

INSTITUTION PERFORMANCE PROFILE
AUDIT VISIT NUMBER: 1 2 3 4
(Circle number of the visit, as appropriate)

NAME OF PERFORMANCE AUDITOR: Prof. M.M.Malhotra

DATES OF PERFORMANCE AUDIT: 10-12 May, 2016

NAME OF INSTITUTION WITH LOCATION: Dr. Babasaheb Ambedkar Technological University, Lonere

PIP REF	INSTITUTION PERFORMANCE PROFILE	EVALUATION GRADES
COMPONENT 1: IMPROVING THE QUALITY OF EDUCATION IN SELECTED INSTITUTIONS		
1.1	Strengthening institutions to improve learning outcomes and employability of graduates	NA
1.2	Scaling-up postgraduate education and demand-driven research and development and innovation	2
1.2.1	Establishing centers of excellence	NA
1.3	Faculty development for effective teaching (pedagogical training)	2
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

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

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

PERFORMANCE AUDIT FORM (1.1)

Name of Performance Auditor: Prof. M.M.Malhotra

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

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 the institutions, including: <ul style="list-style-type: none"> • Increase in the satisfaction index of student and faculty 	
B. Obtaining Academic Autonomy status, including: <ul style="list-style-type: none"> • Number of institutions that have obtained 'Autonomous Institution status' as per University Grants Commission process within 2 years of joining the Project, or • Effectiveness of utilization of academic autonomy possessed/obtained (See Table-26 in PIP) 	
C. Effort made by Institutions for upgrading qualifications of faculty members, including: <ul style="list-style-type: none"> • Percentage of faculty enrolled in MTech and PhD 	Not Applicable
D. Existing teaching and staff vacancies and effort made by Institutions for filling the vacancies, including: <ul style="list-style-type: none"> • Percentage of faculty and staff positions filled and vacant • Increase in faculty appointed on regular basis 	
E. Effectiveness of equity at Institutional level, including: <ul style="list-style-type: none"> • Transition rate of students from the First to the Second year in Undergraduate programs 	
Evaluation Grade for 1.1 Using the 3-point grading scale and grade descriptors in Annex 4(1)	

PERFORMANCE AUDIT FORM (1.2)

Name of Performance Auditor: Prof. M.M.Malhotra

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

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)
<p>A. Effectiveness of funds utilized for the teaching, training, learning and research equipment, library, computers, etc. by the institutions, including:</p>	<p>Funds utilized for:</p> <ul style="list-style-type: none"> • Adding two laboratories namely CAD and for conducting research in Computer Engineering Department • Electrical Dept. set up a Renewable energy lab for project work by UG & PG students and two more labs in power electronics and BLDC drive system to facilitate research on specific problems. • Strengthening/modernization of existing laboratories by adding equipment/instruments for effective implementation of curricula • Teaching /Research assistantships for Masters and Ph.D students • Research projects taken up by UG students • Faculty development for training in subject domain • Organizing in-house training programs for professional development of faculty. • Industry related M.Tech/Ph.D programs • Industrial internship of UG students • Training in Soft Skills for graduating students. • Management training programs for Sr. Faculty & Officials • Curricula revision/modification • Academic support for weak students • Equipment for Embedded System design in Electronics Engineering Department • Books, Encyclopedias NPTEL CDs, E books • Course specific software for different labs and departments.

<ul style="list-style-type: none"> • Increase in the satisfaction index of student and faculty 	<ul style="list-style-type: none"> • Modernizing instructional space and Labs for all PG programs and adding one Seminar room each for Electronics and Computer Engineering departments. • Computers for Library and providing connectivity to hostels and departments through campus wide networking • Subscription to e journals • Digitization of library • Training of administrators, staff, Faculty, technical supporting staff • Faculty and students visits to industries • Collaborative Research on live problems from industry by most of the M.Tech students • Training programs and workshops in Research Methodology for Ph.D scholars and PG students from some departments. • Research &Development projects by Final year B.Tech. students on industry live problems • Organization of Workshops, Seminars, Guest lectures by experts from industry and academia. • Furniture added to meet specific requirements of different labs, classrooms, library, conference rooms <ul style="list-style-type: none"> • <u>A field study was conducted to find satisfaction index of both students and faculty. No increase found in the level of satisfaction index for both students and faculty. It remained as moderate.</u> • <u>Library reported as deficient in contributing to e-journals as reported by research scholars.</u> • <u>Connectivity of network not satisfactory. Speed of internet reported very slow for downloading by PG students</u>
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- Existing teaching and staff positions

- **Faculty for UG Programs**

- Sanctioned posts for UG programs: 95
- In Position: 58
- Vacancies: 37
- Faculty appointed on contract/ ad-hoc basis: 41?

Note: *There is no regular position sanctioned for UG and Ph.D. programs offered in the Civil Engineering department. The faculty in position in the department is not regular and is managed on Self-financing basis.*

- **b) Faculty for PG Programs**

There are no regular positions sanctioned for PG programs. The faculty appointed for UG programs are conducting the PG programs with the assistance of Research/Teaching assistants and faculty appointed on ad-hoc basis. This has severely affected the quality of PG programs and resulted in the low morale of majority of teachers.

- **c) Non-Teaching staff(Administrative, technical &Class IV supporting staff**

- Sanctioned: 123
- in position: 82
- Vacancies: 41

<p>B. Effectiveness of scaling-up Postgraduate Technical Education, including:</p> <ul style="list-style-type: none"> Increased enrolment for M.Tech and PhD 	<ul style="list-style-type: none"> The enrolments in M.Tech and Ph.D programs have gone up significantly up to the year 2014. A decline is noted thereafter, especially in the MTech programs. This is evident from the table given below. <table border="1" data-bbox="1060 337 1785 435"> <thead> <tr> <th><u>Enrolment</u></th> <th>2011-12</th> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>M.Tech</td> <td>107</td> <td>143</td> <td>195</td> <td>206</td> <td>197</td> </tr> <tr> <td>Ph.D</td> <td>65</td> <td>76</td> <td>85</td> <td>85*</td> <td>97**</td> </tr> </tbody> </table> <ul style="list-style-type: none"> * Out of a total of 85, 23 is with TEQIP assistance. * Out of a total of 97, 29 is with TEQIP assistance. 	<u>Enrolment</u>	2011-12	2012-13	2013-14	2014-15	2015-16	M.Tech	107	143	195	206	197	Ph.D	65	76	85	85*	97**
<u>Enrolment</u>	2011-12	2012-13	2013-14	2014-15	2015-16														
M.Tech	107	143	195	206	197														
Ph.D	65	76	85	85*	97**														
<ul style="list-style-type: none"> Establishment of proposed laboratories 	<ul style="list-style-type: none"> 2 additional CAD and Research Laboratories set up in Computer Engg. Dept Electrical Dept. set up a Renewable energy lab for project work by UG & PG students. It set up another two labs in power electronics and BLDC drive system to facilitate research. <ul style="list-style-type: none"> In addition, existing Laboratories in the departments of Chemical, Computer, Electrical, Electronic and Mechanical Engineering have been strengthened by adding equipment worth Rs. 3, 21, 67,925 with funds from TEQIP II for effective implementation of the PG programs. 																		
<ul style="list-style-type: none"> Cumulative number of assistantships granted 	<ul style="list-style-type: none"> Total no. of M.Tech. Fellowships granted thro' TEQIP (cumulative) till date is 87. Total no. of Ph.D. Fellowships granted thro' TEQIP (cumulative) till date is 29 <p><i>The teaching and research assistantships thus provided under the project have largely helped running the PG programs in the absence of no faculty positions sanctioned so far by the state.</i></p>																		
<p>C. Progress/achievement in starting new Postgraduate programs, including:</p> <ul style="list-style-type: none"> Securing AICTE approval 	<ul style="list-style-type: none"> No new PG programs were proposed. 																		
<ul style="list-style-type: none"> Establishment of laboratories 	<ul style="list-style-type: none"> No new PG programs were proposed. 																		

<ul style="list-style-type: none"> • Adequacy of student enrolments 	<ul style="list-style-type: none"> • No new PG programs were proposed. 										
<p>D. Effectiveness of collaborations made with other Institutions in India and abroad, including</p> <ul style="list-style-type: none"> • Increase in number of co-authored publications in refereed journals 	<ul style="list-style-type: none"> • Some of the faculty members have established linkages with institutes like IIT Bombay and Bhabha Atomic Research Centre. These institutions allowed some M.Tech and B.Tech students to use their lab facilities and faculty expertise for carrying out their projects. As a result, a few co-authored publications have come out. • A number of B.Tech students are engaged in doing research-based projects with financial support given through TEQIP II funds. • 6 projects (product based) completed in collaboration with ICT, Mumbai. In 2 of these projects , SP College, Mumbai also collaborated • 7 innovation networking projects with ICT. • The number of co-authored publications in refereed journals during the years 2011-16 are given as under: <table border="1" data-bbox="1108 885 1816 950"> <thead> <tr> <th>2011-12</th> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>15</td> <td>72</td> <td>59</td> <td>8</td> <td>11</td> </tr> </tbody> </table> 	2011-12	2012-13	2013-14	2014-15	2015-16	15	72	59	8	11
2011-12	2012-13	2013-14	2014-15	2015-16							
15	72	59	8	11							
<p>E. Increased collaboration with industry in research and development, including</p> <ul style="list-style-type: none"> • Increase in number of joint and industry sponsored research and development work undertaken 	<ul style="list-style-type: none"> • There are 5 projects jointly with the Industry which are in progress by the departments of Electronics and Mechanical Engineering. <table border="1" data-bbox="1108 1096 1795 1161"> <thead> <tr> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>8</td> <td>5 in progress</td> <td>10</td> </tr> </tbody> </table> • Professionals from industry are involved in BOS meetings, expert lectures and entrepreneurial training. • The university organized a NETWORK MEET on 19March, 2016. 50 industry executives participated to give a push to the idea of equal partnership for building excellence in engineering education so that it is highly relevant, responsive and able to produce quality engineers needed by the industry. 	2012-13	2013-14	2014-15	2015-16	7	8	5 in progress	10		
2012-13	2013-14	2014-15	2015-16								
7	8	5 in progress	10								

<ul style="list-style-type: none"> • Increase in financial contribution by industry for R & D 	<ul style="list-style-type: none"> • <i>The real life R&D projects undertaken by B.Tech & M.tech students mentioned under (A) above were carried out on the premises of the industry. All the expenses incurred on conducting these projects were borne by the industry. In addition stipends were paid to the students by the Industry which ranged from Rs. 8000/ to Rs. 25,000/= per month.</i> • <i>1 M.Tech student in Electrical engineering was offered internship by the industry</i> • <i>A number of students completed their industry-based projects in industries namely Thermax , CAT, Mahindra Composit , Excel Industries, L&T heavy Engineering , Reliance Infotech, Sudarshan Chemicals, Sandvik and a few more.</i> • <i>The departments of Civil and Chemical Engineering departments are very active in contributing financially through their consultancy work from industry. The Civil Engineering department has alone contributed Rs. 2.23 Crores for the consultancy work undertaken by it during the year 2014-15</i> 								
<ul style="list-style-type: none"> • Increase in industry personnel registered for Masters and Doctoral programs 	<table border="1"> <thead> <tr> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>---</td> <td>01</td> <td>01</td> <td>01</td> </tr> </tbody> </table>	2012-13	2013-14	2014-15	2015-16	---	01	01	01
2012-13	2013-14	2014-15	2015-16						
---	01	01	01						
<ul style="list-style-type: none"> • Increase in industry personnel trained by the institution in knowledge and/or skill areas 	<p>Over the years, the University has been conducting CEPs for industry personnel. For example L&T, Privi Organics, Sandoz, Rhodia are some of the companies for whom the training was conducted.</p>								
<ul style="list-style-type: none"> • Increase in the number of consultancy assignments secured 	<ul style="list-style-type: none"> • Number of consultancy assignments taken up by the Civil Engineering and Chemical Engineering departments have gone up steadily 								
<ul style="list-style-type: none"> • Increase in the number of students' and faculty visits to and/or training in industry (all departments of the university combined) 	<ul style="list-style-type: none"> • This is a regular feature. As a part of the Curriculum, students compulsorily undertake industrial training for 90 days. • In addition, the faculty and students make several visits to industries and industrial exhibitions/expositions so as to expose them to latest technologies and industrial practices. • During the year 2015-16, 20 industrial visits were organized. • During the year 2015-16, 27 consultancy assignments were 								

	<p>completed and 5 in progress.</p> <ul style="list-style-type: none"> • During the year 2015-16, 2 MOUs were signed , one with GEXCON, a Norwegian company for training master trainers and the other with BOSCH, Bangalore for training in industrial automation. • The number of students' participation in these visits and/or training over the years is given as under: <table data-bbox="1123 446 1743 511"> <tr> <td>2012-13</td> <td>2013-14</td> <td>2014-15</td> <td>2015-16 till date</td> </tr> <tr> <td>400</td> <td>600</td> <td>1000</td> <td>1200</td> </tr> </table> 	2012-13	2013-14	2014-15	2015-16 till date	400	600	1000	1200
2012-13	2013-14	2014-15	2015-16 till date						
400	600	1000	1200						
<ul style="list-style-type: none"> • Improvements in graduate placement rate 	<ul style="list-style-type: none"> • An improvement has been noted in the placement number of university graduates over the years. This is evident from the data given below: <table data-bbox="1123 738 1774 803"> <tr> <td>2012-13</td> <td>2013-14</td> <td>2014-15</td> <td>2015-16 till date</td> </tr> <tr> <td>67</td> <td>77</td> <td>120</td> <td>100</td> </tr> </table> 	2012-13	2013-14	2014-15	2015-16 till date	67	77	120	100
2012-13	2013-14	2014-15	2015-16 till date						
67	77	120	100						
<ul style="list-style-type: none"> • Increase in the involvement of industry experts in curricula & syllabi improvements, laboratory improvements, evaluation of students and delivering expert lectures 	<ul style="list-style-type: none"> • Industry professionals/experts form an essential constituent of the Boards of Studies in the institute and are actively involved in all curriculum processes- design, implementation, evaluation and modification of curricula. There is a significant increase in the participation of industry experts during the current year. • <table data-bbox="1123 1128 1753 1193"> <tr> <td>2012-13</td> <td>2013-14</td> <td>2014-15</td> <td>2015-16 till date</td> </tr> <tr> <td>13</td> <td>18</td> <td>18</td> <td>34</td> </tr> </table> 	2012-13	2013-14	2014-15	2015-16 till date	13	18	18	34
2012-13	2013-14	2014-15	2015-16 till date						
13	18	18	34						
<ul style="list-style-type: none"> • Increase in the number of sandwich programs between industries and the institution 	<ul style="list-style-type: none"> • No sandwich program is offered by the Institute 								

<p>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</p>	<ul style="list-style-type: none"> • <i>There is a substantial increase in the revenue from externally funded projects and consultancy from 21.84 lacs in 2013-14 to Rs. 269 lacs in 2014-15. This includes 200 lacs as the grant-in-aid from the AICTE reported in the PA report of 2015</i> • <i>Dept. of E&TC generated total revenue of Rs.10.7 lacs through organizing National conferences and offering CEPs during the years 2013-16. In addition it generated a revenue of Rs. 48,000/= through consultancies and stipends paid to students for undertaking industry sponsored R&D projects.</i> 								
<p>G. Increase in the number of publications in refereed journals and citations</p>	<table border="1"> <thead> <tr> <th>2012-13</th> <th>2013-14</th> <th>2014-15</th> <th>2015-16</th> </tr> </thead> <tbody> <tr> <td>57</td> <td>44</td> <td>21</td> <td>31</td> </tr> </tbody> </table>	2012-13	2013-14	2014-15	2015-16	57	44	21	31
2012-13	2013-14	2014-15	2015-16						
57	44	21	31						
<p>H. Increase in the number of patents obtained/filed</p>	<ul style="list-style-type: none"> • <i>5 patents have been filed by the PCM lab of Mechanical Engineering department in collaboration with ICT which are in the pipe line</i> 								
<p style="text-align: right;">Evaluation Grade for 1.2</p> <p style="text-align: center;">Using the 3-point grading scale and grade descriptors in Annex 4(1)</p>		<p>2</p>							

PERFORMANCE AUDIT FORM (1.2.1)

Name of Performance Auditor: Prof. M.M.Malhotra
October,2015

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

1.2.1 ESTABLISHING CENTRES OF EXCELLENCE

MONITORING AND PROJECT OUTPUT/ OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (Note: Grades must be supported by sound evidence of achievement of the institutional development proposal goals and targets)	
A. Establishing Centres of Excellence Improvement in Research and Development facilities through:		
<ul style="list-style-type: none"> • Establishment of new laboratories for applicable thematic research 		
<ul style="list-style-type: none"> • Establishment of a knowledge resource Centre (library) in the thematic area 	A proposal was submitted in the year 2013.However it was not accepted because of lesser number of Ph.Ds produced by the University	
<ul style="list-style-type: none"> • Procurement of furniture 		
<ul style="list-style-type: none"> • Civil works 		
Evaluation Grade for 1.2.1 Using the 3-point grading scale and grade descriptors in Annex 4(1)		N.A.

PERFORMANCE AUDIT FORM (1.3)

Name of Performance Auditor: Prof. M.M.Malhotra

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

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)																									
<p>A. Effort made by Institutions providing Pedagogy Training to faculty, including:</p> <ul style="list-style-type: none"> Percentage of faculty who have benefitted from the core and advanced modules of pedagogy training 	<ul style="list-style-type: none"> All junior faculty members have undergone pedagogical training under Mission 10X of Wipro. All senior faculty members got exposed to a module in pedagogy in a continuing education program conducted by IIT Bombay Majority of the faculty members have attended training programs in Research Methodology. <p>The total number of faculty who benefitted from training in pedagogy year wise are given as under:</p> <table style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">2012-2013.</th> <th style="text-align: center;">2013-2014.</th> <th style="text-align: center;">2014-15</th> <th style="text-align: center;">2015-16</th> </tr> </thead> <tbody> <tr> <td>Core.</td> <td style="text-align: center;">26</td> <td style="text-align: center;">21</td> <td style="text-align: center;">55</td> <td style="text-align: center;">85**</td> </tr> <tr> <td>Advanced</td> <td style="text-align: center;">24</td> <td style="text-align: center;">28</td> <td style="text-align: center;">14</td> <td style="text-align: center;">14*</td> </tr> <tr> <td></td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> <td style="text-align: center;">-----</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">50</td> <td style="text-align: center;">49</td> <td style="text-align: center;">69</td> <td style="text-align: center;">99</td> </tr> </tbody> </table> <p>*7 senior faculty members attended WOSA summit at Delhi and 14 attended OBE workshops ** 30 Contractual faculty members attended workshop on Pedagogy</p>		2012-2013.	2013-2014.	2014-15	2015-16	Core.	26	21	55	85**	Advanced	24	28	14	14*		-----	-----	-----	-----	Total	50	49	69	99
	2012-2013.	2013-2014.	2014-15	2015-16																						
Core.	26	21	55	85**																						
Advanced	24	28	14	14*																						
	-----	-----	-----	-----																						
Total	50	49	69	99																						
<ul style="list-style-type: none"> Improvements in (and/or updating, and more relevant) curricula and/or syllabi 	<ul style="list-style-type: none"> Some improvements in curriculum design through revisions are there but the changes affected are piecemeal. However, much needs to be done to improve the process of designing curriculum systematically to enhance the relevance and 																									

	<p>worth of curriculum.</p> <ul style="list-style-type: none"> • Curriculum design must take into consideration the needs of industry, growing body of knowledge, students' entry behavior, changes in technology and industrial practices, research findings in the field of pedagogy on learning and instruction, and application of systems thinking. • Efforts are being made to improve the relevance and responsiveness of curriculum design with the involvement of professionals from industry, but the approach adopted in curriculum design is highly opinion based. There is a need to adopt an approach which is research based by making use of any of the models listed as under: <ul style="list-style-type: none"> -Systematic approach to Curriculum design incorporating DACUM approach and systems thinking - Competency based approach - CDIO approach <p>All of these approaches are outcome based and can be employed to improve the relevance, responsiveness and worth of curriculum.</p>
<ul style="list-style-type: none"> • Improvements in (and/or updating, more relevant) course assessment methods 	<ul style="list-style-type: none"> • Presently no change is witnessed in the tools and techniques adopted for course assessment. • <i>Much needs to be done to make student evaluation as an integral part of the teaching learning process and make it valid and reliable.</i>
<ul style="list-style-type: none"> • Improvements in teaching and learning methods, including provision for students needing extra/remedial support 	<ul style="list-style-type: none"> • Some improvement in the T/L process has been noted which is evidenced by: Use of PP presentations; Research on Live problems by some students in some departments; Contribution of research articles in journals by students; independent individual /group assignments followed by presentation and discussion in a few departments and remedial coaching classes for weak students on regular basis. <p><i>There is however a need to use a variety of T/L strategies to match the different types of learning outcomes/competencies, for which the teachers need to undergo training in both the selection and application of these strategies.</i></p>

<ul style="list-style-type: none"> Percentage of faculty with UG qualification registered/deputed for improving their qualification (see Section-3, 4(b) on page 20 of PIP) 	<ul style="list-style-type: none"> The opportunity provided to the teachers with UG qualification for upgrading their qualifications has resulted in almost all of such teachers to acquire M.Tech degree except one who is currently registered for the PG program.
<ul style="list-style-type: none"> 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) 	<p>The university deposes faculty members for subject domain training programs, seminars, conferences. Almost all the regular faculty members have taken advantage of this facility. <i>This facility has now been extended to teachers who are appointed on ad-hoc / contractual basis also. During the year 2015-16,107 faculty members from various departments of the university attended the subject-domain courses.</i></p> <ul style="list-style-type: none"> <i>In addition, short term training programs, mostly in-house were also organized for supporting staff (149internal) and 74(external) on the themes of 'Life skills for happy life', 'Migration to open source' and 'Safety measures in laboratories'.</i> <i>Short term courses were also organized on Soft skills development for students to enhance their employability. So far 620 students have benefitted from training in Soft Skills under the project.</i> The practice of faculty members sharing their gains from attending training programs/seminars/conferences/workshops with their peers has improved. However, not all of these teachers have put up their report on the institute website.
<ul style="list-style-type: none"> Progress in securing accreditation of eligible UG & PG programs (institutions to achieve target of 60% of eligible UG & PG programs accredited - applied for within 2 years of joining the Project) 	<ul style="list-style-type: none"> The university has submitted applications for accreditation of all the eligible UG (5) and PG (4) programs to NBA. There is no change in the status so far.
<p>B. Effectiveness of Pedagogy Training, including</p> <ul style="list-style-type: none"> Percentage of students satisfied with the quality of teachers and changes/ developments specifically undertaken as a result of student evaluations 	<ul style="list-style-type: none"> Increase in the percentage of M.Tech students satisfied with the quality of their teachers was found as moderate. Feedback provided to the teachers as a result of Student evaluations has resulted in the improvement of teaching effectiveness in class rooms, laboratories and research activities
Evaluation Grade for 1.3	
Using The 3-Point Grading Scale and Grade Descriptors in Annex 4(1)	
2	

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

Name of Performance Auditor: Prof. M.M.Malhotra

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

2.1: CAPACITY BUILDING TO STRENGTHEN MANAGEMENT

MONITORING AND PROJECT OUTPUT/ OUTCOME PARAMETERS	SUPPORTING EVIDENCE (Note: Grades must be supported by sound evidence of achievement of the institutional development proposal goals and targets)
<p>A. Implementation of academic and nonacademic reforms, including:</p> <ul style="list-style-type: none"> • Improved understanding of the need and ways for increased autonomy, and new instruments for accountability 	<ul style="list-style-type: none"> • Training of 2 Senior faculty members in educational planning and management <p>Academic Reforms: <i>There is no addition to the academic reforms as reported in the last performance audit of year 2015 and detailed as under:</i></p> <ul style="list-style-type: none"> • The 'Choice based Credit System' and 'Relative Grading system implemented successfully. • On-line system developed to monitor academic activities: Teachers upload student attendance on-line, monitored by the HODs and VC. • Teachers upload the marks obtained by the students in the mid-semester and end-semester examination on-line. • The Board of Studies enjoy full autonomy to frame and revise Curricula <p>Non-academic reforms: <i>There is no addition to the Non-academic reforms as reported in the last performance audit of year 2015 except the increase in the amount of imprest from Rs. 5000 to 6000. The Non-academic reforms are:</i></p> <ul style="list-style-type: none"> • Biometric attendance system implemented to ensure presence of faculty and staff in the campus during the working hours. There is scheme to extend this to students in all rooms also. • Financial accounting system improved by using Tally software. • Purchase procedures well defined with the publication of manual of "Purchase Procedures". • Imprest amount of Rs. 6000/- per month allocated to each Department to purchase items required in emergency.

<ul style="list-style-type: none"> • Modernization and decentralization of administration and financial management 	<p><i>No change noticed from that reported in the performance audit of the year 2015 mentioned as under:</i></p> <ul style="list-style-type: none"> • Administration of the University decentralized as per the provisions of DBATU Act of 1989. • Financial management is the responsibility of the Finance Officer, whose powers and duties are mentioned in the Act. • The Finance Officer reports to the VC and the Finance Committee. Decisions taken in the Finance Committee finally approved by the Governing Body (The Executive Council of the University). • Senior faculty and officers of the University attend training programs from time to time for capacity enhancement
<ul style="list-style-type: none"> • Extent of delegation of administrative and financial decision making powers to senior functionaries 	<p><i>No change noticed from that reported in the performance audit of the year 2015 mentioned as under:</i></p> <ul style="list-style-type: none"> • VC enjoys unlimited powers to grant administrative approval for purchases. • HODs delegated financial power of upto Rs. 20,000/- • VC has financial powers upto Rs. 1 lac. • Purchase Committee enjoys unlimited financial powers. • For purchases made under TEQIP, the University follows TEQIP norms, rules and regulations. All the procurement is done through PMSS. • University follows procedures as per Account Code of Government of Maharashtra for purchase from funds other than TEQIP funds..
<ul style="list-style-type: none"> • Responsiveness to stakeholders (students, faculty, staff, industry, local communities) 	<p><i>No change noticed from that reported in the performance audit of the year 2015 mentioned as under:</i></p> <ul style="list-style-type: none"> • The VC, HOD's and teachers entertain student problems which could be academic or non-academic as and when they arise. • University is very responsive to faculty's requirements of job-embedded, professional and career development. • <i>University lacks in framing a sound policy to take care of the non-academic needs of the faculty and staff in respect of schooling of children, healthcare, recreation facilities for the staff and their families. This is one of the major factors in the way of attraction and retention of quality faculty and staff.</i> • <i>University has no policy for the up gradation of qualification of technical supporting staff, especially those who hold a diploma in engineering and are eligible for a lateral entry to</i>

	<p><i>the UG program at the University</i></p> <p><u><i>However, a serious effort is being made to remedy the situation and provide an opportunity to the deserving technical support staff for their professional and career development.</i></u></p>
<ul style="list-style-type: none"> Institutional quality assurance and enhancement strategies, including student feedback mechanisms 	<p><i>No change noticed from that reported in the performance audit of the year 2015 mentioned as under:</i></p> <ul style="list-style-type: none"> The university has established an Academic Council and put in place a special committee called “Institutional Quality Assurance Cell (IQAC).” It is the prime responsibility of this cell to look after quality issues and strategies. This cell takes periodic review of quality issues and identifies shortcomings and problems related to quality. It also suggests remedial measures. In addition, it ensures that proactive steps are taken to achieve quality. IQAC has brought in many reforms in the last four years. These include online attendance system, online admissions, stake-holders’ feedback and choice-based credit system, to name a few. As mentioned above, stake-holders’ feedback is being taken. This includes students’ feedback on teachers. The feedback from students is shared with the faculty.
<ul style="list-style-type: none"> Maintenance of academic and non-academic infrastructure and facilities, including sufficiency and quality of academic buildings 	<ul style="list-style-type: none"> Taking note of the comments given in the last performance audit report, the University has made an effort to utilize the unused space available in the library by furnishing it and shifted two departments, viz. Computer Engineering Department and IT Department. There is also a plan to relocate Mechanical and civil labs on similar lines. The University has not still addressed the following comments made in the last Performance audit report which is reproduced below: <i>“There is a lot of scope for improving the maintenance of academic and non-academic facilities. A very sound management structure needs to be established in the university for both preventive and regular maintenance of all the assets and infrastructure facilities”.</i> <p>The university needs to address the issue raised as above.</p>
<ul style="list-style-type: none"> Development, maintain and utilization of institutional resources 	<ul style="list-style-type: none"> The University has taken steps towards utilization of most of the unused space. However, there is a need to optimally utilize the remaining unused available built-in instructional space. <i>For example, study Carrels can be provided for independent study in the verandahs at all the floors of the building. Also some large unused spaces could be used</i>

	<p><i>to decongest some of the spaces presently used for seating of faculty and supporting staff.</i></p> <ul style="list-style-type: none"> • It is appreciated that plans for providing an additional space of 20,000 sq. ft. to accommodate 3 sheds that would house labs with heavy-duty machines, such as engines, turbines, pumps, machine tools, etc. have been prepared and will soon be constructed. This will make free the instructional space in the main building which can be used for class rooms, studios and R&D project work. 	
<ul style="list-style-type: none"> • Generation, retention and utilization of Income Revenue Generation. 	<ul style="list-style-type: none"> • The revenue generated is deposited in the consultancy account of the University. The distribution of the revenue generated is done as per the rules of Government of Maharashtra. • The share of the University is retained by the University in the separate account and is utilized with the approval of the Vice Chancellor as per the need. 	
<p style="text-align: right;">Evaluation Grade for 2.1</p> <p style="text-align: center;">Using the 3-point grading scale and grade descriptors in Annex 4(1)</p>		<p>2</p>

PERFORMANCE AUDIT FORM (2.1.1)

2.1.1: IMPLEMENTATION OF GOOD GOVERNANCE IMPLEMENTATION OF GOOD GOVERNANCE

(See Also Annex 4 of the Good Governance Guide for Governing Bodies for examples of supporting evidence)

Name of Performance Auditor: Prof. M.M.Malhotra

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

MONITORING AND PROJECT OUTPUT/ OUTCOME PARAMENTERS	SUPPORTING EVIDENCE (Note: Grades must be supported by sound evidence)	GRADE
Section A: Primary accountabilities		
<ul style="list-style-type: none"> 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? <i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)</i> 	<p><i>No change noticed from that reported in the performance audit of the year 2015 mentioned as under:</i> Yes. The Governing Body has approved the Institutional Development Proposal (IDP) in its meeting held on 9th October, 2010. The IDP contains strategic vision, mission and long-term objectives of the university.</p>	1
<ul style="list-style-type: none"> Has the Governing Body ensured the establishment and monitoring of proper, effective and efficient systems of control and accountability to ensure financial sustainability? <i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)</i> 	<p><i>No change noticed from that reported in the performance audit of the year 2015 mentioned as under:</i></p> <ul style="list-style-type: none"> The annual budgets are prepared by the Finance Section in consultation with the Vice-Chancellor and Finance Committee and, then finally approved by the Governing Body in the beginning of the financial year. The Governing Body Sub-committees meet regularly and report to the main Governing Body –including financial and procurement risks assessed and discussed in these meetings. This University has statutory committees such as Finance Committee, Building and Works Committee and Purchase Committee. These committees report to the Governing Body and minutes of their meetings are placed in the regular meeting of the Governing Body for its consideration and necessary approvals. 	1

	<ul style="list-style-type: none"> The Governing Body has approved the mechanism in the form of Institutional Project Management Unit (IPMU) for execution, monitoring and control of TEQIP II project in its meeting held on 9th October, 2010. 	
<ul style="list-style-type: none"> Is the Governing Body monitoring institutional performance and quality assurance arrangements? <i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up at the systems level.)</i> 	<p><i>No change except THE ONE SHOWN IN BOLD from that reported in the performance audit of the year 2015 mentioned as under:</i></p> <ul style="list-style-type: none"> Such review is taken on regular basis in the meetings of the Academic Council and the Governing Body which are recorded in the respective minutes. Action Taken Reports are placed in the immediate next meeting which takes care of monitoring aspects. The register of the minutes of these meetings signed by the Chairman is available in the Registrar’s office for reference to the stake holders. The University is also initiating the monitoring activity through external Academic Audit. The Governing Body is forming a committee of external experts which will conduct Academic Audit of all the Departments at the end of every semester. With reference to the BOG discussion on benchmarking, the University has revised its syllabi / curriculum in July 2010, adopted Choice Based Credit System and Relative Grading System and done this exercise on the lines of the systems followed in IITs. The University is trying to improve its systems taking IIT systems as benchmark. Acute shortage of faculty comes in the way of achieving the planned goals. As per the guidelines of University Grants Commission (UGC), the University has put in place ‘Internal Quality Assurance Cell (IQAC), which meets at regular intervals and reports to the Academic Council and the Governing Body. The Annual Quality Assurance Report (AQAR) is prepared yearly. Agenda of each Governing Body meeting contains an item related to TEQIP in which the progress of TEQIP activities is reviewed and approval is accorded to important proposals. Following are the dates of meetings: 9/10/2010, 6/10/2012, 6/4/2013, 2/6/2013, 19/10/2013 and 1/2/2014, 20/2/2015., 26/3/2015, 30/04/2015, 24/07/2015, 16/10/2015, 26/02/2016 	1

<ul style="list-style-type: none"> Has the Governing Body put in place suitable arrangements for monitoring the head of the institution's performance? <i>(Give dates of governing body meetings where the minutes record these matters having been discussed, approved and/or followed up.)</i> 	<p>No change except THE ONE SHOWN IN BOLD from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> DBATU, being a state University, the performance of the Vice-Chancellor (Head of the Institution) is monitored by the office of the Hon'ble Chancellor and Governor of Maharashtra. Hon'ble Chancellor asks for reports from the Vice-Chancellor and also takes periodic review. Not discussed in the BOG. 	<p>1</p>
<p>Section B: Openness & transparency in the operation of governing bodies</p>		
<ul style="list-style-type: none"> Does the Governing Body publish an annual report on institutional performance? <i>(Give the publication date and type of publication of the most recent annual report, if there is one)</i> 	<p>No change except THE ONE SHOWN IN BOLD from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> The Annual Reports of the University are prepared every year and submitted to the Government of Maharashtra. These reports are placed before the Legislative Council and Legislative Assembly of Government of Maharashtra. The responsibilities and accountabilities of the Governing Body are well defined in the DBATU Act of 1989 The Annual report is published every year in the month of March. The last Annual report has been published in March 2015. Annual report for the year 2016 is under preparation. 	<p>1</p>
<ul style="list-style-type: none"> Does the Governing Body maintain, and publicly disclose, a register of interests of members of its governing body? <i>(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)</i> 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> The arrangement for maintenance of formal register is not in place at present. As far as the conflict of interest as part of recruitment process is concerned, the question does not arise as the constitution of the selection committees for the recruitment are well defined in DBATU Act of 1989. 	<p>3</p>
<ul style="list-style-type: none"> 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 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> The meetings of the Governing Body are conducted regularly and the minutes are recorded by the Registrar. The minutes are sent to all the members and the comments are invited. 	<p>1</p>

<p>management? (Say whether the governing minutes are published on the institution website, and note any other steps that the governing body takes to communicate with its stakeholders on its work as a Board)</p>	<ul style="list-style-type: none"> • The minutes are placed for confirmation in the next meeting. Action Taken Reports are also placed in the immediate next meeting which takes care of monitoring and implementation aspects. • The register of the minutes of these meetings signed by the Chairman is available in the Registrar's office for reference to the stake holders. The stakeholders are free to refer the minutes in the Registrar's office. 	
<p>Section C: Key attributes of governing bodies</p>		
<ul style="list-style-type: none"> • Are the size, skills, competences and experiences of the Governing Body, such that it is able to carry out its primary accountabilities effectively and efficiently, and ensure the confidence of its stakeholders and constituents? (Specify the range of skills and experience that the members of the governing body, and especially the external members, have) 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> • BOG is constituted as per the provisions of DBATU Act of 1989. • The internal members are nominated by the Chairman of the Governing Body (Vice-Chancellor) strictly as per the provisions of the Act. • Independent members are external nominees, and independent of the institution. • One member is nominated by the Hon'ble Chancellor and the Governor of Maharashtra. Dr. O. G. Kakde, Director of VJTI Mumbai is the present nominee. • Four eminent persons from academia and industry are nominated by the Government of Maharashtra as per the provisions of the DBATU Act of 1989. The present nominees are: Dr. P. D. Porey, Director SVNIT Surat, Dr. U. N. Gaitonde, Professor IIT Bombay, Dr. Mrs. A. S. Kunte, Professor TSCE Mumbai and Dr. R. N. Mohanty, President Pidilite Industries Ltd. Mumbai 	<p>1</p>
<ul style="list-style-type: none"> • Are the recruitment processes and procedures for governing body members rigorous and transparent? (Specify how governing body members are selected, and whether that process is transparent) 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> • The Governing Body is formed strictly as per the provisions of DBATU Act of 1989. • The constitution of the Governing Body, its powers and duties are well defined in the Act. 	<p>1</p>

<ul style="list-style-type: none"> 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? <i>(Give examples, where possible, of the role of external members in improving the performance of the institution)</i> 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> All independent members of the Governing Body are actively involved and contribute to the development of the University. The University is totally free from direct political interference 	<p>1</p>
<ul style="list-style-type: none"> Are the role and responsibilities of the Chair of the institution and the Member Secretary serving the governing body clearly stated? <i>(If yes, specify the document where these roles are defined)</i> 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <p>The role and responsibilities of the Chair of the Governing Body, the Head of the Institution and the Member Secretary serving the governing body are clearly stated in the Act.</p>	<p>1</p>
<ul style="list-style-type: none"> Does the Governing Body meet regularly? Is there clear evidence that members of the governing body attend regularly and participate actively? <i>(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)</i> 	<ul style="list-style-type: none"> Governing Body members allocated to serve on sub-committees attend most meetings and are actively involved in the work of these committees - reporting back regularly to the main Governing Body. The meetings of the Governing Body are held regularly in a year. The members mostly attend these meetings (on an average 4 meetings in a year). As per the provisions of the Act, the members of the Governing Body have been nominated on different sub-committees such as Building and Works Committee, Finance Committee, Purchase Committee and Library Committee. In addition to this, the University takes services of Governing Body members on other committees such as scrutiny committee of applications received for the recruitment, disciplinary committee, committee constituted by the Vice-Chancellor for implementing scheme of promotions of the employees etc. Number of BOG meetings conducted in the last year: 04 Average No. of members present in the meetings: 09 Average No. of members absent in the meetings: 04 	<p>1</p>

Section D: Effectiveness and performance review of governing bodies		
<ul style="list-style-type: none"> 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? <i>(If yes, give the date(s) of governing body meetings where the minutes show that such a review has been discussed)</i> 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> Record of the activities undertaken by the individual member of the Governing Body is kept. The BOG reviews the performance of the University in the Board meetings in line with the yearly plan of action drawn by the University. In the 6 meetings held on 26/2/15, 26/3/15, 30/4/15, 24/7/15, 16/10/15, 26/2/16 	2
<ul style="list-style-type: none"> Does the Governing Body ensure that new members are properly inducted, and existing members receive opportunities for further development as deemed necessary? <i>(If yes, give examples of how these two tasks are carried out)</i> 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> Yes, the new members are oriented in respect of their roles and functions in the effective and efficient functioning of the Institute as well its growth and development. The existing members , however receive no opportunities for further development deemed necessary 	2
Section E: Regulatory compliance		
<ul style="list-style-type: none"> Does the Governing ensure regulatory compliance* and, subject to this, take all final decisions on fundamental matters of the institution. <i>(If yes, give the date(s) of governing body meetings where the minutes show that regulatory compliance has been discussed)</i> 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <ul style="list-style-type: none"> The University ensures regulatory compliance with the statutes, ordinances and provisions regulating the institution, including compliance with the regulations by statutory bodies, such as the AICTE and UGC, as well as regulations laid out by the State government. So far, AICTE has not passed any negative strictures on this University. There are no faculty positions sanctioned for running PG programs. The in-position faculty sanctioned for UG programs manage the implementation of UG and PG programs. It is amazing that with <u>no</u> faculty positions sanctioned for running 6 PG programs, the faculty 	2

	<p><i>in position for UG programs is conducting both the UG and PG programs with the assistance of teaching/research assistants.</i></p> <ul style="list-style-type: none"> <i>This discrepancy in the number of teaching positions is always mentioned in the letter of extension of approval issued every year. The University is constantly following up this matter of sanction of additional teaching positions with the Government of Maharashtra, but with no result.</i> 	
<ul style="list-style-type: none"> Does the regulatory compliance include demonstrating compliance with the 'not-for-profit' purpose of education institutions? (If yes, give evidence that the governing body has been directly involved) 	Not Applicable	NA
<ul style="list-style-type: none"> Have there been accreditation and/or external quality assurance by a national or professional body? If so, give name, current status of accreditation etc. (Provide lists of all courses which have already been accredited, all courses where an application has been made, and all courses where no such application has yet been made) 	<p>No change from that reported in the performance audit of the year 2015 mentioned as under:</p> <p>Yes. The academic programs have been accredited twice so far. The accreditation proposals for all eligible UG/PG programs have been submitted for the third time. The Accreditation Team is expected to visit in January 2015. Accreditation application has been submitted for following programs:</p> <p>UG programs: Chemical Engg, Petrochemical Engg, Mechanical Engg, Electrical Engg, Electronics & Telecommunication Engg, Computer Engg, IT</p> <p>PG Programs: Chemical Engg, Manufacturing Engg, Thermal & Fluids Engg, Electrical Engg, Electronics & Telecommunication Engg, Computer Engg</p>	1
<p>Overall Evaluation Grade for Governance 2.1.1 A-E Using the 3-point grading scale and grade descriptors in Annex 4(1)</p>		1

PERFORMANCE AUDIT FORM (2.2)

Name of Performance Auditor: Prof. M.M.Malhotra

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

TABLE 2.2: PROJECT MANAGEMENT, MONITORING AND EVALUATION

MONITORING AND PROJECT OUTPUT/ OUTCOME PARAMETERS	SUPPORTING EVIDENCE (Note: Grades must be supported by sound evidence of achievement of the institutional development proposal goals and targets)	GRADE
<p>A. Effectiveness of mentoring, reviews, surveys and audits conducted, including:</p> <ul style="list-style-type: none"> Increase in the achievement of the institutions goals and targets set out in the Institutional Development Proposal 	<p>No change from that reported in performance audit of the Year 2015 mentioned as under:</p> <ul style="list-style-type: none"> The performance audit and mentoring are proving to be quite useful in keeping the project on track. The university has addressed some of the shortcomings and weaknesses pointed out by the performance auditor and mentor. As a result, the university has made satisfactory progress as envisaged in the IDP. 	1
<p>B. Effective project management and monitoring, including:</p> <ul style="list-style-type: none"> Precise and reliable information/data through web based MIS available to stakeholders at all time 	<p>No change from that reported in performance audit of the Year 2015 mentioned as under:</p> <ul style="list-style-type: none"> The university updates project related data in the MIS almost on day-to-day basis. A full-time person is exclusively appointed under the project for this job. Some discrepancies have been noticed w.r.t to the data collected on the ground and that reported by the Data Auditor from MIS 	2
<p>C. Effectiveness of faculty evaluation by students, including:</p> <ul style="list-style-type: none"> Percentage/increase in percentage of faculty evaluated by students in one or more subjects Are results of evaluation properly used for teacher improvement? <p><i>If yes, is the procedure adopted for teacher improvement including counseling appropriate and effective?</i></p> <hr/>	<p>No change from that reported in performance audit of the Year 2015 mentioned as under:</p> <ul style="list-style-type: none"> The students' feedback on teachers is taken regularly in each semester for each teacher. Each and every teacher is covered under this. Thus, the percentage is 100%. The results of evaluation are shared separately with each individual teacher in a confidential manner by the head of the department concerned. The teacher is told about his/her weaknesses and strengths as reported by students. There is a change from what was practiced earlier and has an effect on the morale of the teacher. 	2
Overall Evaluation Grade for 2.2 Using the 3-point grading scale and grade descriptors in Annex 4(1)		2

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: Prof. M.M.Malhotra

Dates of Performance Audit: 10-12 May, 2016

Name of Institution with Location: Dr. Babasaheb Ambedkar Technological University, Lonere

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

1. The enrolments in M.Tech and Ph.D programs have gone up significantly. This is primarily because of the increase in the number of fellowships provided under TEQIP II, which is going to be over by the end of year 2016. ***There is a need to sustain this.***
 2. There is a marginal increase in the number of co-authored publications from 8 in the year 2014-15 to 11 in the year 2015-16. However, the Departments of Mechanical and Chemical Engineering have to be congratulated for filing applications for obtaining patents on 5 of their product development projects jointly with ICT and SP College of Engineering. Taking a cue from this, ***there is a need to improve upon the linkages and/or signing MOUs with other Institutes/research organizations in India and abroad for collaborative R&D projects resulting in the increase in the number of co-authored publications and obtaining patents..***
 3. A definite improvement in the T/L process has been noted which is evidenced by: Use of PP presentations; Research on Live problems by some students in some departments; Contribution of research articles in journals by students; and remedial coaching classes for weak students on regular basis. There is ***however a need to use a variety of teaching methods to match the different types of learning outcomes/competencies, for which the teachers need to undergo training in both the selection and application of these methods.***
 4. There is a significant increase in the collaboration of the University with the Industry. This is evident from: a) an increase in the number of R&D projects (5) jointly with the Industry; b) Significant Increase in the financial contribution by industry for R & D by way of substantial no. and amount of stipends offered to M.Tech. Students for undertaking sponsored industry-based R&D projects and also by consultancy undertaken by departments.
 5. There is a decline in the placement number from 120 in the year 2014-15 to 100 in the year 2015-16.
 6. Need to improve quality and effectiveness of ***training in 'Research Methodology provided to both M.Tech and Ph.D students.***
 7. There is a need to ***improve the involvement of Industry in the T/L process by way of expert lectures from industry, undertaking research on live problems by the PG students and collaborative R&D projects with industry by the faculty of the University.***
 8. There is a need to ***improve the network connectivity and download speed of internet especially for students and faculty engaged in research.***
 9. The University has taken steps towards utilization of most of the unused space available in the main building. However, there is a need to optimally utilize the remaining unused available built in instructional space. For example, ***study carrels can be provided for independent study in the verandahs at all the floors of the building. Also some unused built up spaces should be identified and utilized suitably to eliminate congested instructional/faculty & staff seating spaces***
-

10. Need to strengthen the Library with additional qualified manpower to support the researchers -students, faculty, educational administrators and others in their research work through supply of relevant information from all kinds of information resources.

Key improvements noticed on shortcomings reported during earlier Performance Audits

1. Unused space available in the Library has been optimally utilized and modernized to relocate the departments of Computer Engineering, and Information Technology to meet their total requirements in respect of laboratories, instructional spaces and seating of the faculty.
 2. Planning for locating laboratories that would be housing heavy duty equipment is in progress
 3. Some improvement in the curriculum design and T/L processes of PG Courses is seen. However, it is piecemeal. Much needs to be done to improve the process of designing curriculum of programs systematically so as to enhance their relevance and worth by adopting any of the following approaches namely Systems approach, DACUM approach to curriculum design, Competency- based , CDIO approach (All of these approaches are outcome based.)
 4. University is on the move to frame a policy for the upgradation of qualification of technical supporting staff , especially those who hold a diploma in Engineering and are eligible for lateral entry to UG program of the University.
 5. A very sound effort being made by the university to make industry an equal partner in the education and training of engineers and improve linkages for collaborative and product development research. It is evident from the recent NETWORKING meet organized by the University on 19March,2016 in which 50 executives from the industry interacted with the academia of the university to chalk out a strategy to realize this vision.
 6. An improvement on the selection of problems for R&D projects undertaken by students
-

Brief statements on continuing shortcomings, and reasons

1. There are no regular positions sanctioned for PG programs. The faculty appointed for UG programs are conducting the PG programs with the assistance of Research/Teaching assistants and faculty appointed on ad-hoc basis. This has severely affected the quality of PG programs and resulted in the low morale of majority of teachers and students, which is evident from the moderate satisfaction index of both students and teachers on a rating scale of 3. There is an urgent need to make rigorous efforts in obtaining Govt. sanctions for faculty & Staff required for running the PG programs.
2. No regular faculty positions are sanctioned for UG program in Civil Engineering. The Department of Civil Engineering is managed through self-financing and with faculty mostly appointed on ad-hoc basis. Quality of the program suffers as a result of this. There is an urgent need to make rigorous efforts in obtaining Govt. sanctions for faculty & Staff required for running the UG programs in the department of Civil Engineering.

3. Need to frame a sound policy and create infrastructure and facilities to take care of the non-academic needs of the faculty and staff in respect of schooling of children, healthcare, recreation facilities for the staff and their families. This is a **MUST** for attracting and retaining quality faculty and staff in the University.
 4. No change is witnessed in the tools and techniques adopted for course assessment. ***Much needs to be done to make student evaluation as an integral part of the teaching learning process and make it valid and reliable.***
 5. ***The practice of faculty members sharing their gains from attending training program/seminars/workshops with their peers has improved only partially. This needs further improvement. Also the teachers after their training should put their gains from the program attended on the University website.***
 6. Need to conduct more in-house workshops on Systematic Curriculum Development, Instructional Design & Delivery, and Comprehensive Student Evaluation with outside expertise available on the respective areas.
 7. Need for establishing sound system for maintenance of all the buildings, furniture, equipment and other assets of the University.
 8. Need for setting a up an Integrated Academic Center comprising of 4 interactive Cells namely Curriculum development cell, Industry Institute Interaction Cell, Teacher Training Cell and a Research Cell staffed with professionals who are experts in their respective areas of work and can contribute to building excellence in engineering education on an on-going basis.
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Recommendations for Mentors

Provide guidance on the items listed under Feedback to the Institute

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Prof.(Dr.) M.M.Malhotra
Principal(Retd./Director), TTTI/NITTTR, Chandigarh
Performance Auditor
#647, Sector 8
Panchkula-134109
Mob: 9878408648
E-mail: malhotraman@yahoo.com