec 2012) | | 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.1.9 | | **Any other** | - | | | | | | | | |
| **A.2** | **Faculty** | | | | | | | | | | |
| A.2.1 | ***Capacity Development of Faculty***<br>- Recruitment of faculty<br>- Subject domain training<br>- Qualification upgradation<br>- Pedagogical Training<br>- E-enabled training<br>- Management development training<br>- Continuing Education Programme | **Percentage of faculty positions filled-in** (as per AICTE/MHRD required Teacher-Student ratio):<br>• Regular<br>• Regular + Contract | GIA-80%<br>Total-96% | GIA-80%<br>Total-98% | | NA | NA | Total-100% | NA | Achieved | **.** |
| A.2.2 | | **Percentage of Faculty with BTech enrolled for MTech against total BTech faculty** | - | 27% | 27% | NA | NA | NA | NA | Achieved | **All the faculty members are with M.Tech or PhD** |
| A.2.3 | | **Percentage of Faculty with MTech enrolled for PhD in engineering against total MTech faculty** | 43% | 42% | 42% | NA | NA | 47.83% | 20.79 | Achieved | |
| A.2.4 | | **Percentage of regular faculty with Masters degree in engineering against total engineering faculty** | 95% | 95% | 95% | NA | NA | 100% | NA | Achieved | |
| A.2.5 | | **Percentage of regular faculty with PhD degree in engineering against total engineering faculty** | 23% | 24% | 24% | NA | NA | 45% | NA | Achieved | |
| A.2.6 | | **Number of faculty members attended training in subject domain** | 133 | 115 | 115 | NA | NA | 314 | 7.86 | Achieved | **All the faculty members have attended** |
| A.2.7 | | **Number of faculty members attended management development training** | 15 | 29 | 29 | NA | NA | 95 | 23.82 | Achieved | |
| A.2.8 | | **Number of faculty members attended pedagogical training** | 27 | 41 | 41 | NA | NA | 189 | 1.97 | Achieved | **All the faculty members have attended either TEQIP/Other agency supported Pedagogical training** |
| A.2.9 | | **Any other** | | | | | | | | | |

| A.3 | Institutional Reforms | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.3.1 | *Set of Reforms*<br>- Academic reforms<br>- Non-academic reforms<br>- Enhance interaction with industry | **Percentage of NBA accredited UG & PG programs including Applied-For cases, against total eligible programs** | UG-75%<br>PG-25% | 100%<br>[All eligible programs applied for fresh/ renewal] | | NA | NA | 100% | 3.38 | Achieved | **All eligible programs are applied for and others are accredited.** |
| A.3.2 | | **Autonomous institution status concurred by UGC (Yes/No/Applied For)** | Yes | Yes | | NA | NA | Yes | 0.49 | Achieved | |
| A.3.3 | | **No. of academic programs i.e. MTech/PhD etc. with industry** | - | - | | NA | NA | 2 | NA | Achieved | |
| A.3.4 | | **No. of short term programs with industry** | | - | | NA | NA | 47 | 0.08 | Achieved | |
| A.3.5 | | **Academic networking with other institutions (No.)** | | | | NA | NA | 13 | 0.15 | Achieved | |
| A.3.6 | | **ICT (Information communication Technology) enabled learning (No. of programs/ courses)** | | In vogue | | NA | NA | 78<br>(Live courses and MOOCs under QEEE) | 70.36<br>(ICT Setup & Equipment) | Achieved | |
| A.3.7 | | **Curricula revised/restructured (No.)** | Syllabus revised periodically | - | | NA | NA | 39<br>(No. of BOS Meetings) | 3.45 | Achieved | |
| A.3.8 | | **Total IRG ( in lakhs)** | 1474 | 1321<br>[Part of financial year 2012-13 up to Dec.12] | | NA | NA | | 6555 | Achieved | |
| A.3.9 | | **Percentage revenue from externally funded R&D projects and consultancies in total revenue** | 3% | 2% | | NA | NA | | 2.30% | Achieved | |
| A.3.10 | | **IRG as percentage of annual recurring expenditure** | 75% | 75% | | NA | NA | | 107% | Achieved | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| A.3.11 | | **Any other** | | | | | | | | | |
| **B.0** | **Enhance Access to Knowledge resources** | | | | | | | | | | |
| B.1 | ***Improvement in Teaching, Training and Learning facilities***<br>- New PG programmes<br>- Updation of learning resources<br>- Equipment details<br>- Modernization of Labs and class rooms | **Laboratories:**<br>• New laboratory (Nos.) for new PG programs<br>• New laboratory (Nos.) for existing PG programs<br>• Existing laboratory (Nos.) modernized | -<br>1<br>8 | 1<br>3<br>15 | 1<br>3<br>15 | NA | 787.50 ( incl. Library & ICT) | 4<br>3<br>18 | 60.88<br>58.48<br>191.33 | Achieved | |
| B.2 | | **Library**<br>• Books (print) (Nos.)<br>• e-books (Nos.)<br>• Journals (print) (Nos.)<br>• e-journals (Nos.)<br>• Course specific software (Nos.) | 2926<br>1700<br>166<br>1240<br>190 | 5360<br>5100<br>308<br>16042<br>290 | 5360<br>5100<br>308<br>16042<br>290 | NA | NA | 6517<br>1700<br>179<br>8611<br>1974 | 159.89 | Achieved | **The Library has around 1.96 lakhs printed books.** |
| B.3 | | **Membership of online**<br>1. No. of journals<br>2. No. of consortium | 7 e-resources database | 17 e-resources database | 17 e-resources database | NA | NA | 7 e-resources database | College | Achieved | **Currently 7 e-resources are subscribed thru VTU as mandated.** |
| B.4 | | **No. of digitally/virtually accessible courses/subjects** | -- | -- | | | | 78 | College | Achieved | |
| B.5 | | **Any other** | | | | | | | | | |
| **C.0** | **Enhancement of Research and Development Activities** | | | | | | | | | | |
| C.1 | ***Promoting R&D culture in the Institution***<br>- Modern R&D equipment<br>- Conferences / Workshops organized<br>- Conferences / Workshops attended | **No. of research publications in engineering in refereed journals:**<br>• National journals<br>• International journals | 26<br>45 | 20<br>78 | 20<br>78 | | | 61<br>577 | 3.51 | Achieved | Details from the inception of the project |
| C.2 | | **No. of Books published** | 02 | 02 | | | | 17 | NA | Achieved | |
| C.3 | | **No. of Patents obtained/ filed** | 06 | 06 | | | | 61 | 0.56 | Achieved | Obtained: 12<br>Filed:49<br>Total:61 |
| C.4 | | **Any other** | | | | | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **D.0** | **Improve Employability of Graduates** | | | | | | | | | | |
| D.1 | ***Improving competencies of graduates***<br>- Industrial collaboration<br>- Finishing School<br>- Industrial training | **Campus placement percentage:**<br>• Undergraduates<br>• Postgraduates | 77%<br>18% | 82%<br>40% | | | | 88%<br>58% | 7.77 | Achieved | |
| D.2 | | **Average annual salary (Rs. Lakh) of**:<br>• Undergraduates<br>• Postgraduates | 3.8<br>3.5 | 4.0<br>4.0 | | | | | 4.50<br>4.50 | Achieved | |
| D.3 | | **Share of UG students attended industrial internship** (percentage) | 23% | 34% | | | | 30 | 0.46 | | |
| D.4 | | **Any other** | | | | | | | | | |

## Table-3: Institutional Project Budget [Sub component 1.2]

**TEQIP funds received** (Instalment) **:** 1st / 2nd / 3rd / 4th / 5th / 6th

| | | | | | |
|---|---|---|---|---|---|
| **1st Instalment** | **:** | Amount Rs. 2 | Crores | Date: | 24.09.2012 |
| **2nd Instalment** | **:** | Amount Rs. 5 | Crores | Date: | 11.03.2014 |
| **3rd Instalment** | **:** | Amount Rs. 2 | Crores | Date: | 15.12.2014 |
| **4th Instalment** | **:** | Amount Rs.2 | Crores | Date: | 05.05.2015 |
| **5th Instalment** | **:** | Amount Rs.1.5 | Crores | Date: | 28.10.2015 |
| **6th Instalment** | **:** | Amount Rs. 2 | Crores | Date: | 17.05.2016 |

**Total funds received: Rs. 15 Crores**

# Table-3: Institutional Project Budget [Sub component 1.2]

| bSl. No. | Activities | Project Life Allocation | Expenditure in Financial year | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 (as on final round of PA) |
| | | (Rupees in Lakhs) | | | | | | |
| 1 | Improvements for teaching, training and learning facilities through: | 787.50 | | | | | | |
| | Procurement of goods: | | | | | | | |
| | Equipment | | | | 89.38 | 215.26 | 97.24 | 9.13 |
| | Books & LRs & software | | | | 121.52 | 26.49 | 11.88 | |
| | a. Starting new PG programmes | | 0 | 0 | | | | |
| | b. Modernization and strengthening of laboratories+ | | 0 | 0 | | | | |
| | c. Establishment of new laboratories for existing UG and PG programmes and for new PG programmes | | 0 | 0 | | | | |
| | d. Modernization of classrooms+ | | 0 | 0 | | | | |
| | e. Updating of Learning Resources | | 0 | 0 | | | | |
| | f. Procurement of furniture | | 0 | 0 | | | | |
| | g. Establishment/Upgrading of Central and Departmental Computer Centers+ | | 0 | 0 | | | | |
| | h. Modernization/improvements of supporting departments+ | | 0 | 0 | | | | |
| | i. Modernization and strengthening of libraries and increasing access to knowledge resources | | 0 | 0 | | | | |
| | j. Minor Civil Works | | 0 | 0 | | | | |
| | Consultancy Services | | 0 | 0.12 | | | | |
| 2 | Providing Teaching and Research Assistantships to increase enrolment in existing and new PG programmes in Engineering disciplines | 403.43 | 0 | 9.94 | 85.43 | 152.76 | 22.85 | 58.56 |
| 3 | Enhancement of R&D and institutional consultancy activities | 89.56 | 0 | 0.16 | 5.02 | 25.50 | 29.63 | 5.78 |
| 4 | Faculty and Staff Development (including faculty qualification upgradation, pedagogical training, and organising/participation of faculty in workshops, seminars and conferences) for improved competence | 188.97 | 0 | 9.09 | 64.66 | 50.31 | 14.75 | 7.15 |
| 5 | Enhanced Interaction with Industry | 88.29 | 0 | 0.00 | 27.34 | 19.96 | 14.30 | 4.34 |
| 6 | Institutional Management Capacity enhancement | 34.35 | 0 | 0.00 | 17.62 | 2.38 | 3.97 | 0.00 |
| 7 | Implementation of institutional academic reforms | 24.37 | 0 | 0.00 | 0.12 | 6.86 | 4.12 | 1.72 |
| 8 | Academic support for weak students | 27.18 | 0 | 0.65 | 2.76 | 2.21 | 7.56 | 0.44 |
| 9 | Incremental Operating Cost | 122.23 | 0 | 3.33 | 22.57 | 48.53 | 23.12 | 3.77 |
| | **TOTAL** | **1765.88*** | **0** | **23.29** | **436.42** | **550.26** | **229.42** | **90.89** |

● Includes 5 Crores of additional grants & Revised Allocation

## Table-3: Institutional Project Budget [Sub-Component 1.2.1]

**COE-TEQIPII funds received** (Instalment) **:** 1st / 2nd
**1st Instalment :** Amount Rs. 3.333 Crores Date : 07.05.2014
**2nd Instalment :** Amount Rs. 1.666 Crores Date : 25.07.2016 Total funds received : Rs. 5 Crores

| Sl. No. | Activities | Project Life Allocation | Expenditure in Financial Year | | | | |
|---|---|---|---|---|---|---|---|
| | | | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 (as on final round of PA) |
| | | (Rupees in lakhs) | | | | | |
| 1 | Improvements for teaching, training and learning facilities through: | | | | | | |
| | Procurement of goods: | | | | | | |
| | Equipment | 275.00 | 0 | 0 | 132.18 | 163.77 | 14.26 |
| 2 | Provide Teaching and Research Assistantships for enrolment in Masters and Doctoral programmes in topics linked to economic or societal needs in the thematic areas | 50.00 | 0 | 0 | 6.80 | 12.78 | 23.66 |
| 3 | Collabration with industry for applicable research and product development | 25.00 | 0 | 0 | 0.22 | 0.73 | 1.19 |
| 4 | National / International collabration for Research and Development activities with Academic Institutions and R & D organisations | 50.00 | 0 | 3.94 | 0 | 1.96 | 0.36 |
| 5 | Enhancing research competence of faculty and knowledge sharing in thematic areas, both within India and abroad | 50.00 | 0 | 0 | 1.98 | 1.78 | 11.22 |
| 6 | Incremental operating cost | 50.00 | 0 | 2.21 | 10.12 | 14.79 | 4.08 |
| | **TOTAL** | 500.00 | 0 | 6.15 | 151.30 | 195.81 | 54.77 |

Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

## Subject: Comments on the data audit

The data audit visit of BMS College of Engineering was arranged on 18th to 20th of august 2016. During the data audit following are the observations made:

1. The data inputted to the MIS was exactly matching with the institutional data source.
2. There was a problem in MIS in few fields, even though the data were feeding properly; the output was not matching with the actual data.
3. The records were maintained and submitted in a satisfactory way
4. The utilization of the funds for the enhancement of the faculty was properly done
5. The effect of TEQIP was reflecting in the transition scale of the students to the next years with more than 75% and or more aggregate marks
6. The encouragement of the students to enhance their personality was really good
7. The faculty members were benefitted through research, paper presentation and publications through TEQIP was appreciable.
8. **Centre of excellence in advanced materials research** has setup the separate cell as advance material research centre preferably for the advancement of material technology.
9. Lot of progress has been done through COE for the benefit of in- house and also neighbouring institution faculties of local and also interstate and students who were in search of these technological facilities.
10. Lot more research and faculty development programmes had been organized through COE, Departmental as well as through the institution.

**The utilization of the TEQIP fund as per the records and the transactions were satisfactory.**

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15 and 2015-16)
Bangalore -560019

Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

**CONSOLIDATED INFORMATION VERIFICATION THROUGH DATA-AUDIT for the year : 2011-12,12-13,13-14,14-15 and 2015-2016**

**Name of the Data Auditor: B M Rudresh** **Dates of Data Audit: 18, 19, 20/08/ 2016**

**Name of the Institution and Location: B M S College of Engineering, Bangalore - 560019**

**Data Audit Form (01)**

| No | Particulars | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|---|
| 1 | ***Information in respect to Bachelors programs in engineering/technology*** | | | | | |
| | (a) Number of UG programs conducted during latest academic year | 12 | 12 | 12 | 12 | 12 |
| | (b) Total number of UG students during latest academic year | 3812 | 3818 | 4101 | 4214 | 4532 |
| | (c) Total number of women students in UG programs during latest academic year | 1083 | 1133 | 1165 | 1243 | 1259 |
| | (d) Total number of SC students in UG programs during latest academic year | 283 | 278 | 265 | 315 | 371 |
| | (e) Total number of ST students in UG programs during latest academic year | 68 | 65 | 65 | 64 | 65 |
| | (f) Total number of OBC students in UG programs during latest academic year | 596 | 566 | 677 | 1605 | 1121 |
| | (g) Percentage of final year UG students during latest academic year placed through campus interviews | 82.98 | 77.3 | 76.87 | 75 | 80 |
| | (h) Percentage of final year UG students during latest that passed out with 75%or more aggregate marks | 82 | 75 | 83 | 84.7 | 83 |
| | (i) Percentage of all 1year students [as at 1(b)] during latest that passed all courses fully and successfully got admitted to 2 year in the current academic year | 87.81 | 96.57 | 74.79 | 81..5 | 64 |
| | (j) Percentage of 1year women students [as at 1(c)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic | 94.27 | 94.31 | 96 | 90 | 89 |
| | (k) Percentage of 1 year SC students [as at 1(d)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 74 | 87 | 91 | 86.76 | 50 |
| | (l) Percentage of 1year ST students [as at 1(e)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 99 | 92 | 98 | 63.6 | 61 |
| | m) Percentage of 1year OBC students [as at 1(f)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 87 | 97 | 98 | 95.65 | 85 |

| Data Audit Form (02) | | | | | | |
|---|---|---|---|---|---|---|
| **No** | **Particulars** | **2011-12** | **2012-13** | **a Audit Form** | **2014-15** | **2015-16** |
| 2 | ***Information in respect to Masters programs in engineering/technology*** | | | | | |
| | (a) Number of full-time masters programs during latest academic year | 8 | 9 | 11 | 13 | 13 |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 1 | 1 | 1 | 1 | 1 |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 157 | 163 | 196 | 240 | 234 |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | 0 | 0 | 0 | 0 |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | 78 | 92 | 99 | 70 | 102 |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 0 | 49 | 129 | 178 | 116 |
| | (g) Total number of women students in all Masters programs during latest academic year | 55 | 54 | 22 | 78 | 82 |
| | (h) Total number of SC students in all Masters programs during latest academic year | 16 | 19 | 6 | 24 | 31 |
| | (i) Total number of ST students in all Masters programs during latest academic year | 1 | 5 | 2 | 6 | 4 |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 50 | 57 | 15 | 45 | 44 |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | 47.56 | 37.75 | 43.75 | 37 | 58 |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | 82 | 75 | 83 | 48 | Progress |

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| Data Audit Form (03) | | | | | | |
|---|---|---|---|---|---|---|
| **No** | **Particulars** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** |
| 3 | ***Information in respect to Doctoral programs*** | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 41 | 20 | 48 | 43 | 58 |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 3 | 7 | 16 | 6 | 0 |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | 0 | 0 | 0 | 0 | 0 |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 0 | 5 | 13 | 15 | 29 |

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| Data Audit Form (04) | | | | | | |
|---|---|---|---|---|---|---|
| **No** | **Particulars** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** |
| 4 | ***Information in respect to Faculty*** | | | | | |
| | (a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during latest academic year(Excluding AT) | 252 | 260 | 287 | 311 | 314 |
| | (b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during latest academic year | 224 | 232 | 251 | 271 | 273 |
| | (c) Number of regular full-time faculty in engineering disciplines with Master's degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 164 | 161 | 169 | 169 | 163 |
| | (d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 51 | 61 | 77 | 102 | 110 |
| | (e) Number of regular full-time faculty in engineering disciplines with Bachelor's degree as their highest qualification faculty during latest academic year | 8 | 10 | 5 | 0 | 0 |
| | (f) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 0 | 0 | 0 | 0 | 0 |
| | (g) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs at other institutions during academic year latest: | 3 | 0 | 2 | 0 | 0 |
| | (h) Number of faculty with Master's degree which are enrolled in-house for Ph.D programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | (i) 3 | (i) 7 | 16 | 0 | 0 |
| | (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year latest:<br>(i) Engineering Teachers<br>(ii) Applied Scienec Teachers<br>(iii) others | (i) 1<br>--<br>-- | (i) 3<br>--<br>-- | 5<br>---<br>-- | (i) 5<br>(ii) 1 | (i) 1<br>(ii) 1<br>-- |
| | (j) Number of faculty that have attended a professional training program of 5 or more days duration during latest academic year | 0 | 0 | 92 | 33 | 64 |
| | (k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during latest academic year | 0 | 0 | 0 | 29 | 40 |
| | (l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during latest academic year | 0 | 0 | 0 | 20 | 32 |
| | (m) Number of faculty appraised by students during latest academic year | 227 | 207 | 260 | 201 | 245 |

| Data Audit Form (05) | | | | | | |
|---|---|---|---|---|---|---|
| **No** | **Particulars** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** |
| 5 | ***Information in respect to Accreditation of Program*** | | | | | |
| | (a) Number of UG programs accredited | 9 | 0 | 2 | 11 | 11 |
| | (b) Number of UG programs for which accreditation applied for | 0 | 12 | 0 | 1 | 1 |
| | (c) Number of PG programs accredited | 2 | 5 | 4 | 4 | 0 |
| | (d) Number of PG programs for which accreditation applied for | 0 | 0 | 0 | 4 | 9 |

| Data Audit Form (06) | | | | | | |
|---|---|---|---|---|---|---|
| **No** | **Particulars** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** |
| 6 | ***Information in respect to research and patents*** | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 35 | 18 | 7 | 20 | 15 |
| | (b) Number of research publications in International refereed journals during the latest academic year | 93 | 83 | 93 | 162 | 214 |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 68 | 35 | 16 | 52 | 66 |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 0 | 0 | 4 | 4 | 0 |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 2 | 3 | 4 | 21 | 10 |
| | (f) Number of sponsored research project completed during the latest academic year | 2 | 0 | 0 | 2 | 2 |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 4 | 4 | 1 | 13 | 6 |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 0 | 0 | 0 | 1 | 2 |

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**Data Audit Form (07)**

| No | Particulars | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|---|
| 7 | ***Information in respect to Finances*** | | | | | |
| | (a) Amount received as Block Grant during the latest academic year (Rs. In Lakhs) | 0 | 0 | 0 | 0 | 0 |
| | (b) IRG from students' tuition fee and other charges during the latest academic year (Rs. In Lakhs) | 1882.43 | 2736.87 | 3318.37 | 4396.8 | 5001.347 |
| | (c) IRG from externally funded R&D projects and consultancies during the latest academic year (Rs. In Lakhs) | 57.76 | 3569.107 | 84.74 | 22.82 | 147.82 |
| | (d) Total IRG during the latest academic year (Rs. in Lakhs) | 3399.41 | 3853.77 | 4571.08 | 5809.07 | 655.88 |
| | (e) Total annual recurring expenditure during the latest academic year (Rs. In Lakhs) | 3675.85 | 3586.32 | 4611.118 | 5426.01 | 626.22 |
| | (f) Amount available in Corpus Fund on March 31, | Rs.190000 | Rs.272854 | Rs.400862 | Rs.307380 | Rs.13,308,773 |
| | (g) Amount available in Faculty Development Fund on March 31, | Rs.190000 | Rs.272855 | Rs.887987 | Rs.564972 | Rs.13,191,132 |
| | (h) Amount available in Equipment Replacement Fund on March 31, | Rs.190000 | Rs.272853 | Rs.293279 | Rs.303034 | Rs.13,191,132 |
| | (i) Amount available in Maintenance Fund on March 31, | Rs.190000 | Rs.272855 | Rs.2932279 | Rs.303034 | Rs.13,234,162 |

**Data Audit Form (08)**

| No | Particulars | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|---|
| 8 | ***With respect to Institutional Governance/ Management*** | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | 2 | 3 | 4 | 3 | 3 |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 0 | 0 | 51 | 19 | 37 |

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Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

## INFORMATION VERIFICATION THROUGH DATA-AUDIT for the year 2011-12

**Name of the Data Auditor: B M Rudresh**

**Date of data Audit : 25,26,27/11/2014**

**Name of Institution and Location: B M S College of Engineering, Bangalore -560019**

**Data Audit Form (01)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 1 | *Information in respect to Bachelors programs in engineering/technology* | | 2011-12 | | | The data submitted during data audit were verified as per the availability of the records in the TEQIP cell of the college and were found matching with MIS report and college data source . | |
| | (a) Number of UG programs conducted during latest academic year | 12 | | 12 | 12 | | |
| | (b) Total number of UG students during latest academic year | 3812 | | 3812 | 3812 | | |
| | (c) Total number of women students in UG programs during latest academic year | 1083 | | 1083 | 1083 | | |
| | (d) Total number of SC students in UG programs during latest academic year | 283 | | 283 | 283 | | |
| | (e) Total number of ST students in UG programs during latest academic year | 68 | | 68 | 68 | | |
| | (f) Total number of OBC students in UG programs during latest academic year | 596 | | 596 | 596 | | |
| | (g) Percentage of final year UG students during latest academic year placed through campus interviews | 82.98 | | 82.98 | 82.98 | | |
| | (h) Percentage of final year UG students during latest that passed out with 75%or more aggregate marks | 82 | | 82 | 82 | | |
| | (i) Percentage of all 1year students [as at 1(b)] during latest that passed all courses fully and successfully got admitted to 2 year in the current academic year | 87.81 | | 87.81 | 87.81 | | |
| | (j) Percentage of 1year women students [as at 1(c)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic | 94.27 | | 94.27 | 94.27 | | |
| | (k) Percentage of 1 year SC students [as at 1(d)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 74 | | 74 | 74 | | |
| | (l) Percentage of 1year ST students [as at 1(e)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 99 | | 99 | 99 | | |
| | m) Percentage of 1year OBC students [as at 1(f)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 87 | | 87 | 87 | | |

## Data Audit Form (02)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 2 | *Information in respect to Masters programs in engineering/technology* | | | | | | |
| | (a) Number of full-time masters programs during latest academic year | 8 | 2011-12 | 8 | 8 | Data audited satisfactory | |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 157 | | 157 | 157 | | |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | 78 | | 78 | 78 | | |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 0 | | 0 | 0 | | |
| | (g) Total number of women students in all Masters programs during latest academic year | 55 | | 55 | 55 | | |
| | (h) Total number of SC students in all Masters programs during latest academic year | 16 | | 16 | 16 | | |
| | (i) Total number of ST students in all Masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 50 | | 50 | 50 | | |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | 47.56 | | 47.56 | 47.56 | | |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | 82 | | 82 | 82 | | |

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| Data Audit Form (03) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 3 | ***Information in respect to Doctoral programs*** | | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 41 | 2011-12 | 41 | 41 | Data audited satisfactory | |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 3 | | 3 | 3 | | |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | 0 | | 0 | 0 | | |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 0 | | 0 | 0 | | |

## Data Audit Form (04)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 4 | ***Information in respect to Faculty*** | | | | | | |
| | (a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during latest academic year(Excluding AT) | 252 | 2011-12 | 252 | 252 | Data audited satisfactory | |
| | (b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during latest academic year | 224 | | 224 | 224 | | |
| | (c) Number of regular full-time faculty in engineering disciplines with Master's degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 164 | | 164 | 164 | | |
| | (d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 51 | | 51 | 51 | | |
| | (e) Number of regular full-time faculty in engineering disciplines with Bachelor's degree as their highest qualification faculty during latest academic year | 8 | | 8 | 8 | | |
| | (f) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 0 | | 0 | 0 | | |
| | (g) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs at other institutions during academic year latest: | 3 | | 3 | 3 | | |
| | (h) Number of faculty with Master's degree which are enrolled in-house for Ph.D programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | (i) 3 | | (i) 3 | (i) 3 | | |
| | (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year latest:<br>(i) Engineering Teachers<br>(ii) Applied Scienec Teachers<br>(iii) others | (i) 1<br>--<br>-- | | (i) 1<br>--<br>-- | (i) 1<br>--<br>-- | | |
| | (j) Number of faculty that have attended a professional training program of 5 or more days duration during latest academic year | 0 | | 0 | 0 | | |
| | (k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during latest academic year | 0 | | 0 | 0 | | |
| | (l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during latest academic year | 0 | | 0 | 0 | | |
| | (m) Number of faculty appraised by students during latest academic year | 227 | | 227 | 227 | | |

## Data Audit Form (05)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 5 | *Information in respect to Accreditation of Program* | | | | | | |
| | (a) Number of UG programs accredited | 9 | 2011-12 | 9 | 9 | Data audited satisfactory | |
| | (b) Number of UG programs for which accreditation applied for | 0 | | 0 | 0 | | |
| | (c) Number of PG programs accredited | 2 | | 2 | 2 | | |
| | (d) Number of PG programs for which accreditation applied for | 0 | | 0 | 0 | | |

## Data Audit Form (06)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 6 | *Information in respect to research and patents* | | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 35 | 2011-12 | 35 | 35 | Data audited satisfactory | |
| | (b) Number of research publications in International refereed journals during the latest academic year | 93 | | 93 | 93 | | |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 68 | | 68 | 68 | | |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 2 | | 2 | 2 | | |
| | (f) Number of sponsored research project completed during the latest academic year | 2 | | 2 | 2 | | |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 4 | | 4 | 4 | | |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 0 | | 0 | 0 | | |

## Data Audit Form (07)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 7 | *Information in respect to Finances* | | | | | | |
| | (a) Amount received as Block Grant during the latest academic year (Rs. In Lakhs) | 0 | 2011-12 | 0 | 0 | data audited satisfactory | |
| | (b) IRG from students' tuition fee and other charges during the latest academic year (Rs. In Lakhs) | 1882.43 | | 1882.43 | 1882.43 | | |
| | (c) IRG from externally funded R&D projects and consultancies during the latest academic year (Rs. In Lakhs) | 57.76 | | 57.76 | 57.76 | | |
| | (d) Total IRG during the latest academic year (Rs. in Lakhs) | 3399.41 | | 3399.41 | 3399.41 | | |
| | (e) Total annual recurring expenditure during the latest academic year (Rs. In Lakhs) | 3675.85 | | 3675.85 | 3675.85 | | |
| | (f) Amount available in Corpus Fund on March 31, | Rs.190000 | | Rs.190000 | Rs.190000 | | |
| | (g) Amount available in Faculty Development Fund on March 31, | Rs.190000 | | Rs.190000 | Rs.190000 | | |
| | (h) Amount available in Equipment Replacement Fund on March 31, | Rs.190000 | | Rs.190000 | Rs.190000 | | |
| | (i) Amount available in Maintenance Fund on March 31, | Rs.190000 | | Rs.190000 | Rs.190000 | | |

## Data Audit Form (08)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 8 | *With respect to Institutional Governance/ Management* | | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | 2 | 2011-12 | 2 | 2 | Data audited satisfactory | |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 0 | | 0 | 0 | | |

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Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

## INFORMATION VERIFICATION THROUGH DATA-AUDIT for the academic year 2012-13

**Name of the Data Auditor: B M Rudresh**

**Date of data Audit : 25,26,27/11/2014**

**Name of Institution and Location: B M S College of Engineering, Bangalore -560019**

**Data Audit Form (01)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 1 | *Information in respect to Bachelors programs in engineering/technology* | | 2012-13 | | | The data submitted during data audit were verified as per the availability of the records in the TEQIP cell of the college and were found matching with MIS report and college data source. | |
| | (a) Number of UG programs conducted during latest academic year | 12 | | 12 | 12 | | |
| | (b) Total number of UG students during latest academic year | 3818 | | 3818 | 3818 | | |
| | (c) Total number of women students in UG programs during latest academic year | 1133 | | 1133 | 1133 | | |
| | (d) Total number of SC students in UG programs during latest academic year | 278 | | 278 | 278 | | |
| | (e) Total number of ST students in UG programs during latest academic year | 65 | | 65 | 65 | | |
| | (f) Total number of OBC students in UG programs during latest academic year | 566 | | 566 | 566 | | |
| | (g) Percentage of final year UG students during latest academic year placed through campus interviews | 77.3 | | 77.3 | 77.3 | | |
| | (h) Percentage of final year UG students during latest that passed out with 75%or more aggregate marks | 75 | | 75 | 75 | | |
| | (i) Percentage of all 1year students [as at 1(b)] during latest that passed all courses fully and successfully got admitted to 2 year in the current academic year | 96.57 | | 96.57 | 96.57 | | |
| | (j) Percentage of 1year women students [as at 1(c)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic | 94.31 | | 94.31 | 94.31 | | |
| | (k) Percentage of 1 year SC students [as at 1(d)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 87 | | 87 | 87 | | |
| | (l) Percentage of 1year ST students [as at 1(e)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 92 | | 92 | 92 | | |
| | m) Percentage of 1year OBC students [as at 1(f)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 97 | | 97 | 97 | | |

| Data Audit Form (02) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data** | **Comment** |
| 2 | ***Information in respect to Masters programs in engineering/technology*** | | | | | | |
| | (a) Number of full-time masters programs during latest academic year | 9 | 2012-13 | 9 | 9 | Data audited satisfactory | |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 163 | | 163 | 163 | | |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | 92 | | 92 | 92 | | |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 49 | | 49 | 49 | | |
| | (g) Total number of women students in all Masters programs during latest academic year | 54 | | 54 | 54 | | |
| | (h) Total number of SC students in all Masters programs during latest academic year | 19 | | 19 | 19 | | |
| | (i) Total number of ST students in all Masters programs during latest academic year | 5 | | 5 | 5 | | |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 57 | | 57 | 57 | | |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | 37.75 | | 37.75 | 37.75 | | |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | 75 | | 75 | 75 | | |

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| Data Audit Form (03) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 3 | ***Information in respect to Doctoral programs*** | | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 20 | 2012-13 | 20 | 20 | Data audited satisfactory | |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 7 | | 7 | 7 | | |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | 0 | | 0 | 0 | | |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 5 | | 5 | 5 | | |

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## Data Audit Form (04)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 4 | *Information in respect to Faculty* | | 2012-13 | | | Data audited satisfactory | |
| | (a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during latest academic year(Excluding AT) | 260 | | 260 | 260 | | |
| | (b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during latest academic year | 232 | | 232 | 232 | | |
| | (c) Number of regular full-time faculty in engineering disciplines with Master's degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 161 | | 161 | 161 | | |
| | (d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 61 | | 61 | 61 | | |
| | (e) Number of regular full-time faculty in engineering disciplines with Bachelor's degree as their highest qualification faculty during latest academic year | 10 | | 10 | 10 | | |
| | (f) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 0 | | 0 | 0 | | |
| | (g) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs at other institutions during academic year latest: | 0 | | 0 | 0 | | |
| | (h) Number of faculty with Master's degree which are enrolled in-house for Ph.D programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | (i) 7 | | (i) 7 | (i) 7 | | |
| | (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year latest:<br>(i) Engineering Teachers<br>(ii) Applied Scienec Teachers<br>(iii) others | (i) 3<br>--<br>-- | | (i) 3<br>--<br>-- | (i) 3<br>--<br>-- | | 4/6 |
| | (j) Number of faculty that have attended a professional training program of 5 or more days duration during latest academic year | 0 | | 0 | 0 | | |
| | (k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during latest academic year | 0 | | 0 | 0 | | |
| | (l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during latest academic year | 0 | | 0 | 0 | | |
| | (m) Number of faculty appraised by students during latest academic year | 207 | | 207 | 207 | | |

## Data Audit Form (05)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 5 | *Information in respect to Accreditation of Program* | | | | | | |
| | (a) Number of UG programs accredited | 0 | 2012-13 | 0 | 0 | Data audited satisfactory | |
| | (b) Number of UG programs for which accreditation applied for | 12 | | 12 | 12 | | |
| | (c) Number of PG programs accredited | 5 | | 5 | 5 | | |
| | (d) Number of PG programs for which accreditation applied for | 0 | | 0 | 0 | | |

## Data Audit Form (06)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 6 | *Information in respect to research and patents* | | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 18 | 2012-13 | 18 | 18 | Data audited satisfactory | |
| | (b) Number of research publications in International refereed journals during the latest academic year | 83 | | 83 | 83 | | |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 35 | | 35 | 35 | | |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 3 | | 3 | 3 | | |
| | (f) Number of sponsored research project completed during the latest academic year | 0 | | 0 | 0 | | |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 4 | | 4 | 4 | | |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 0 | | 0 | 0 | | |

## Data Audit Form (07)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 7 | *Information in respect to Finances* | | | | | | |
| | (a) Amount received as Block Grant during the latest academic year (Rs. In Lakhs) | 0 | 2012-13 | 0 | 0 | Data audited satisfactory | |
| | (b) IRG from students' tuition fee and other charges during the latest academic year (Rs. In Lakhs) | 2736.87 | | 2736.87 | 2736.87 | | |
| | (c) IRG from externally funded R&D projects and consultancies during the latest academic year (Rs. In Lakhs) | 3569.107 | | 3569.107 | 3569.107 | | |
| | (d) Total IRG during the latest academic year (Rs. in Lakhs) | 3853.77 | | 3853.77 | 3853.77 | | |
| | (e) Total annual recurring expenditure during the latest academic year (Rs. In Lakhs) | 3586.32 | | 3586.32 | 3586.32 | | |
| | (f) Amount available in Corpus Fund on March 31, | Rs.272854 | | Rs.272854 | Rs.272854 | | |
| | (g) Amount available in Faculty Development Fund on March 31, | Rs.272855 | | Rs.272855 | Rs.272855 | | |
| | (h) Amount available in Equipment Replacement Fund on March 31, | Rs.272853 | | Rs.272853 | Rs.272853 | | |
| | (i) Amount available in Maintenance Fund on March 31, | Rs.272855 | | Rs.272855 | Rs.272855 | | |

## Data Audit Form (08)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 8 | *With respect to Institutional Governance/ Management* | | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | 3 | 2012-13 | 3 | 3 | Data audited satisfactory | |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 0 | | 0 | 0 | | |

Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

## INFORMATION VERIFICATION THROUGH DATA-AUDIT for the year : 2013-14

**Name of the Data Auditor: B M Rudresh**

**Date of data Audit : 25,26,27/11/2014**

**Name of the Institution and Location: B M S College of Engineering, Bangalore -560019**

**Data Audit Form (01)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 1 | *Information in respect to Bachelors programs in engineering/technology* | | 2013-14 | | | The data submitted during data audit were verified as per the availability of the records in the TEQIP cell of the college and were found matching with MIS report and college data source. | |
| | (a) Number of UG programs conducted during latest academic year | 12 | | 12 | 12 | | |
| | (b) Total number of UG students during latest academic year | 4101 | | 4101 | 4101 | | |
| | (c) Total number of women students in UG programs during latest academic year | 1165 | | 1165 | 1165 | | |
| | (d) Total number of SC students in UG programs during latest academic year | 265 | | 265 | 265 | | |
| | (e) Total number of ST students in UG programs during latest academic year | 65 | | 65 | 65 | | |
| | (f) Total number of OBC students in UG programs during latest academic year | 677 | | 677 | 677 | | |
| | (g) Percentage of final year UG students during latest academic year placed through campus interviews | 76.87 | | 76.87 | 76.87 | | |
| | (h) Percentage of final year UG students during latest that passed out with 75%or more aggregate marks | 83 | | 83 | 83 | | |
| | (i) Percentage of all 1year students [as at 1(b)] during latest that passed all courses fully and successfully got admitted to 2 year in the current academic year | 74.79 | | 74.79 | 74.79 | | |
| | (j) Percentage of 1year women students [as at 1(c)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic | 96 | | 96 | 96 | | |
| | (k) Percentage of 1 year SC students [as at 1(d)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 91 | | 91 | 91 | | |
| | (l) Percentage of 1year ST students [as at 1(e)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 98 | | 98 | 98 | | |
| | m) Percentage of 1year OBC students [as at 1(f)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 98 | | 98 | 98 | | |

## Data Audit Form (02)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 2 | ***Information in respect to Masters programs in engineering/technology*** | | | | | | |
| | (a) Number of full-time masters programs during latest academic year | 11 | 2013-14 | 11 | 11 | Data audited satisfactory | |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 196 | | 196 | 196 | | |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | 99 | | 99 | 99 | | |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 129 | | 129 | 129 | | |
| | (g) Total number of women students in all Masters programs during latest academic year | 22 | | 22 | 22 | | |
| | (h) Total number of SC students in all Masters programs during latest academic year | 6 | | 6 | 6 | | |
| | (i) Total number of ST students in all Masters programs during latest academic year | 2 | | 2 | 2 | | |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 15 | | 15 | 15 | | |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | 43.75 | | 43.75 | 43.75 | | |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | 83 | | 83 | 83 | | |

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| Data Audit Form (03) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 3 | ***Information in respect to Doctoral programs*** | | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 48 | **2013-14** | 48 | 48 | Data audited satisfactory | |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 16 | | 16 | 16 | | |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | 0 | | 0 | 0 | | |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 13 | | 13 | 13 | | |

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## Data Audit Form (04)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 4 | ***Information in respect to Faculty*** | | | | | | |
| | (a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during latest academic year(Excluding AT) | 287 | | 287 | 287 | Data audited satisfactory | |
| | (b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during latest academic year | 251 | | 251 | 251 | | |
| | (c) Number of regular full-time faculty in engineering disciplines with Master's degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 169 | | 169 | 169 | | |
| | (d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 77 | | 77 | 77 | | |
| | (e) Number of regular full-time faculty in engineering disciplines with Bachelor's degree as their highest qualification faculty during latest academic year | 5 | | 5 | 5 | | |
| | (f) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 0 | | 0 | 0 | | |
| | (g) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs at other institutions during academic year latest: | 2 | | 2 | 2 | | |
| | (h) Number of faculty with Master's degree which are enrolled in-house for Ph.D programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 16 | | 16 | 16 | | |
| | (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year latest:<br>(i) Engineering Teachers<br>(ii) Applied Scienec Teachers<br>(iii) others | 5<br>---<br>-- | | 5<br>---<br>-- | 5<br>---<br>-- | | |
| | (j) Number of faculty that have attended a professional training program of 5 or more days duration during latest academic year | 92 | | 92 | 92 | | 4/6 |
| | (k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during latest academic year | 0 | | 0 | 0 | | |
| | (l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during latest academic year | 0 | | 0 | 0 | | |
| | (m) Number of faculty appraised by students during latest academic year | 260 | | 260 | 260 | | |

**Data Audit Form (05)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 5 | ***Information in respect to Accreditation of Program*** | | | | | | |
| | (a) Number of UG programs accredited | 2 | 2013-14 | 2 | 2 | Data audited satisfactory | |
| | (b) Number of UG programs for which accreditation applied for | 0 | | 0 | 0 | | |
| | (c) Number of PG programs accredited | 4 | | 4 | 4 | | |
| | (d) Number of PG programs for which accreditation applied for | 0 | | 0 | 0 | | |

**Data Audit Form (06)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 6 | ***Information in respect to research and patents*** | | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 7 | 2013-14 | 7 | 7 | Data audited satisfactory | |
| | (b) Number of research publications in International refereed journals during the latest academic year | 93 | | 93 | 93 | | |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 16 | | 16 | 16 | | |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 4 | | 4 | 4 | | |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 4 | | 4 | 4 | | |
| | (f) Number of sponsored research project completed during the latest academic year | 0 | | 0 | 0 | | |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 1 | | 1 | 1 | | |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 0 | | 0 | 0 | | |

## Data Audit Form (07)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 7 | *Information in respect to Finances* | | | | | | |
| | (a) Amount received as Block Grant during the latest academic year (Rs. In Lakhs) | 0 | 2013-14 | 0 | 0 | Data audited satisfactory | |
| | (b) IRG from students' tuition fee and other charges during the latest academic year (Rs. In Lakhs) | 3318.37 | | 3318.37 | 3318.37 | | |
| | (c) IRG from externally funded R&D projects and consultancies during the latest academic year (Rs. In Lakhs) | 84.74 | | 84.74 | 84.74 | | |
| | (d) Total IRG during the latest academic year (Rs. in Lakhs) | 4571.08 | | 4571.08 | 4571.08 | | |
| | (e) Total annual recurring expenditure during the latest academic year (Rs. In Lakhs) | 4611.118 | | 4611.118 | 4611.118 | | |
| | (f) Amount available in Corpus Fund on March 31, | Rs.400862 | | Rs.400862 | Rs.400862 | | |
| | (g) Amount available in Faculty Development Fund on March 31, | Rs.887987 | | Rs.13,191,132 | Rs.13,191,132 | | |
| | (h) Amount available in Equipment Replacement Fund on March 31, | Rs.293279 | | Rs.293279 | Rs.293279 | | |
| | (i) Amount available in Maintenance Fund on March 31, | Rs.2932279 | | Rs.2932279 | Rs.2932279 | | |

## Data Audit Form (08)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 8 | *With respect to Institutional Governance/ Management* | | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | 4 | 2013-14 | 4 | 4 | Data audited satisfactory | |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 51 | | 51 | 51 | | |

6/6

Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

## INFORMATION VERIFICATION THROUGH DATA-AUDIT for the year 2014-15

**Name of the Data Auditor: B M Rudresh** **Date of data Audit : 18,19,20/08/2016**

**Name of Institution and Location: B M S College of Engineering, Bangalore -560019**

**Data Audit Form (01)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 1 | *Information in respect to Bachelors programs in engineering/technology* | | 2014-15 | | | The data submitted during data audit were verified as per the availability of the records in the TEQIP cell of the college and were found matching with MIS report and college data source . | |
| | (a) Number of UG programs conducted during latest academic year | 12 | | 12 | 12 | | |
| | (b) Total number of UG students during latest academic year | 4214 | | 4214 | 4214 | | |
| | (c) Total number of women students in UG programs during latest academic year | 1243 | | 1243 | 1243 | | |
| | (d) Total number of SC students in UG programs during latest academic year | 315 | | 315 | 315 | | |
| | (e) Total number of ST students in UG programs during latest academic year | 64 | | 64 | 64 | | |
| | (f) Total number of OBC students in UG programs during latest academic year | 1605 | | 1605 | 1605 | | |
| | (g) Percentage of final year UG students during latest academic year placed through campus interviews | 75 | | 75 | 75 | | |
| | (h) Percentage of final year UG students during latest that passed out with 75%or more aggregate marks | 84.7 | | 84.7 | 84.7 | | |
| | (i) Percentage of all 1year students [as at 1(b)] during latest that passed all courses fully and successfully got admitted to 2 year in the current academic year | 81..5 | | 81.58 | 81.58 | | |
| | (j) Percentage of 1year women students [as at 1(c)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic | 90 | | 90 | 90 | | |
| | (k) Percentage of 1 year SC students [as at 1(d)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 86.76 | | 86.76 | 86.76 | | 1/6 |
| | (l) Percentage of 1year ST students [as at 1(e)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 63.6 | | 63.6 | 63.6 | | |
| | m) Percentage of 1year OBC students [as at 1(f)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 95.65 | | 95.65 | 95.65 | | Lab |

## Data Audit Form (02)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 2 | *Information in respect to Masters programs in engineering/technology* | | | | | | |
| | (a) Number of full-time masters programs during latest academic year | 13 | 2014-15 | 13 | 13 | Data audited satisfactory | |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 240 | | 240 | 240 | | |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | 70 | | 70 | 70 | | |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 178 | | 178 | 178 | | |
| | (g) Total number of women students in all Masters programs during latest academic year | 78 | | 78 | 78 | | |
| | (h) Total number of SC students in all Masters programs during latest academic year | 24 | | 24 | 24 | | |
| | (i) Total number of ST students in all Masters programs during latest academic year | 6 | | 6 | 6 | | |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 45 | | 45 | 45 | | |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | 37 | | 37 | 37 | | |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | 48 | | 48 | 48 | | |

9/16

| Data Audit Form (03) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 3 | ***Information in respect to Doctoral programs*** | | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 43 | 2014-15 | 43 | 43 | Data audited satisfactory | |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 6 | | 6 | 6 | | |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | 0 | | 0 | 0 | | |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 15 | | 15 | 15 | | |

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## Data Audit Form (04)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 4 | ***Information in respect to Faculty*** | | | | | | |
| | (a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during latest academic year(Excluding AT) | 311 | 2014-15 | 311 | 311 | Data audited satisfactory | |
| | (b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during latest academic year | 271 | | 271 | 271 | | |
| | (c) Number of regular full-time faculty in engineering disciplines with Master's degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 169 | | 169 | 169 | | |
| | (d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 102 | | 102 | 102 | | |
| | (e) Number of regular full-time faculty in engineering disciplines with Bachelor's degree as their highest qualification faculty during latest academic year | 0 | | 0 | 0 | | |
| | (f) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 0 | | 0 | 0 | | |
| | (g) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs at other institutions during academic year latest: | 0 | | 0 | 0 | | |
| | (h) Number of faculty with Master's degree which are enrolled in-house for Ph.D programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 0 | | 0 | 0 | | |
| | (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year latest:<br>(i) Engineering Teachers<br>(ii) Applied Scienec Teachers<br>(iii) others | (i) 5<br>(ii) 1 | | (i) 5<br>(ii) 1 | (i) 5<br>(ii) 1 | | |
| | (j) Number of faculty that have attended a professional training program of 5 or more days duration during latest academic year | 33 | | 33 | 33 | | 4/6 |
| | (k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during latest academic year | 29 | | 29 | 29 | | |
| | (l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during latest academic year | 20 | | 20 | 20 | | |
| | (m) Number of faculty appraised by students during latest academic year | 201 | | 201 | 201 | | |

**Data Audit Form (05)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 5 | *Information in respect to Accreditation of Program* | | | | | | |
| | (a) Number of UG programs accredited | 11 | 2014-15 | 11 | 11 | Data audited satisfactory | |
| | (b) Number of UG programs for which accreditation applied for | 1 | | 1 | 1 | | |
| | (c) Number of PG programs accredited | 4 | | 4 | 4 | | |
| | (d) Number of PG programs for which accreditation applied for | 4 | | 4 | 4 | | |

**Data Audit Form (06)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 6 | *Information in respect to research and patents* | | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 20 | 2014-15 | 20 | 20 | Data audited satisfactory | |
| | (b) Number of research publications in International refereed journals during the latest academic year | 162 | | 162 | 162 | | |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 52 | | 52 | 52 | | |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 4 | | 4 | 4 | | |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 21 | | 21 | 21 | | |
| | (f) Number of sponsored research project completed during the latest academic year | 2 | | 2 | 2 | | |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 13 | | 13 | 13 | | |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 1 | | 1 | 1 | | |

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## Data Audit Form (07)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 7 | *Information in respect to Finances* | | | | | | |
| | (a) Amount received as Block Grant during the latest academic year (Rs. In Lakhs) | 0 | 2014-15 | 0 | 0 | Data audited satisfactory | |
| | (b) IRG from students' tuition fee and other charges during the latest academic year (Rs. In Lakhs) | 4396.8 | | 4396.8 | 4396.8 | | |
| | (c) IRG from externally funded R&D projects and consultancies during the latest academic year (Rs. In Lakhs) | 22.82 | | 22.82 | 22.82 | | |
| | (d) Total IRG during the latest academic year (Rs. in Lakhs) | 5809.07 | | 5809.07 | 5809.07 | | |
| | (e) Total annual recurring expenditure during the latest academic year (Rs. In Lakhs) | 5426.01 | | 5426.01 | 5426.01 | | |
| | (f) Amount available in Corpus Fund on March 31, | Rs.307380 | | Rs.307380 | Rs.307380 | | |
| | (g) Amount available in Faculty Development Fund on March 31, | Rs.564972 | | Rs.564972 | Rs.564972 | | |
| | (h) Amount available in Equipment Replacement Fund on March 31, | Rs.303034 | | Rs.303034 | Rs.303034 | | |
| | (i) Amount available in Maintenance Fund on March 31, | Rs.303034 | | Rs.303034 | Rs.303034 | | |

## Data Audit Form (08)

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 8 | *With respect to Institutional Governance/ Management* | | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | 3 | 2014-15 | 3 | 3 | Data audited satisfactory | |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 19 | | 19 | 19 | | |

Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

## INFORMATION VERIFICATION THROUGH DATA-AUDIT for the year 2015-16

**Name of the Data Auditor: B M Rudresh** **Date of data Audit : 18,19,20/08/2016**

**Name of the Institution and Location: B M S College of Engineering, Bangalore -560019**

**Data Audit Form (01)**

| No | Particulars | 2010-11 | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|---|
| 1 | *Information in respect to Bachelors programs in engineering/technology* | | | | | | | |
| | (a) Number of UG programs conducted during latest academic year | 12 | 12 | 2015-16 | 12 | 12 | The data submitted during data audit were verified as per the availability of the records in the TEQIP cell of the college and were found matching with MIS report and college data source. | |
| | (b) Total number of UG students during latest academic year | 3660 | 4532 | | 4532 | 4532 | | |
| | (c) Total number of women students in UG programs during latest academic year | 918 | 1259 | | 1259 | 1259 | | |
| | (d) Total number of SC students in UG programs during latest academic year | 347 | 371 | | 371 | 371 | | |
| | (e) Total number of ST students in UG programs during latest academic year | 55 | 65 | | 65 | 65 | | |
| | (f) Total number of OBC students in UG programs during latest academic year | 445 | 1121 | | 1121 | 1121 | | |
| | (g) Percentage of final year UG students during latest academic year placed through campus interviews | 87 | 80 | | 80 | 80 | | |
| | (h) Percentage of final year UG students during latest that passed out with 75%or more aggregate marks | 80 | 83 | | 83.12 | 83.12 | | |
| | (i) Percentage of all 1year students [as at 1(b)] during latest that passed all courses fully and successfully got admitted to 2 year in the current academic year | 67 | 64 | | 63 | 63 | | |
| | (j) Percentage of 1year women students [as at 1(c)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic | 86 | 89 | | 89 | 89 | | |
| | (k) Percentage of 1 year SC students [as at 1(d)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 63 | 50 | | 50 | 50 | | |
| | (l) Percentage of 1year ST students [as at 1(e)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 64 | 61 | | 61 | 61 | | |
| | m) Percentage of 1year OBC students [as at 1(f)] during latest that passed all courses fully and successfully got admitted to 2year in the current academic year | 85 | 85 | | 85 | 85 | | |

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## Data Audit Form (02)

| No | Particulars | 2010-11 | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|---|
| 2 | *Information in respect to Masters programs in engineering/technology* | | | | | | | |
| | (a) Number of full-time masters programs during latest academic year | 8 | 13 | 2015-16 | 13 | 13 | Data audited satisfactory | |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 1 | 1 | | 1 | 1 | | |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 144 | 234 | | 234 | 234 | | |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | 0 | | 0 | 0 | | |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | 32 | 102 | | 102 | 102 | | |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 0 | 116 | | 116 | 116 | | |
| | (g) Total number of women students in all Masters programs during latest academic year | 54 | 82 | | 82 | 82 | | |
| | (h) Total number of SC students in all Masters programs during latest academic year | 20 | 31 | | 31 | 31 | | |
| | (i) Total number of ST students in all Masters programs during latest academic year | 2 | 4 | | 4 | 4 | | |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 28 | 44 | | 44 | 44 | | |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | 51.19 | 58 | | 58 | 58 | | |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | 71 | Progress | | Progress | | | |

2/6

| Data Audit Form (03) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **2010-11** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 3 | ***Information in respect to Doctoral programs*** | | | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 15 | 58 | 2015-16 | 58 | 58 | Data audited satisfactory | |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 5 | 0 | | 0 | 0 | | |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | 0 | 0 | | 0 | 0 | | |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 0 | 29 | | 29 | 29 | | |

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## Data Audit Form (04)

| No | Particulars | 2010-11 | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|---|
| 4 | ***Information in respect to Faculty*** | | | | | | | |
| | (a) Total number of regular full-time faculty excluding adjunct and emeritus faculty during latest academic year(Excluding AT) | 220 | 314 | 2015-16 | 314 | 314 | Data audited satisfactory | |
| | (b) Total number of regular full-time faculty in engineering disciplines excluding adjunct and emeritus faculty during latest academic year | 199 | 273 | | 273 | 273 | | |
| | (c) Number of regular full-time faculty in engineering disciplines with Master's degree as their highest qualification excluding adjunct and emeritus faculty during | 152 | 163 | | 163 | 163 | | |
| | (d) Number of regular full-time faculty in engineering disciplines with Doctoral degree as their highest qualification excluding adjunct and emeritus faculty during latest academic year | 50 | 110 | | 110 | 110 | | |
| | (e) Number of regular full-time faculty in engineering disciplines with Bachelor's degree as their highest qualification faculty during latest academic year | 6 | 0 | | 0 | 0 | | |
| | (f) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | 0 | 0 | | 0 | 0 | | |
| | (g) Number of faculty with Bachelor's degree which are enrolled in-house for Masters programs at other institutions during academic year latest: | (i) 3 | 0 | | 0 | 0 | | |
| | (h) Number of faculty with Master's degree which are enrolled in-house for Ph.D programs in parent institution during academic year latest:<br>(i) Engineering Teachers (ii) Applied Scienec Teachers and (iii) others | (i) 5 | 0 | | 0 | 0 | | |
| | (i) Number of faculty with Masters degree which are enrolled in-house for PhD programs at other institutions during academic year latest:<br>(i) Engineering Teachers<br>(ii) Applied Scienec Teachers<br>(iii) others | (i) 9<br>(ii) 2<br>-- | (i) 1<br>(ii) 1<br>-- | | (i) 1<br>(ii) 1<br>-- | (i) 1<br>(ii) 1<br>-- | | |
| | (j) Number of faculty that have attended a professional training program of 5 or more days duration during latest academic year | 42 | 64 | | 64 | 64 | | |
| | (k) Number of all faculty (irrespective of specialization) that have attended the Basic Module of pedagogy training during latest academic year | 0 | 40 | | 40 | 40 | | |
| | (l) Number of all faculty (irrespective of specialization) that have attended both the Basic and Advanced Modules of pedagogy training during latest academic year | 0 | 32 | | 32 | 32 | | |
| | (m) Number of faculty appraised by students during latest academic year | 200 | 245 | | 245 | 245 | | |

**Data Audit Form (05)**

| No | Particulars | 2010-11 | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|---|
| 5 | ***Information in respect to Accreditation of Program*** | | | | | | | |
| | (a) Number of UG programs accredited | 9 | 11 | | 11 | 11 | Data audited satisfactory | |
| | (b) Number of UG programs for which accreditation applied for | 0 | 1 | | 1 | 1 | | |
| | (c) Number of PG programs accredited | 2 | 0 | | 0 | 0 | | |
| | (d) Number of PG programs for which accreditation applied for | 0 | 9 | | 9 | 9 | | |

**Data Audit Form (06)**

| No | Particulars | 2010-11 | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|---|
| 6 | ***Information in respect to research and patents*** | | | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 27 | 15 | 2015-16 | 15 | 15 | Data audited satisfactory | |
| | (b) Number of research publications in International refereed journals during the latest academic year | 40 | 214 | | 214 | 214 | | |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 20 | 66 | | 66 | 66 | | |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 0 | 0 | | 0 | 0 | | |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 0 | 10 | | 10 | 10 | | |
| | (f) Number of sponsored research project completed during the latest academic year | 3 | 2 | | 2 | 2 | | |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 2 | 6 | | 6 | 6 | | |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 1 | 2 | | 2 | 2 | | |

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**Data Audit Form (07)**

| No | Particulars | 2010-11 | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|---|
| 7 | *Information in respect to Finances* | | | | | | | |
| | (a) Amount received as Block Grant during the latest academic year (Rs. In Lakhs) | 0 | 0 | 2015-16 | 0 | 0 | Data audited satisfactory | |
| | (b) IRG from students' tuition fee and other charges during the latest academic year (Rs. In Lakhs) | 1436.804 | 5001.347 | | 5001.347 | 5001.347 | | |
| | (c) IRG from externally funded R&D projects and consultancies during the latest academic year (Rs. In Lakhs) | 46.2 | 147.82 | | 147.82 | 147.82 | | |
| | (d) Total IRG during the latest academic year (Rs. in Lakhs) | 2190.66 | 655.88 | | 655.88 | 655.88 | | |
| | (e) Total annual recurring expenditure during the latest academic year (Rs. In Lakhs) | 2742 | 626.22 | | 626.22 | 626.22 | | |
| | (f) Amount available in Corpus Fund on March 31, | Rs. 25,000,00 | Rs.13,308,773 | | Rs.13,308,773 | Rs.13,308,773 | | |
| | (g) Amount available in Faculty Development Fund on March 31, | Rs. 25,000,00 | Rs.13,191,132 | | Rs.13,191,132 | Rs.13,191,132 | | |
| | (h) Amount available in Equipment Replacement Fund on March 31, | Rs. 25,000,00 | Rs.13,191,132 | | Rs.13,191,132 | Rs.13,191,132 | | |
| | (i) Amount available in Maintenance Fund on March 31, | Rs. 25,000,00 | Rs.13,234,162 | | Rs.13,234,162 | Rs.13,234,162 | | |

**Data Audit Form (08)**

| No | Particulars | | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|---|
| 8 | *With respect to Institutional Governance/ Management* | | | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | 4 | 3 | 2015-16 | 3 | 3 | Data audited satisfactory | |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 0 | 37 | | 37 | 37 | | |

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Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II **Centre of excellence in advanced materials research (1.2.1)** in respect of BMS College of Engineering, Bangalore -560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

## INFORMATION VERIFICATION THROUGH DATA-AUDIT for the year 2014-15

## Centre of Excellence : Advanced Material Research

**Name of the Data Auditor: B M Rudresh** **Date of data Audit : 17,18,19/08/2014**

**Name of Institution and Location: B M S College of Engineering, Bangalore -560019**

**Data Audit Form (01)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 1 | *Information in respect to Bachelors programs in engineering/technology* | *Not applicable* | | | | | |

**Data Audit Form (02)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 2 | *Information in respect to Masters programs in engineering/technology* | | 2014-15 | | | Dta audited satisfactroy | |
| | (a) Number of full-time masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 21 | | 21 | 21 | | |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | Not applicable | | Not applicable | | | |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 17 | | 17 | 17 | | |
| | (g) Total number of women students in all Masters programs during latest academic year | 2 | | 2 | 2 | | |
| | (h) Total number of SC students in all Masters programs during latest academic year | 2 | | 2 | 2 | | |
| | (i) Total number of ST students in all Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 5 | | 5 | 5 | | |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | Progress | | Progress | | | |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | Progress | | Progress | | | |

| Data Audit Form (03) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 3 | ***Information in respect to Doctoral programs*** | | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 0 | 2014-15 | 0 | 0 | Data audited satisfactory | |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 0 | | 0 | 0 | | |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | Not applicable | | Not applicable | Not applicable | | |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 0 | | 0 | 0 | | |

| Data Audit Form (04) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 4 | ***Information in respect to Faculty*** | Not applicable | | | | | |

| Data Audit Form (05) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 5 | ***Information in respect to Accreditation of Program*** | | | | | | |
| | (b) Number of UG programs for which accreditation applied for | 0 | 2014-15 | 0 | 0 | Data audited satisfactory | |
| | (c) Number of PG programs accredited | 0 | | 0 | 0 | | |
| | (d) Number of PG programs for which accreditation applied for | 0 | | 0 | 0 | | |

| Data Audit Form (06) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data** | **Comment** |
| 6 | ***Information in respect to research and patents*** | | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 0 | 2014-15 | 0 | 0 | Data audited satisfactory | |
| | (b) Number of research publications in International refereed journals during the latest academic year | 8 | | 8 | 8 | | |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 8 | | 8 | 8 | | |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 0 | | 0 | 0 | | |
| | (f) Number of sponsored research project completed during the latest academic year | 0 | | 0 | 0 | | |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 0 | | 0 | 0 | | |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 0 | | 0 | 0 | | |

| Data Audit Form (07) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data** | **Comment** |
| 7 | ***Information in respect to Finances*** | | | | | | |
| | Procurement of goods (equipment, furniture, books, LRs, software and minor items) and civil works for improvement in research and development facilities ( Rs.in lakhs ) | 1321.18 | 2014-15 | 1321.18 | 1321.18 | Data audited satisfactory | |
| | Provide Teaching and Research Assistantships for enrolment in Masters and Doctoral programmes in topics linked to economic or societal needs in the | 6.8 | | 6.8 | 6.8 | | |
| | Collabration with industry for applicable research and product development ( Rs.in lakhs ) | 0.23 | | 0.23 | 0.23 | | |
| | National / International collabration for Research and Development activities with Academic Institutions and R & D organisations ( Rs.in lakhs ) | 3.94 | | 3.94 | 3.94 | | |
| | Enhancing research competence of faculty and knowledge sharing in thematic areas, both within India and abroad (Rs.in lakhs ) | 1.98 | | 1.98 | 1.98 | | |
| | Incremental operating cost ( Rs.in lakhs ) | 12.29 | | 12.29 | 12.29 | | |

| Data Audit Form (08) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **No** | **Particulars** | **Figure Reported in MIS** | **Year** | **Verified Figure** | **Institutional source data** | **Remarks regarding data audited** | **Comment** |
| 8 | ***With respect to Institutional Governance/ Management*** | | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | Not applicable | 2014-15 | Not appllicable | | Data audited satisfactory | |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 0 | | 0 | 0 | | |

Date: 18, 19, and 20/08/2016

TO,
**State project coordinator / Officer on special duty**
**SPFU, Karnataka,**
**Office of the directorate of Technical Education,**
**4th floor, Palace Road, Bangalore -560001**

Dear Sir,

**Sub: Submission of Data Audit Report of TEQIP Phase –II in respect of B M S College of Engineering, Bangalore -560019**

With reference to the above cited subject, data audit of TEQIP phase-II **Centre of excellence in advanced materials research (1.2.1)** in respect of BMS College of Engineering, Bangalore - 560019 (2014-15,2015-16 and review of previous years audit) was arranged on 18th to 20th of August 2016. The data audit reports of respective academic years along with the review report are enclosed herewith for your kind consideration.

Thanking you

(B M Rudresh)
Data Auditor
BMS College of Engineering
TEQIP Phase –II (2011-12, 2012-13, 2013-14, 2014-15, 2015-16)
Bangalore -560019

# Technical Education Quality Improvement Programme : Phase II

## INFORMATION VERIFICATION THROUGH DATA-AUDIT for the year 2015-16

## Centre of Excellence : Advanced Material Research

**Name of the Data Auditor: B M Rudresh** **Date of data Audit : 17,18,19/08/2014**

**Name of Institution and Location: B M S College of Engineering, Bangalore -560019**

**Data Audit Form (01)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 1 | *Information in respect to Bachelors programs in engineering/technology* | *Not applicable* | | | | | |

**Data Audit Form (02)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 2 | *Information in respect to Masters programs in engineering/technology* | | 2015-16 | | | Data audited satisfactory | |
| | (a) Number of full-time masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (b) Number of part-time and sandwich (Joint) Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (c) Total number of students enrolled for all Masters programs during latest academic year | 23 | | 23 | 23 | | |
| | (d) Number of faculty in-house enrolled for Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of students enrolled for all Masters programs during latest academic year with scholarship | Not applicable | | Not applicable | | | |
| | (f) Number of students enrolled for all Masters programs during latest academic year with TEQIP assistantship | 33 | | 33 | 33 | | |
| | (g) Total number of women students in all Masters programs during latest academic year | 1 | | 1 | 1 | | |
| | (h) Total number of SC students in all Masters programs during latest academic year | 4 | | 4 | 4 | | |
| | (i) Total number of ST students in all Masters programs during latest academic year | 0 | | 0 | 0 | | |
| | (j) Total number of OBC students in all Masters programs during latest academic year | 5 | | 5 | 5 | | |
| | (k) Percentage of final year Masters students during latest academic year placed through campus interviews | Progress | | Progress | | | |
| | (l) Percentage of final year Masters students during latest that passed out with 75% or more aggregate marks | Progress | | Progress | | | |

**Data Audit Form (03)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 3 | ***Information in respect to Doctoral programs*** | | | | | | |
| | (a) Number of Doctoral candidates on roll up to March 31, | 4 | 2015-16 | 4 | 4 | Data audited satisfactory | |
| | (b) Number of in-house faculty enrolled for Doctoral programs during latest academic year | 0 | | 0 | 0 | | |
| | (c) Number of students enrolled for Doctoral programs during latest academic year with scholarship | Not applicable | | Not applicable | Not applicable | | |
| | (d) Number of students enrolled for Doctoral programs during latest academic year with TEQIP assistantship | 4 | | 4 | 4 | | |

**Data Audit Form (04)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 4 | ***Information in respect to Faculty*** | Not applicable | | | | | |

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**Data Audit Form (05)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 5 | ***Information in respect to Accreditation of Program*** | | | | | | |
| | (b) Number of UG programs for which accreditation applied for | 0 | 2015-16 | 0 | 0 | Data audited satisfactory | |
| | (c) Number of PG programs accredited | 0 | | 0 | 0 | | |
| | (d) Number of PG programs for which accreditation applied for | 0 | | 0 | 0 | | |

**Data Audit Form (06)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 6 | ***Information in respect to research and patents*** | | | | | | |
| | (a) Number of research publications in Indian refereed journals during the latest academic year | 0 | 2015-16 | 0 | 0 | Data audited satisfactory | |
| | (b) Number of research publications in International refereed journals during the latest academic year | 10 | | 10 | 10 | | |
| | (c) Number of research publications (Journal) co-authored with faculty/ researchers/ industry experts from outside the institution | 10 | | 10 | 10 | | |
| | (d) Number of patents in engineering related areas obtained during the latest academic year | 0 | | 0 | 0 | | |
| | (e) Number of patents in engineering related areas filed during the latest academic year | 0 | | 0 | 0 | | |
| | (f) Number of sponsored research project completed during the latest academic year | 0 | | 0 | 0 | | |
| | (g) Number of MOUs signed for collaborative programs with Indian industry and R&D organizations | 0 | | 0 | 0 | | |
| | (h) Number of MOUs signed for collaborative programs with International academic institutions and R&D organizations | 0 | | 0 | 0 | | |

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**Data Audit Form (07)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data | Comment |
|---|---|---|---|---|---|---|---|
| 7 | ***Information in respect to Finances*** | | | | | | |
| | Procurement of goods (equipment, furniture, books, LRs, software and minor items) and civil works for improvement in research and development facilities ( Rs.in lakhs ) | 310.21 | 2015-16 | 310.21 | 310.21 | Data audited satisfactory | |
| | Provide Teaching and Research Assistantships for enrolment in Masters and Doctoral programmes in topics linked to economic or societal needs in the | 43.24 | | 43.24 | 43.24 | | |
| | Collabration with industry for applicable research and product development ( Rs.in lakhs ) | 0.96 | | 0.96 | 0.96 | | |
| | National / International collabration for Research and Development activities with Academic Institutions and R & D organisations ( Rs.in lakhs ) | 7.09 | | 7.09 | 7.09 | | |
| | Enhancing research competence of faculty and knowledge sharing in thematic areas, both within India and abroad (Rs.in lakhs ) | 15.34 | | 15.34 | 15.34 | | |
| | Incremental operating cost ( Rs.in lakhs ) | 31.2 | | 31.20 | 31.20 | | |

**Data Audit Form (08)**

| No | Particulars | Figure Reported in MIS | Year | Verified Figure | Institutional source data | Remarks regarding data audited | Comment |
|---|---|---|---|---|---|---|---|
| 8 | ***With respect to Institutional Governance/ Management*** | | | | | | |
| | (a) Number of BoG meeting held during the latest academic year (with minutes on the web) | Not applicable | 2015-16 | Not appllicable | | Data audited satisfactory | |
| | (b) Number of institutional functionaries (Deans, HoDs, senior faculty and senior officials) that have undergone Management Capacity Enhancement training | 0 | | 0 | 0 | | |

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