TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) PHASE-II

Final Round of Performance Audit held from 12th to 14^h August 2016.

Performance Audit Report of BVB's Sardar Patel College of Engineering, Mumbai

NATIONAL PROJECT IMPLEMENTATION UNIT (NPIU)

EdCIL House, 4th Floor, Plot 18-A, Sector 16-A NOIDA - 201 301, Gautam Budh Nagar, Uttar Pradesh

PERFORMANCE AUDIT FORMS

INSTITUTE ON PERFORMANCE PROFILE FINAL round of performance audit

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016.

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering,
Mumbai 400 058

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PIP REF	INSTITUTION PERFORMANCE PROFILE	OVERALL EVALUATION GRADES
Co	emponent 1: Improving the Quality of Education in selected	Institutions
1.1	Strengthening institutions to improve learning outcomes and employability of Graduates	1
1.2	Scaling – up postgraduate education and demand driven research and development and innovation	1
1.2.1	Establishing centres of excellence	NOT APPLICABLE
1.3	Faculty development for effective teaching (pedagogical Training	1
	Component 2: Improving System Management	
2.1	Capacity building to strengthen management	2
2.1.1	Implementation of good governance	1
2.2	Project management, monitoring and evaluation	2

INSTITU	TION PERFORMANCE PROFILE GRADES AND GRADE DESCRIPTORS
1	Significant evidence of good practice in the quality and standards achieved
	(Assessment identifies clear supporting evidence for at least 75% of the relevant
	practices can be considered good practice)
2	Some evidence of good practice in the quality and standards achieved
	(Assessment identifies clear supporting evidence that at least 50% of the relevant practices. can be considered good practice)
3	Good practice not widespread or not in place (Institutions may specify the
	expected date of completion if there are concrete plans in place for
	implementation.)

NOTE: SUPPORTING EVIDENCE - PERFORMANCE AUDITORS WILL PROVIDE A BULLET POINT LIST OF THE STRONGEST, CLEAREST EXAMPLES OF EVIDENCE IN SUPPORT OF EVALUATION GRADES ON ALL ANNEX 4 FORMS.

The grade descriptors have two elements: one relating to the **amount and nature of the evidence** for a given practice; and **one relating to the quality** of thepractice about which the evidence is gathered. So, for example, a grade of 1 means both that the evidence is clear and that it amounts to 75% or more of thetotal evidence found; and, that the practice is good.

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PERFORMANCE AUDIT FORM (1.1)

COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash

DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering, Mumbai 400 058

1.1: Strengthening institutions to improve learning outcomes and employability of Graduates

		2	1									within 2 years of joining the Project, or	University Grants Commission process	'Autonomous Institution status' as per	 Number of institutions that have obtained 	including:	B. Obtaining Academic Autonomy status,						faculty	 Increase in the satisfaction index of student and 	computers, etc. by the institutions, including:	training, learning and research equipment, library,	A. Effectiveness of funds utilized for the teaching,	PARAMENTERS	PROJECT OUTPUT/OUTCOME	OUTPUT/OUTCOME PARAMENTITORING AND	MONMONITORING AND PROJECT
			/	/	1																									Score	Perceived
נס נוופ טפר וטו נוופ פאנפוואוטוו טו מטנטווטוווץ. טוו	2019-20. Subsequently, the institute applied	further period of 5 years from 2015-16 to	extension of autonomy to the institute for	recommendations the University granted of	2019-20. Based on the committee's	further period of 5 years from 2015-16 to	extension of autonomy to the institute for	the university with recommendation of	committee visited the submitted the report to	committee for the same and accordingly the	Mumbai. The University constituted Review	for extension of autonomy to the university of	2015-16. In 2015, the institute has applied	has conferred autonomy from 2010-11 to	autonomy from 2010-11 to 2014-15 and UGC	2010. Mumbai University has conferred	 Institute has got autonomous status since 	+Committed expenditure is 97.4%	percentage of actual amount utilized	Rs.65.5 lacs.	received is 90.82%.The committed	date. Thus % of actual utilization of grants	out of Total Grant received Rs1000 lacs till	908.2 lacs were spent by the end of July 2016	library, computers, etc. by the institution. Rs.	learning, training, and research equipment,	 Funds are utilized effectively for the teaching- 	development proposal goals and targets)	evidence of achievement of the institutional	(Note: Grades must be supported by sound	SUPPORTING EVIDENCE

																						in PIP)	autonomy possessed/ obtained (See Table - 26	Effectiveness of utilization of academic						
•																								•						
In the current year a new elective subject namely VLSI in semester VI has been	Ξ,	Systems and real-time programming, Restructuring and deregulation, Industrial	l Engineering name	namely, Industry Automation is supported by	Electrical Department one of the elective	PLC has been introduced in semester IV. In	Department, one value aided course namely	introduced in Semester-IV. In electrical	Technology and Internet of Things have been	namely, Introduction to Composite Material	Department, two value added courses	industry in this regards. In Mechanical	meeting was held to take the input from	in the curriculum. The industry review	input from industry experts are incorporated	experts in subject board and academic board,	campus placements. Participation of industry	Efforts are taken to improve results and	strictly followed. Results are declared on time.	the curricula/syllabi. Academic calendar is	meetings are held regularly to update/revise	process. Subject and Academic board	norms to improve the teaching learning	Various committees are constituted as per the	17 to 2021-2022.	the institute for period of 6 years from 2016-	the UGC granted the extension of autonomy	dations of the	Committee and on the basis of the	the basis of the report of the UGC expert

Addition of new electives in Mechanical Engineering namely Automobile Engineering is done.

introduced.

In Civil Engineering Department, new elective namely Risk and Value Management has been

In PG program with Structural Engineering, a

introduced in semester VII.

new elective namely, Analysis of offshore Structures is introduced in semester –I.

In Construction Management, new elective namely, Health Safety and Environment has been introduced.

New Course Added:

- In Civil Engineering Department new course on Development has been introduced in semester V.
- In Mechanical Engineering, a new course on Health Safety and Environment has been introduced in semester VI.

Credit Transfer Scheme:

- admitted to the undergraduate engineering agreement with SGGS, Nanded and WCE, SPCE Mumbai has undergone an academic Engineering Department in Semester V. academic requirements as per MoU signed are presently in second year, third year and study in the second Year, Third Year and Final Sangli. academic year with one student from SGGS Further in this agreement the students who can avail CTS scheme for PG courses as well. year of graduation at SPCE Mumbai. Student programs at SPCE Mumbai an opportunity to Nanded has joined our institute in Electrica CTS has been implemented from present fourth year and PG need to satisfy the This agreement gives students
- activities, Efforts are also taken to enhance R&D Engineering) have been started since 2011departments also. Two New PG programs analysis. This will be implemented in other semester. collected for all subjects at the end of each institute interaction. Student's feedback is Power System New PG program Power Electronics and Engineering) and Machine Design (Mechanica namely Construction Management (Civil initiated the on-line student's feedback and consultancy jobs, and industry-Mechanical Department has S started ⋽ Electrica

 Supporting staff in 2013-14 100 out of 120 i.e. 83.33% In 2015-16 position of supporting staff: Out of 114 sanctioned posts, 85 posts are filled. %of supporting staff filled is 73.9% In June 2015, 7 supporting staffs were selected and approval of this appointment is sent to DTE. 	• Increase in faculty appointed on regular hasis
the vacant posts the interviews were held in Nov 2014. Out of 21 vacant posts 15 candidates have been selected and have joined the institute. Of 15 selected candidate two internal faulty have been promoted to higher posts. The process of filling up of remaining vacant posts is in progress. Out of 46 faculties, 19 have PhD qualification, 24 have M.Tech/M.E/M.Sc. qualification. In 2014-15 Faculty position – 37 out of 59 i.e., 62.7%. In 2015-16 Faculty position - 46 out of 59 i.e. 78%	 made by Institutions for filling the vacancies, including: Percentage of faculty and staff positions filled and vacant
 Faculty members are deputed for upgrading their qualification regularly. In 2013-14 01 faculty has been deputed for PhD. program at IITB In 2014-15 two faculty members have been deputed for Ph.D. under self Finance Category (one faculty in IITB and other at VJTI, Mumbai). In 2015-16, 03 faculty members have been deputed for M.Tech. Program. 	 C. Effort made by Institutions for upgrading qualifications of faculty members, including: Percentage of faculty enrolled in M Tech and PhD D. Existing teaching and staff vacancies and effort
Engineering Department in 2014-2015. Efforts were made to start two new PG programs, namely, M. Tech. in Electronics/ Control and M.Tech in Computer Integrated Manufacturing and follow up is to start these programs in progress. Training programs in collaboration with industries and skill enhancement programs as per market need are conducted. Faculty members are regularly deputed for academic advancement.	

Þ	OVERALL EVALUATION GRADE FOR 1.1
	programmes
	the Second year in Undergraduate
	 Transition rate of students from the First to
	including:
 In 2015-16 Transition rate: 91.4% 	E. Effectiveness of equity at Institutional level,
 Increased by 24.4% 	
 In 2015-16 Faculty position 46 out of 59 	

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

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash

DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016.

NAME OF INSTITUTION WITH LOCATION:BVB's Sardar Patel College of Engineering, Mumbai-400 058

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

	Increased enrolment for MTech and PhD	Technical Education, including:						faculty	 Increase in the satisfaction index of student and 	computers, etc. by the institutions, including:	training, learning and research equipment, library,	A. Effectiveness of funds utilized for the teaching,	PARAMENTERS	PROJECT OUTPUT/OUTCOME	OUTPUT/OUTCOME PARAMENTITORING AND	MONMONITORING AND PROJECT
1/2/	1														score	Perceived
 2011-12 Two Laboratories Machine Design Research Lab for Mechanical Dept. and 	of Ph.D. students Enrolled (all years) in 2014-15 is 49 while in 2015-16 is 46		+Committed expenditure is 97.4%	Thus the % of actual amount utilized	 The committed expenditure is Rs.65.5 lacs. 	received is 90.82%	date. Thus % of actual utilization of grants	out of Total Grant received Rs1000 lacs till	908.2 lacs were spent by the end of July 2016	library, computers, etc. by the institution. Rs.	learning, training, and research equipment,	 Funds are utilized effectively for the teaching- 	development proposal goals and targets)	evidence of achievement of the institutional	(Note: Grades must be supported by sound	SUPPORTING EVIDENCE

Mechanical Department(PG): 22	undertaken and development work
2014-15 2015-16	and inc
 Project works done in collaboration with 	E. Increased collaboration with industry in research and development, including:
 Publications in referred journals for the year 2015-16 are 31 of which 11 are co-authored by person from industry/other organization. 	 Increase in number of co-authored publications in refereed journals
	Institutions in India and abroad, including
 Almost all seats are filled up. In 2015-16 Five PG seats were left vacant out of 180 seats. 	Adequacy of student enrolments
 2014-15 Power Electronics lab in Electrical Engineering Department. 	
 2013-14 Two Laboratories CAD-CAM Lab & CFD 	
Lab for Mechanical Dep Centre in Civil Eng	
 2011-12 Two Laboratories Machine Design 	 Establishment of laboratories
 New PG Program Started in 2011-12 Civil: Construction Management Mechanical: Machine Design. New PG Program Started in 2014-15 Electrical: Power Electronics Power Systems 	 Progress/achievement in starting new Postgraduate programmes, including: Securing AICTE approval
 Cumulative number of PG students assistantship granted: 92 	
 PG Assistantship under TEQIP for 2014-15 is 	
 Total GATE Scholarship for 2014-15 is 150 	 Cumulative number of assistantships granted
• 2014-15 Power Electronics lab in Electrical Engineering Department.	
• 2013-14 Two Laboratories CAD-CAM Lab &	
Computer Centre in Civil Engineering	 Establishment of proposed laboratories

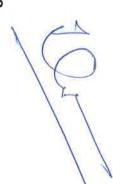
	A (improvements, evaluation of students and delivering expert lectures	≦ 8	1	 Improvements in graduate placement rate 				 Increase in the number of students' and faculty visits to and/or training in industry 		assignifients secured	 Increase in the number of consultancy assignments secured 		institution in knowledge and/or skill areas	Increase in industry personnel trained by					Masters and Doctoral programmes	registered	 Increase in financial contribution by industry for 	
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expert during their placements.	 topics are introduced in the curricula and syllabi. Student's evaluation is done by the industry 	(D) (D)	 Industry experts are involved in subject boards, academic boards in curricula & syllabi 	2014-15: 23.6% PG students placed through 44.82% 89% increase.	 Percentage of PG students placed through 	tural - 01	Mechanical 11 08		 Industrial visits by Students 2014-15 2015-16 	16: 35	 Consultancy Assignments Under taken in 2015. 	 Consultancy Assignments Under taken in 2014- 	• In 2015-16: 25	Mechanical Engineering Department:	A by the fields	 Industry personnel registered for PG. program in 2015-16: 46 (All Years) 	in 2014-15: 49 (All years)	Industry personnel registered for Dh D program	 Industry personnel registered for PG. program 	in 2014-15: 04	personnel registered for PG	Indirect financial contribution in terms of	Electrical Department (PG): 10

OVERALL EVALUATION GRADE FOR 1.2	H. Increase in the number of patents filed	G. Increase in the number of publications in refereed journals	total revenue of the institution from all sources	F. Increase in percentage of revenue from externally funded research and development projects and consultancies as a percentage of the	 Increase in the number of sandwich programmes between industries and the institution. 	
						- A
1	• 2014-15:01 • 2015-16:00	 2014-2015 No. of Publications:32 2015-2016 No. of publications:31 	 No adequate R&D projects funded externally. In the past institute has received funds more than Rs 1 Cr. from FIST, AICTE, UGC and Mumbai University. Currently the institute in focusing on utilization of seed money for research work funded by TEQIP grant Mechanical and Electrical departments are working on projects funded by ICT, Matunga. 	2014-15 14.24 %2015-16 7.67%	Nii	 Subject Board & Academic Board meetings are regularly held. Expert Lectures from industry are regularly organized in all the departments. 2014-15 2015-16 Electrical: Mechanical: 13 15 Civil: 09 10 Structural: 01 07

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

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016.

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering, Mumbai-400 058



1.2.1: ESTABLISHING CENTRES OF EXCELLENCE

Z	OVERALL EVALUATION GRADE FOR 1.2.1 USING THE 3-POINT GRADING SCALE AND GRADE DESCRIPTORS IN ANNEX 4(1)	USING THE 3-POINT GRADING SCA
	NOT APPLICABLE	Civil works
	NOT APPLICABLE	Procurement of furniture
	NOT APPLICABLE	 Establishment of a knowledge resource centre (library) in the thematic area
	NOT APPLICABLE	 A. Establishing Centres of Excellence Improvement in Research and Development facilities through: Establishment of new laboratories for applicable thematic research
dence of proposal	SUPPORTING EVIDENCE (Note: Grades must be supported by sound evidence of achievement of the institutional development proposal goals and targets)	MONMONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS

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

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash

DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016.

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering, Mumbai-400 058

1.3 Faculty development for effective teaching (pedagogical Training)

MONMONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS	Perceived score	SUPPORTING EVIDENCE (Note: Grades must be supported by sound evidence of achievement of the institutional development proposal goals and targets)	sound tional
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 		• 23.9% in 2015-16	
relevant) curricula and /or syllabi		 Yes, Academic Board & Subject Board Meetings are regularly held in order to 	Board er to

27		1
Recently, NBA has revised the duration for award of accreditation, i.e., provisional Accreditation of 2 years has been revised to 3 years and the full accreditation of 5 years to 6 years. The revised duration will be applicable	•	
Autonomous institute have to apply for TEIR-I category. Therefore format has changed and proposals are submitted are per new norms. SAR is opened in Feb 2015. SAR is uploaded in NBA web portal and the tentative dates for NBA committee visits are also submitted.		Project)
3 rd round of accreditation and Electrical Engine and Electrical Engine SARs have been uploaded. The tentative date	•	 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)
In 2015-16 All regular faculty and some ad hoc faculty attended the subject domain training, seminars etc. Five faculties have been deputed to attend conference in abroad and BOG has approved international travel for three faculties to attend the conferences.	•	 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)
6.52%	•	 Percentage of faculty with UG qualification registered/deputed for improving their qualification (see Section - 3, 4(b) on page 20 of PIP
Remedial Coaching Guest Lectures Coaching beyond syllabus Extra Lectures Presentation by Video Working Models Charts etc.,		 Improvements in teaching and learning methods, including provision for students needing extra/remedial support
Continuous assessment by conducting tests 1 & 2, end semester re-exams. Quizzes/mini projects are conducted, answer books are shown to students. Synoptic answers are also provided by faculty members. Question papers and answer books are audited by experts from reputed institutes.	•	 Improvements in (and/or updating, more relevant) course assessment methods
improve curricula and syllabi by updating and adding relevant topics/courses.		

OVERALL EVALUATION GRADE FOR 1.3	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	
<u></u>	Around 75%	considered for accreditation under outcome based format (Tier I/Tier II). To implement the same, the Institutions which have applied for UG Engineering programs and have submitted or are filling the SAR in old format are required to submit the pre-qualifiers before the expert team visit is conducted. Now they are in the process of preparing prequalifiers and it will be submitted by 2 nd week of August 2106. The institute has also applied for first round of accreditation of all four PG eligible PG programs. SAR have been uploaded in NBA web portal. The tentative dates for NBA committee visits are also submitted.

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

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash

DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016.

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering, Mumbai- 400 058

2.1: CAPACITYBUILDING TO STRENGTHEN MANAGEMENT

	Terceived Surroriing EVIDENCE
OUTPUT/OUTCOME PARAMENTERS score	
	(Note: Grades must be supported by sound evidence of
	achievement of the institutional development proposal goals
	and targets)
A. Implementation of academic and non-	 Inclusion of various stake holders in development
academic reforms, including:	processes. Improvement in Scheme, assessment
 Improved understanding of the need 	process, methods of Teaching-Learning Improvement in

institute It was proposed to increase faculty share in	
Retention: 50% of revenue generated is retained with	A TOO THE RESERVE OF THE OWNER.
Generation of revenue: through testing, consultancy, Generation of revenue: through testing, consultancy,	 Generation, retention and utilization of Income Revenue Generation
resources are in place.	
constraint. Maintenance, modernization and utilization of	
	 Development, maintain and utilization of institutional resources
facility is also provided in the college. It is proposed	,
installed at various locations in the institute. Wi-Fi	
rooms/laboratories is under taken. CCTV cameras are	
quality is satisfactory. Recently renovation work of class	academic buildings
	cluding sufficiency
after maintenance of infrastructure and facilities.	non-academic infrastructure and
to audit every section of the institute.	O. T.
assurance cell at institute level is formed. IT is planned	
edba	
3 .	student feedback mechanisms
	inclu
 Student feedback mechanism is in place. Students' 	 Institutional quality assurance and
member are part of Women Development Cell.	
members) are part of Anti-ragging committee. NGO	
Corporation Authorities & Police authorities and NGO	
various committees. Local Authorities (Municipal	
Staff, Students and industry expert are members of	
experts are the member of Board of Governor, Faculty,	
curriculum development. Senior Faculty and industry	communities)
Employers) are taken. Stakeholders are involved in	(students, faculty, staff, industry, local
Feedback from stakeholders (Students Alumni Parents	Responsiveness to stakeholders
departmental level is given to the Heads of Department	Sellior fullctiollaries
Administrative and financial decision making power at	and financial decision making powers to
 Yes. Budget provision for each department. 	 Extent of delegation of administrative
posicions.	2
Decentralization of administration by creating Dean positions	 Modernization and decentralization of financial
learning.	
Improvement in R & D, Publications and Project based	
administration, financial management. Industry	new instruments for accountability
,	was for increased autonomic

2	OVERALL EVALUATION GRADE FOR 2.1
of it is deposited in TEQIP four funds	
of laboratories, to meet inadmissible expenses and part	
Utilization: for procuring new equipment, maintenance	
taken in next meeting.	
the last BOG meeting. Decision in this regard will be	

PERFORMANCE AUDIT FORM (2.1.1) COMPONENT 2: IMPROVING SYSTEM MANAGEMENT

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash

DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016.

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering, Mumbai-400 058 2.1.1: IMPLEMENTATION OF GOOD GOVERNANCE

 Has the Governing Body approved the institutional strategic vision, mission and 	A.PRIMARY ACCOUNTABILITIES	MONMONITORING AND PROJECT OUTPUT/OUTCOME PARAMENTERS
		Perceived score
Yes Revised Vision & Mission strategic plan • Revised Vision, Mission and strategic plan are evolved		SUPPORTING EVIDENCE (Note: Grades must be supported by sound evidence of achievement of the institutional development proposal goals and targets)

- Revised Vision, Mission and strategic plan are evolved by institute faculty through extensive deliberations.
 Vision & Mission have been displayed on college
- These are discussed in the Board of Governor as part of information agenda presented by the Principal and approved by BOG during the meeting held on 22nd May 2015. Annual budgets

budgets?

long-term

business plans

path for the institution

through its and annual

plan - identifying a clear development

- Annual budgets are regularly presented to the BOG and are deliberated and approved.
- BOG Meeting held on 22-10-2013
- Agenda 8. Budget and financial status on the institute.
- BOG Meeting held on 21-06-2014
- Agenda 7. Budget, financial status on the institute and fund received from AICTE.
- BOG Meeting held on 24-12-2014
- Agenda 9. Financial status on the institute.
- BOG Meeting held on 22-05-2015
- Agenda 9. Financial status on the institute

	1	
 Agenda 7. Budget, financial status on the institute and fund received from AICTE. BOG Meeting held on 24-12-2014 	9	
Agenda 8. Budget and financial status on the institute. BOG Meeting held on 21-06-2014		
 approval. Various committees required for autonomous institute are in place and revised as per the norms. 		
review and approve the expenditures. Proceedings of Finance committee are presented to the BOG for		
 Budgets are approved by the finance committee and presented before BOG annually for detailed discussion 		and human resources.)?
funding bodies		clear procedures for managing physical
(1)		sustainability including financial and
/memoran		and accountability to ensure financial
specified in any funding		effective and efficient systems of control
 The auditors ensure that funds provided by funding bodies are used in accordance with the terms and 		Has the Governing Body ensured the establishment and monitoring of proper.
ASSISTANTS TO NON-GAIGE PG STUDENTS THROUGH TEQIP funds.		
i) Proposal to pay enhan		
PG pr		
 Agenda 5 (iii) Proposal of appointment of ad-hoc 		
Students training Centre. Etc.		
research advisors, starting new PG programs		
Money for research activities, appointment of senior		
 Agenda 3: Progress of various activities under TEQIP 		
Other strategic Initiatives approvals		
 Agenda 12: To discuss Financial data for the year 2016-17 		
 BOG Meeting held on 11-06-2016 		
various departments and sections.		
 BOG Meeting held on 21-09-2015 Agenda 3: To discuss Financial Position and Fund 		

board and other relevant levels.	
research quality are monitored and action plans for	
approved at the BOG meetings. Student input quality (cut-off ranks), output quality (placement measures),	
with respect to finance, results, placements,	
 The BOG monitors institutional performance regularly 	
the BOG for deliberations.	
At the and of admiration was this data is chared with	assurance an angenients:
rankings of the incoming students. i.e. meritorious	institutional performance and quality
 Institution has a benchmarking process on the basis of 	 Is the Governing Body monitoring
Agenda 3: Status of faculty and staff recruitment.	
 BOG Meeting held on 22-05-2015 	
Academic Reforms	
 Agenda3. Progress of various activities under TEOIP- 	
 BOG Meeting held on 22-10-2013 	
12 new faculties have joined the institute.	
 In November 2015, faculty interviews were held and 	
and non-teaching posts.	
 Subsequent meetings. Constant efforts are make to fill up the vacant teaching 	
permission of chair and approved by BOG in the	
Human resource requirements are met with the	
9	
management, debt management, and grants and	
management, investment management, risk	
 Policies on a range of systems, including treasury 	
 Finance Committee Meeting held on 26-11-2013 	
7	
BOG Meeting held on 11-06-2016	
g held on 21-09-2015	
 BOG Meeting held on 22-05-2015 	
 Agenda 9. Financial status on the institute. 	

Has the Governing Body put in place

Performance of head of institute is evaluated by

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ווער וווער שנות בווערווושבו אור באנבווומו נסי	
• The independent members are external to and	Does the Governing Body have actively
 BOG has been constituted as per the guidelines of statutory and regulating bodies (TEQIP/UGC guidelines for autonomous institutes), based upon the merit and competencies in a transparent manner. However, few of the nominations are decided by the BOG based upon the merit and competencies in a transparent manner 	 Are the recruitment processes and procedures for governing body members rigorous and transparent?
 BOG has been constituted as per the guidelines of statutory and regulating bodies (TEQIP/UGC guidelines for autonomous institutes) 	 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
	C.KEY ATTRIBUTES OF GOVERNING BODIES
1	EVALUATION GRADE FOR 2.1.1 B
 Governing body is conducted in an open manner and the proceedings of the minutes are published on institute's web site. The relevant information discussed in BOG is also shared with departments and faculty through faculty meetings. 	• 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?
 Yes, register of interest is maintained. 	 Does the Governing Body maintain, and publicly disclose, a register of interests of members of its governing body?
 Annual report is presented and discussed in the BOG; Institute in planning to publish the annual report in print form and upload the same on the institute's website. Annual Report from each Department is published in print form and is uploaded on the institute's website. 	 Does the Governing Body publish an annual report on institutional performance?
	B.OPENNESS & TRANSPARANCY IN THE OPERATION OF GOVERNING BODIES
1	EVALUATION GRADE FOR 2.1.1 A
Chairman, BOG during writing his CR. • The role and responsibility of the head of the institution is guided by the UGC/AICTE/Mumbai University/DTE guidelines	suitable arrangements for monitoring the head of the institution's performance?
100	

1	EVALUATION GRADE FOR 2.1.1 D
Government, Local University and UGC as per the TEQIP- II Norms (PIP-2011)	
Induction of some BOG members is done by State	
members are briefed informally by the Chairman on their role and responsibility	necessary?
institution in the direction of its vision. At present new	r development
perception, which will enhance the performance of the	existing members receive opportunities
The experts who have been invited to the BOG bring with them the knowledge of their field and have a	 Does the Governing Body ensure that new members are properly indicated and
	jectives and its short-term ind
accountabilities have not been documented as the	in meetina its lona-term strategic
FINTEREST. The effectiver	reviewing its performance, reflect on the
informal way. Persons will continue on board as long as	effectiveness under regular review and in
 The review is being carried out by the BOG itself in an 	 Does the Governing Body keep their
	REVIEW OF GOVERNING BODIES
	EVALUATION GRADE FOR 2.1.1 C
אוווכון וא פאומפוור וויסווו רוופון מרנפווממווכב ובנטומ.	EVALUATION CRADE EOD 2 1 1 2
 Members of the Boo attend the meetings regularly 	
s are	
11-12-2015, 11-06-2016 and 21-07-2016. Details of	
_	participate actively?
meetings in a year.	the governing body attend regularly and
year and now its frequency in is increased to four	Is there clear evidence that members of
 Yes, earlier BoG meetings were conducted twice in a 	 Does the Governing Body meet regularly?
2011 and University of Mumbai Statutes 593-642.	clearly stated?
are as per the TEQIP -II Project Implementation Plan,	Secretary serving the Governing Body
Body, Head of the institution and member secretary	
 Yes, Roles and responsibilities of Chair of Governing 	
affect attainment of long term educational objectives.	
	objectives?
free from any political interference as far as day to day	and focus on long term educational
nstitutional objectives. The institution	e to ensure academic t
are proactive. Members are actively involved in	institution free from direct political
	involved independent members and is the

.	OVERALL EVALUATION GRADE FOR 2.1.1 A-E
	EVALUATION GRADE FOR 2.1.1 E
processes.	
 Institute proposes to create internal audit for various 	
 Performance audit and data audit for the 2010-11, 	
for UG and PG programs.	
2008 and applied for next round of accreditation both	
 Institution has been accredited by NBA in 2004 and 	
_	
 Admissions are centralized and done by State 	current status of accreditation etc
 Fee structure is decided by DTE, state Government. 	or professional body? If so, give name,
published on website.	external quality assurance by a national
 Every year mandatory disclosure is sent to AICTE and 	 Has there been accreditation and/or
of education institutions.	institutions?
demonstrates compliance with 'not-for-profit' purpose	`not-for-profit' purpose of education
Government of Maharashtra state. Further the budget	demonstrating compliance with the
 Fee structure and admissions are as per the rules of 	 Does the regulatory compliance include
equipment	
of infrastructure, faculty (Human resources) and	the institution.
requirement and gives directions to higher provisioning	final decisions on fundamental matters of
Local University) regulations as a minimum basic	compliance* and, subject to this, take all
 The BOG makes it a point to treat these (AICTE, UGC, 	 Does the Governing ensure regulatory

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

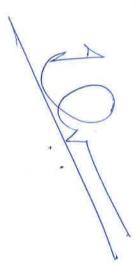
NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016.

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering, Mumbai-400 058

2.2: PROJECT MANAGEMENT, MONITORING AND EVALUATION

 Increase in PG programs, publications and 		A. Effectiveness of mentoring, reviews,
development proposal goals and targets)		
evidence of achievement of the institutional		
(Note: Grades must be supported by sound		OUTPUT/OUTCOME PARAMENTERS
SUPPORTING EVIDENCE	Perceived score	MONMONITORING AND PROJECT

2	R 2.2	OVERALL EVALUATION GRADE FOR 2.2
feedback.	tive?	teacher improvement inclucounseling appropriate and effective?
be implemented in other departments also. Faculty members are informed about their	ted for	for teacher improvement? If yes, is the procedure adopted for
student's feedback and analysis. This will	rly used	 Are results of evaluation properly used
for every semester. Mechanical	n one or	faculty evaluated by students in one or
Student's feedback for all subjects is taken	tage of	 Percentage/ increase in percentage of
faculty members are evaluated by students		students, including:
 Feedback mechanism is in place and 100% 	ion by	C. Effectiveness of faculty evaluation by
ERP to be purchased.		stakeholders at all time
stakeholders at all time	ilable to	through web based MIS available to
through web based MIS available to	on/ data	 Precise and reliable information/ data
most of the reliable information/ data		monitoring, including:
 Website is updated regularly. Precise and 	nd	B. Effective project management and
	Proposal	the Institutional Development Proposal
	et out in	institutions goals and targets set out in
and campus placement.	the	 Increase in the achievement of the
IRG. Improvement in student's results	luding:	surveys and audits conducted, including:



PERFORMANCE AND DATA AUDIT FEEDBACK

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

NAME OF PERFORMANCE AUDITOR: Dr. N.C. Shivaprakash

DATES OF PERFORMANCE AUDIT: 12th to 14th August 2016

NAME OF INSTITUTION WITH LOCATION: BVB's Sardar Patel College of Engineering, Mumbai-400 058

KEY POINTS FEED BACK TO THE INSTITUTION AT THE END OF THE VISIT AGAINST THE SEVEN ASPECTS OF

STRENGTHENING INSTITUTIONS TO IMPROVE LEARNING OUTCOMES AND EMPLOYABILITY OF GRADUATES

- 17 UG laboratories upgraded with latest equipment and facilities, 4 new laboratories were setup
- the faculty and students have been provided Internet facility (40 Mbps), Library with adequate e-books and journals and Wi-Fi facility throughout the institution for all
- An average placement in the last 3 years for the three departments range from 83-99%
- For UG students Placement rate is improved by 33.6%
- Internships for students in Industry, 200 students (last three years)
- Curricula and syllabi in reviewed and updated and Industry need based topics are introduced in the curricula and syllabi
- Recruitment Training, Technical Trainings, Higher Education / Career Guidance Trainings and Mock Placement Drives / Finishing school to enhance employability. activities conducted under Finishing School: Diagnostic Test, Campus
- Conducting remedial teaching for improving transition rate and pass rate of students

INNOVATION SCALING-UP POSTGRADUATE EDUCATION AND DEMAND-DRIVEN RESEARCH AND DEVELOPMENT AND

- Power Systems Three new PG programs has been introduced. Construction Management, Machine Design and Power Electronics and
- Significant rise in placement for PG students

FACULTY DEVELOPMENT FOR EFFECTIVE TEACHING (PEDAGOGICAL TRAINING)

Tech/M.E./M.Sc. qualification. The process of filling up of remaining vacant post is in progress. Faculty positions: Vacant posts are regularly filled. At present Out of 46 faculties, 19 have PhD qualification, 24 have M

- Faculty members are regularly deputed to attend subject domain trainings, workshops/ seminars/ conferences in India
- Publication: A number of faculty having h index 3 or greater than 3 has increased in the past three years. Total No. of Journals publications since beginning of TEQIP project: NNational Journal: 24 International Jr:116 Total: 140
- Patents filed: 03
- programs is also distributed to faculty involved A share of consultancy fees is distributed directly to the faculty involved. Revenue generated from continuing education
- Revenue generated through consultancy and testing and activities: Significant revenue is generated. Approximately Rs 1cr per year

ESTABLISHING CENTRES of EXCELLENCE

NOT APPLICABLE as there is no sanction of CoE from NPIU.

CAPACITY BUILDING TO STRENGTHEN MANAGEMENT

Senior faculty members have attained the Leadership and management workshop conducted by IIMs

IMPLEMENTATION OF GOOD GOVERNANCE

- Governing body is conducted in an open manner and the proceedings of the minutes are published on institute's web
- BoG meetings were conducted four times in a year
- Four funds have been created and every quarter, specific amount is deposited in these accounts
- Deans namely academic, finance and research and development have been appointed. Specific areas of operation with roles and responsibility for each committee are chalked out.

PROJECT MANAGEMENT, MONITORING AND EVALUATION

- Academic board at institute level experts from industries, alumni and institutes of national repute
- uploaded in NBA web portal **Accreditation:** Applied for 3rd round of accreditation all three UG and 1st round for four PG programs. SARs have been
- Delegation of financial, administration and Managerial powers for various functionaries for TEQIP-II implementation
- Many administrative positions are introduced for decentralization of administration

KEY IMPROVEMENTS NOTICED ON SHORTCOMINGS REPORTED DURING EARLIER PERFORMANCE AUDITS

Action taken Report on the Recommendations made during 4th Performance Audit

12.	ь	<u> </u>	9	,œ		6.	4.	ω	2.		Sr.
2.	*	10.		,	7.						No.
Increase awareness of TEQIP amongst staff. Earmark funds identified for staff	Medical Insurance & health facility awareness to students	Involvement of faculty in Pedagogy training for improvement in teaching learning should be increased	Data Validation & Data Authentication procedures should be improved	Self-Appraisal System has been introduced, but there is a need to analysis, corrective actions & benefits of corrective action be in place	Internet Facilities be enhanced at least in the department	Evaluation Charges for Supplementary Exam be charged depending upon Number of Subject	End Semester Results be displayed on website	Grievance Committees at various levels are not working effectively	Terminals/PCs be increased to cater to the need of students in a better manner	Rule/Formula/Equation for conversion of CGPA Grade to % be put up on the Website	Recommendations
Increase in awareness about TEQIP amongst staff is created. Staff have given annual plan of expenditure for attending	Medical Insurance for students is in place and health facility awareness to students is in process.	.More faculties have been already deputed for Pedagogy training and Still sponsoring faculty for Pedagogy training will be increase. It is also proposed to conduct Pedagogical trainings in the institute.	Data validation & Data Authentication procedures have been improved and efforts are made to improve it further.	Self –Appraisal System is in place. As suggested, analysis of self-appraisal, corrective actions is being initiated.	Internet facilities are adequate in all departments. Each and every faculty has access to internet. Further, in each department has computer centre where students have access to internet. Also in library the students have access to computer centre and internet facility. Wi-Fi Facility is provided in the entire college building.	If we charge per subject then it may be high. We will review and implement if it is beneficial to both students and examination section.	Decision in this regard will be taken in academic board meeting	Efforts are made to function the Grievance committees at various levels effectively.	The numbers of Terminals/PCs are also increased. From TEQIP fund computers are purchased.	Yes conversion formula of CGPA to % is uploaded on the website	Action Taken

transfer will be made use of.	may be made use of.	
Awareness about Electronic Board of knowledge	Awareness about Electronic Board of knowledge transfer	17.
ct.		
students while showing their answer books. As	exam is over	
Model answer are shown by individual teacher to the	Model answers be displayed on Notice Boards after the	16.
approved by BOG this benefit will be extended to the staff.		
Mediclaim facility is in place. The proposal of Group	Group Insurance for Staff be introduced	15.
minimum required facilities.		
Ladies Common Room has been created with all	Ladies Common Room be created	14.
Rotation of TEQIP benefits to staff will be implemented.	Rotation of TEQIP staff benefits, if possible	13.
training/management capacity enhancement /pedagogy training etc.		
Workshops/seminars/subject area		

BRIEF STATEMENTS ON CONTINUING SHORTCOMINGS, AND REASONS:

- Faculty position; Government policies Finishing school in subject domain

RECOMMENDATIONS FOR MENTORS

Being a final round of performance audit and the project is ending on 31 October 2016, there are no specific suggestions.

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