

PERFORMANCE AUDIT FORM (FINAL ROUND under TEQIP-II)

AUDIT VISIT NUMBER - 3

Institutional Performance Profile

Name of the Performance Auditor: Dr. J. SRIHARI RAO
Name of the Institution with location: Govt. Engineering College, Karad
Period of Performance Audit: 28-30 August, 2016

PIP REF	INSTITUTIONAL 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	1.0
1.2	Scaling-up postgraduate education and demand-driven research and development and innovation	1.0
1.2.1	Establishing centre's of excellence	N/A
1.3	Faculty development for effective teaching (pedagogical training)	1.0
Component 2: Improving system management		
2.1	Capacity building to strengthen management	1.0
2.2	Implementation of good governance	1.0
2.3	Project management, monitoring and evaluation	1.0

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.	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.	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.

J. Srihar Rao

ANNEX 4: PERFORMANCE AUDIT FORM (1.1)
COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

Name of the Performance Auditor: **Dr. J. SRIHARI RAO**
Name of the Institution with location: **Govt. Engineering College, Karad**
Period of Performance Audit: **28-30 August, 2016**

1.1: STRENGTHENING INSTITUTIONS TO IMPROVE LEARNING OUTCOMES AND EMPLOYABILITY OF GRADUATES

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)
A. Effectiveness of funds utilized for the teaching, training, learning and research equipment, library, computers, etc. by Institutions, including: <ul style="list-style-type: none"> Increase in the satisfaction index of student and faculty 	<p>Till 23rd August 2016, an amount of Rs. 10.97 crores has been utilized for various activities under TEQIP. Additional amount granted.</p> <p>Faculty and students expressed satisfaction at the changes TEQIP has brought in the work ambience in the college and the motivational levels among the stakeholders.</p> <p>Evidence: FMR & Interaction with faculty & students.</p>
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) 	<p>Yes Autonomy is Granted</p> <ul style="list-style-type: none"> Shivaji University, Kolhapur granted autonomy vide notification dated 26th August 2015 for six years from academic year 2015-2016 to 2020-2021 Academic council is formed. Three meetings are held so far on dt. 21-04-2014, dt. 13-02-2016 and dt. 21-06-2016. Admission of students based on inter-se merit in the entrance examination of MH-CET and following statutory reservation. Curriculum has been designed on the basis of credits and grade system. Academic autonomy for all UG and PG programs is being implemented gradually and now it is in second year. Four electives in UG including open elective and two in PG have been introduced having at least four alternatives to each.

	<ul style="list-style-type: none">▪ The examination system has been completely revised having 40% for continuous assessment and 60% weightage for end semester exam. Continuous assessment is done through two class tests and teachers assessment through assignments, tutorials, case studies, quiz etc.▪ Frequency of examination has been increased and declaration of results happen within a week of completion of examination.▪ Internal evaluation is done through a different rubrics suggested by NBA to decide the program outcome.▪ 6 value adding courses (GP-1/GP-2/ GP-3, industrial training & mini project , case study, self study, open elective, CSP/NSS/NCC) have been introduced in the curriculum.▪ Feedback mechanism is in place which is done online at the end of semester. Additionally Class representatives meetings are conducted monthly and the feedback is circulated to each faculty through concerned heads.▪ Complete restructuring of B. Tech in Electronics and Telecommunication is done.▪ LCD projectors are installed in the classrooms. NPTEL lectures and e-books are available for ready reference.▪ Industry experts, industry advisory board help in introducing employment oriented and value addition courses in curriculum.▪ The deputation of faculty for training as well as academic advancements has increased significantly.▪ TNA is done which is in line with institutional objectives▪ The number of industry lectures has increased significantly. <p>Evidence : Interaction ,Physical visits and documentation.</p>												
<p>C. Effort made by Institutions for upgrading qualifications of faculty members, including:</p> <ul style="list-style-type: none">• Percentage of faculty enrolled in M.Tech and PhD	<ul style="list-style-type: none">• All existing regular faculty are M.Tech and above qualified.• 10 Faculty members are pursuing Ph.D. (01 faculty deputed for Ph.D under QIP in current academic year.)• 1 faculty member has recently completed under QIP.• 2 faculty members have applied for PhD deputation for next year and applications have been submitted to government with recommendations.												
<p>D. Existing teaching and staff vacancies and effort made by Institutions for filling the vacancies, including:</p> <ul style="list-style-type: none">• Percentage of faculty and staff positions filled and vacant• Increase in faculty appointed on regular basis	<table><tr><th>Sr. No</th><th>Year</th><th>Regular+ contract</th><th>Adjunct</th></tr><tr><td>1</td><td>2011-12</td><td>52</td><td>---</td></tr><tr><td>2</td><td>2012-13</td><td>51</td><td>----</td></tr></table>	Sr. No	Year	Regular+ contract	Adjunct	1	2011-12	52	---	2	2012-13	51	----
Sr. No	Year	Regular+ contract	Adjunct										
1	2011-12	52	---										
2	2012-13	51	----										

	<table> <tr> <td>3</td> <td>2013-14</td> <td>48</td> <td>---</td> </tr> <tr> <td>4</td> <td>2014-15</td> <td>95</td> <td>2</td> </tr> <tr> <td>5</td> <td>2015-16</td> <td>95*</td> <td>1</td> </tr> </table> <p>* 68 Regular + 27 Contract.</p> <p>Total sanctioned strength : 110</p> <ul style="list-style-type: none"> • 1 Professor selected by MPSC has joined in July 2016. • 1 Professor and 2 Associate Professors are likely to join in September 2016. • 3 Associate Professors have been selected by MPSC and posted to the institute. <p>Evidence : Muster Roll & interaction.</p>	3	2013-14	48	---	4	2014-15	95	2	5	2015-16	95*	1
3	2013-14	48	---										
4	2014-15	95	2										
5	2015-16	95*	1										
<p>E. Effectiveness of equity at Institutional level, including:</p> <ul style="list-style-type: none"> • Transition rate of students from the First to the Second year in Undergraduate programmes 	<p>At the end of 1st Year examination ,</p> <p>2013-14 : 77.17 %</p> <p>2014-15: 83.26%</p> <p>2015-16: 90.50 %</p> <p>Evidence : Records of Dean Academics</p>												
<p>Using the 3-point grading scale and grade descriptors in Annex 4(1)</p> <p>Evaluation Grade for 1.1</p>													
<p>1.0</p>													

J. S. N. S.

ANNEX 4: PERFORMANCE AUDIT FORM (1.2)
COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

Name of the Performance Auditor: Dr. J. SRIHARI RAO
Name of the Institution with location: Govt. Engineering College, Karad
Period of Performance Audit: 28-30 August, 2016

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

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)						
A. Effectiveness of funds utilized for the teaching, training, learning and research equipment, library, computers, etc. by Institutions, including: <ul style="list-style-type: none"> • Increase in the satisfaction index of student and faculty 	<p>Till 23rd August 2016, an amount of Rs. 10.97 crores has been utilized for various activities under TEQIP.</p> <p>Faculty and students expressed satisfaction at the changes TEQIP has brought in the work ambience in the college and the motivational levels among the stakeholders.</p> <ul style="list-style-type: none"> • Evidence: FMR & Interaction with faculty & students. 						
B. Effectiveness of scaling-up Postgraduate Technical Education, including: <ul style="list-style-type: none"> • Increased enrolment for M.Tech and PhD • Establishment of proposed laboratories • Cumulative number of assistantships granted 	<ul style="list-style-type: none"> • Admission to M. Tech courses increased from 60 to 77. Total 10 faculty members pursuing Ph.D. <p>8 New laboratories have been established which are used by UG & PG students.</p> <table border="1"> <thead> <tr> <th>Year</th><th>No of Students</th></tr> </thead> <tbody> <tr> <td>2014-15</td><td>07 (I & II Year)</td></tr> <tr> <td>2015-16</td><td>28 (I & II Year)</td></tr> </tbody> </table> <p>Evidence: TEQIP Office records & visits Labs.</p>	Year	No of Students	2014-15	07 (I & II Year)	2015-16	28 (I & II Year)
Year	No of Students						
2014-15	07 (I & II Year)						
2015-16	28 (I & II Year)						
C. Progress/achievement in starting new Postgraduate programmes, including: <ul style="list-style-type: none"> • Securing AICTE approval • Establishment of laboratories • Adequacy of student enrolments 	<p>Applied for M. Tech. program in Computer Science and Engineering</p> <p>Application date: 19/02/2016.</p> <p>However, it has not been granted.</p>						
D. Effectiveness of collaborations made with other Institutions in India and abroad, including <ul style="list-style-type: none"> • Increase in number of co-authored publications in refereed journals 	<p>The Institute is planning to conduct a P G Program in "Alternative Energy Studies", as a part of the M O U entered by Govt. of Maharashtra with New South Wales University, Australia.</p>						
E. Increased collaboration with industry in research and development, including	<ul style="list-style-type: none"> • M O U with Dalvik App Design and Development, Mumbai public state-assisted higher education institution of the State of 						

<ul style="list-style-type: none"> • Increase in number of joint and industry sponsored research and development work undertaken 	<p>Maharashtra.</p> <ul style="list-style-type: none"> • MOU with Malkapur Nagarpanchayat under Ground Drainage Scheme under UIDSSMT. • MOU with i3indya Technology, a unit of I THREE INFOTECH PVT LTD.& AAVISHKAR 2K-16. • MOU with Koyna Hydro Power Project, Study of Geomorphological and Run off Characteristics of Koyna Project. • MOU with Structwel Designers & Consultants Pvt. Ltd. Mumbai. • MOU with University of South Wales Australia for PG Courses Alternate energy • MOU for Corporate training with Globerena Hyderabad. • MOU with NAASCOM for National Digital Literacy mission • MOU with Pariksha.com for online aptitude test • MOU with DAS offshore Engineering Pvt. Ltd for incubation center • MOU with Shree Refrigeration Pvt. Ltd for incubation center • MOU with Inventive (Auto Desk authorized developer) for encouraging startup • MOU with Shreem Electrics, Jaysingpur for incubation center • MOU with M-Computer Ichalkaranji for students training and research • MOU with Penta-Mech Kolhapur for students training and research • MOU with RR Metacraft, Mumbai for students training and research • MOU with Vastra-Tech for students training and research • MOU with Serve last mile, Pune for students training and research <p>Evidence: Office record & interaction with Dean, III</p>
<ul style="list-style-type: none"> • Increase in financial contribution by industry for R & D 	<p>NIL</p>
<ul style="list-style-type: none"> • Increase in industry personnel registered for Master's and Doctoral programmes 	<p>2 Nos (1 in Heat Power Engg. & 1 in Production Engg.)</p> <p>Evidence: Student section record</p>
<ul style="list-style-type: none"> • Increase in industry personnel trained by the institution in knowledge and/or skill areas 	<p>Nil</p>
<ul style="list-style-type: none"> • Increase in the number of consultancy assignments secured 	<p>Institute received many consultancy projects under following categories</p> <ul style="list-style-type: none"> • Design of RCC water tank(03) • Structural Assessment of Water Tank(13)

	<ul style="list-style-type: none">• Health monitoring of Bridge (02)• Dams(02)• Third party inspection of Rural water supply scheme 17 villages• Design and scrutiny of RCC buildings(05)• Design and scrutiny of minor irrigation dams, retaining walls(04)• Third party inspection of Civil Structures(11+02)• Non-destructive testing of industrial buildings(02)• Third party inspection of water supply projects of nearby districts(01+01)• Consultancy work of 'Jalyukt Shiwar Yojana' of Govt. of Maharashtra(03)• Core logging of bore holes(02)• Wet mix Macadam design (01)• Asphalt mixed design (02)• Safe Bearing Capacity estimation (11) <p>Evidence: Office records of Dean, R & D</p>																
<ul style="list-style-type: none">• Increase in the number of students' and faculty visits to and/or training in Industry	<table><tr><th>Year</th><th>Industrial Visit</th><th>Industrial Guest lecture</th><th>No. of students did Internships</th></tr><tr><td>2013-14</td><td>13</td><td>28</td><td>224</td></tr><tr><td>2014-15</td><td>17</td><td>33</td><td>224</td></tr><tr><td>2015-16</td><td>21</td><td>38</td><td>241</td></tr></table> <p>Evidence: Training & Placement Office record</p>	Year	Industrial Visit	Industrial Guest lecture	No. of students did Internships	2013-14	13	28	224	2014-15	17	33	224	2015-16	21	38	241
Year	Industrial Visit	Industrial Guest lecture	No. of students did Internships														
2013-14	13	28	224														
2014-15	17	33	224														
2015-16	21	38	241														
<ul style="list-style-type: none">• Improvements in graduate placement rate	<table><tr><th>Year</th><th>No of Company Visit</th><th>No of Students Placed</th></tr><tr><td>2013-14</td><td>28</td><td>128</td></tr><tr><td>2014-15</td><td>32</td><td>162</td></tr><tr><td>2015-16</td><td>35</td><td>171</td></tr></table> <p>Evidence: Training & Placement Office record</p>	Year	No of Company Visit	No of Students Placed	2013-14	28	128	2014-15	32	162	2015-16	35	171				
Year	No of Company Visit	No of Students Placed															
2013-14	28	128															
2014-15	32	162															
2015-16	35	171															
<ul style="list-style-type: none">• Increase in involvement of industry experts in curricula & syllabi improvements	<ul style="list-style-type: none">• 2 Experts from industry are members on the newly formed BOS of each Dept.• 12 Experts from the industry are members of academic council.• The BOS meetings have been organized by each dept. quarterly.• There is an Industry Institute Board (IIB) in each department. Five members from industry are there are on each board.																

- laboratory improvements, evaluation of students and delivering expert lectures

Modernization total **15** Laboratories

- Structural Engineering Lab
- Geotechnical Lab
- Survey Lab
- Applied Thermo-dynamics lab
- Heat transfer Lab
- Electrical Machine lab
- Networking Lab
- Virtual Lab
- Physics Lab
- Chemistry Lab
- Design and Dynamics Lab
- Refrigeration and air-conditioning Lab
- I.C Engines Lab
- Concrete Technology Lab
- Computer lab

Newly Established Laboratories.

1. Automation Studio and CAD-CAM Laboratory in Mechanical Engineering Department.
2. Microprocessor Laboratory in Electrical Engineering Department.
3. Communication Laboratory in Electronics and Telecommunication Department.
4. Fiber optics Lab
5. Language and Computing Laboratory in Mathematics Department.
6. Central Computing Facility in institute.
7. COE in Flexible Manufacturing Cell, Precision Metrology, Condition monitoring and Mechatronics in Mechanical Engineering.
8. Campus Wide Networking and Data Center in institute.

Evidence: Procurement records, physical visits and interaction with HODs

<ul style="list-style-type: none">• Increase in the number of sandwich programmes between industries and the institution.	Nil										
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	Revenue from consultancy & testing :- Year 2014-15 :- 43.43 Lakhs Year 2015-16 :- 36.58 Lakhs Evidence: Office records										
G. Increase in the number of publications in refereed journals		<table><tr><td></td><td>2014-15</td><td>2015-16</td></tr><tr><td>Indian Journals :</td><td>5</td><td>24</td></tr><tr><td>International journal</td><td>33</td><td>63</td></tr></table>		2014-15	2015-16	Indian Journals :	5	24	International journal	33	63
	2014-15	2015-16									
Indian Journals :	5	24									
International journal	33	63									
H. Increase in the number of patents filed	<p>Before start of project 7 patents were filed.</p> <p>During the project following patents have been filed:</p> <ol style="list-style-type: none">1. Experimental setup for flow Boiling (Application no-3888/MUM/2015) Prof.A.R.Acharya, Prof. A.T.Pise .2. Experimental set up for Single Bubble Dynamics(Application no-3891/MUM/2015) Prof.A.R.Acharya, Prof. A.T.Pise.3. Counting device for domestic pressure cooker for hearing impaired (Application no-3890/MUM/2015) Prof.A.R.Acharya.4. Medicine Dispenser Box for Adults (Application no-2889/MUM/2015) Prof.A.R.Acharya.5. Synthesis of Cuprous oxide on Bronze Coated Steel via Immersion Route. Prof A.A.Sapkal.6. Micro channel Heat-Exchanger based on natural flow patterns electronic cooling. (Application no54/MUM/2015)Prof.S.S.Mohite.7. Tile Moulding blade (Application no-3753/MUM/2015) Dr.P.M.Khodke.8. Novel converging vertex tube(2660/Mum/2012) Dr.A T Pise9. Loop thermo siphon heat pipe collector with thermal storage(2979/Mum/2015) A T Pise10. Novel Additive for Boiling enhancement(3065/Mum/2015).Dr. A T Pise <p>▪ 12 more patents are in process</p> <p>Evidence: TEQIP office records & interaction with Dean R & D</p>										
Evaluation Grade for 1.2		1.0									
Using the 3-point grading scale and grade descriptors in Annex 4(1)											

J. S. K. P.

ANNEX 4: PERFORMANCE AUDIT FORM (1.2.1)
COMPONENT 1: IMPROVING QUALITY OF EDUCATION IN SELECTED INSTITUTIONS

Name of the Performance Auditor: **Dr. J. SRIHARI RAO**
 Name of the Institution with location: **Govt. Engineering College, Karad**
 Period of Performance Audit: **28-30 August, 2016**

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)
Establishing Centers of Excellence	NOT APPLICABLE
Improvement in Research and Development facilities through	
Establishment of new laboratories for applicable thematic research	
Establishment of a knowledge resource centre (library) in the thematic area	
Procurement of furniture	
Civil works	
Evaluation Grade for 1.2.1 Using the 3-point grading scale and grade descriptors in Annex 4(1)	

J Srihar Rao

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

Name of the Performance Auditor: **Dr. J. SRIHARI RAO**
 Name of the Institution with location: **Govt. Engineering College, Karad**
 Period of Performance Audit: **28-30 August, 2016**

1.3: FACULTY DEVELOPMENT FOR EFFECTIVE TEACHING (PEDAGOGICAL TRAINING)

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. 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 	<p>During the Academic year 2015-16, the institute has organized one week Pedagogy training for In-house faculty members in which 54 faculty members (56.84%) participated. A total 82 (86.31 %) faculty members received trainings in Pedagogy during the project tenure till now. Evidence: TEQIP records & interaction with faculty.</p>
<ul style="list-style-type: none"> Improvements in (and/or updating, and more relevant) curricula and/or syllabi 	<p>The institute is running Autonomy gradually from first year onwards. The structure for all four years of UG and two years of PG is ready.</p> <ul style="list-style-type: none"> Four electives in UG including open elective and two in PG have been introduced having at least four alternatives to each. 6 value adding courses (GP-1 GP-2, GP-3 industrial training mini project, case study, self study, open elective, CSP/NSS/NCC) in addition to a few program specific courses as per market demand have been introduced. Complete restructuring of B.Tech in Electronics and Telecommunication is done. Evidence: Office records & interaction with Dean, Academics

<ul style="list-style-type: none"> • Improvements in (and/or updating, more relevant) course assessment methods 	<p>After obtaining Autonomy with effect from the year 2015-16, the following changes are made applicable to the batch admitted in the year 2015-16 and onwards.</p> <ul style="list-style-type: none"> ▪ The examination system has been completely revised having 40% for continuous assessment and 60% weightage for end semester exam. ▪ Continuous assessment is done through two class tests and teachers assessment through assignments, tutorials, case studies, quiz etc. ▪ Declaration of results happens within a week of completion of examination. ▪ Internal evaluation is done through a different rubrics suggested by NBA to decide the program outcome. ▪ Summer term has been introduced for the failure students which is an additional compressed one month instructions. ▪ No failure student is allowed to appear for re-examination unless he completes the course again <p>Evidence: Academic Rules, ordinances & regulations- Hard copies given to students and also available on website.</p>
<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"> • LCDs fitted in class rooms. NPTEL material, CDs available. subscription made for e-journals & print journals. • Remedial classes conducted for 49 students who failed only in Mathematics. • 73 students attended summer term during 2015-16 in which classes were conducted for 7 subjects. • GATE coaching classes for third year and final year students by external Agency (GATE-Forum). 69 Students received training in 2014-15, 308 Students in 2015-16 and 223 students in 2016-17, from all branches. • Aptitude training (Pre-placement) by Globerena Technology. 350 engineering students in 2014-15 and 370 engineering students in 2015-2016 received training <p>Evidence: Office records and interaction with Dean, Academics & Dean, Students affairs.</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)	Nil- All Existing regular faculty are with minimum M.Tech.			
Percentage of faculty deputed for subject domain training, seminars, etc. (faculty are required to share their gains with peers and put reports on training on institution's web site)	Year	No of Faculty attended Training programs outside the Institute	Training programs within the Institute	
			No. of Programmes organized	No. of In-house faculty participated
	2012-13	43	05	80
	2013-14	71	12	59
	2014-15	57	09	171
	2015-16	16	17	271
	Total	187	43	581
	<ul style="list-style-type: none">The institute has organized 3 National Conferences. Total 269 participants participated in the conference. Out of which 64 were In-house faculty members.During the project tenure, the Institute has organized 43 Short Term Training Programs in various departments, a total of 1987 faculty members (including faculty from other colleges) participated in the STTP.The institute has organized One Week Teacher Orientation Program for newly joined teachers. 32 faculty attended.			
	Evidence: TEQIP office records			
	<ul style="list-style-type: none">Progress in securing accreditation of eligible UG & PG programmes (institutions to achieve target of 60% of eligible UG & PG programmes accredited - applied for within 2 years of joining the Project)	<ul style="list-style-type: none">Re-accreditation of 4 UG programs for two years (01/01/2016 to 31/12/2017SAR submitted for 5 M. Tech. programs and NBA committee is likely to visit in Sept 2016.		
Evidence: Letter from NBA				

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.

All information is available through web based MOODLE (Modular Object Oriented Dynamic Learning Environment) for first year. The feedback from students of Second, Third, Final year was taken using web based software developed by Institution. The Satisfaction Index of different branches and years is as given below during the year 2015-16.

Branch/ Year	I Year	II Year	III Year	IV Year	Department Index
Civil	72.40	88.41	74.60	79.93	78.84
Mech	74.00	78.51	78.00	82.50	78.25
Elect	77.60	83.06	83.59	64.29	77.14
IT	74.80	87.74	82.98	82.78	82.08
E&TC	73.20	93.49	81.11	85.34	83.29
Average Index	74.40	86.24	80.06	78.97	79.92

Evaluation Grade for 1.3**1.0**

Using The 3-Point Grading Scale and Grade Descriptors in Annex 4(1)

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

Name of the Performance Auditor: **Dr. J. SRIHARI RAO**
 Name of the Institution with location: **Govt. Engineering College, Karad**
 Period of Performance Audit: **28-30 August, 2016**

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)
A. Implementation of academic and nonacademic reforms, including: <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"> Various Statutory Authorities like Board of Management, Finance Committee, Academic Council, Building works Committee, BOS of each dept etc. The documents like Ordinances and Rules and Regulations for UG and PG program, Rules and Regulations for examination and evaluation of UG and PG program, Purchase Rules and Financial powers etc. have been approved by appropriate authority and are published

	•The accountability of all stake holders is aptly defined in the documents prepared.			
• Modernization and decentralization of administration and financial management	• The Institute has formulated policy especially for financial management; the document is called as Purchase Rules and financial Powers. • The financial powers are delegated at different levels such as Head of Department, Dean, Principal, Finance Committee, and Chairman BOM.			
• Extent of delegation of administrative and financial decision making powers to senior functionaries	Sr.No.	Financial power	Financial Limit	Authority
	1.	Purchase of material & stationary / Purchase of Dead stock items	Beyond Rs.5,00,000/-	Chairman BOM
			Rs. 3 to 5 lacs	Finance Committee
			Upto Rs.3 lacs	Competent Authority (Principal)
			Upto Rs.10,000/-	All Deans / HOD / Administrative Officer or Registrar of the Institute as applicable
	2	Printing of Material	Above Rs.10,000/-	Competent Authority
			Upto Rs.10,000/-	All Deans / HOD
	3	Printing of Confidential Material	No limit	Competent Authority
	4	Maintenance, Repairs and upgrade of computers	Upto 10% of the cost of equipment	Competent Authority
	Evidence: Minutes of 8 th BOM meeting held on 29-03-2016			
• Responsiveness to stakeholders (students, faculty, staff, industry, local communities)	• Dean, Student Affairs responds to the issues related to the students. • HOD & Principal responds to the issues related to faculty and staff. • Dean. III and TPO attends to the issues related to the industries.			
• Institutional quality assurance and enhancement strategies, including student feedback mechanisms	• 360° feed back during Exit Interview . • The feedback obtained from students using web based software developed by Institution and web based MOODLE. • Monthly meetings with Class Representatives.			
• Maintenance of academic and non-academic	• Maintenance of building is done by PWD. However, minor maintenance and majority			

<p>infrastructure and facilities, including sufficiency and quality of academic buildings</p>	<p>of refurbishment is done at Institute level. PWD spent 84 lakhs during 2015-16 while institute spent 20 lakhs .</p> <ul style="list-style-type: none"> • The gardening and housekeeping work is outsourced. • Maintenance of equipments and other instructional facilities is done through AMC and internally by laboratory staff. • Institute has appointed technical staff at institute level. • Maintenance of solar monitoring system is done by a faculty from Mechanical department. • The testing and monitoring of potable water is done at Institute level in Environmental Engineering lab. • The structural stability of buildings is done in-house by Applied Mechanics department. <p>Evidence: Interaction with Principal. Faculty in charges are there for supervise different activities.</p>
<ul style="list-style-type: none"> • Development, maintain and utilization of institutional resources 	<ul style="list-style-type: none"> • Ex- servicemen from military are appointed for security purposes. • Private architect is appointed for future developments as per master plan. • Institutional network is managed by system analyst appointed at institute level. • All resources are utilized to optimum level. <p>Evidence: Interaction with Principal.</p>
<ul style="list-style-type: none"> • Generation, retention and utilization of Income Revenue Generation. 	<ul style="list-style-type: none"> • The fees received from students (Tution fee & Development fee) is retained at institute level. • The income from the sources mentioned above is distributed over six funds called Corpus, Staff Development, Equipment Replacement, Maintenance, Salary, and Institute Development.(These 6 funds are in addition to the mandatory 4 funds specified in TEQIP PIP) • The revenue generated through testing and consultancy is retained in Institute after distribution of share of faculty and support staff involved. The institutes share is deposited into the 4 funds established under TEQIP. • Apart from this, some revenue is generated for Sports and Cultural activities, Training and Placement, Internet, ISTE, Library etc through other fees from the students. (Budget document and Minutes of BOM Meetings.) <p>Evidence: Interaction with Principal.</p>
<p>Using the 3-point grading scale and grade descriptors in Annex 4(1)</p>	
<p>Evaluation Grade for 2.1 1.0</p>	

J. S. K.

COMPONENT 2: IMPROVING SYSTEM MANAGEMENT

2.1 Capacity building to strengthen management (continued)

2.1.1: Implementation of Good Governance

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
Section A : PRIMARY ACCOUNTABILITIES		
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?	YES Vision document for the institute was approved by BOM in 4 th meeting held on 10-05-2014.	
Has the Governing Body ensured the establishment and monitoring of proper, effective and efficient systems of control and accountability to financial sustainability (including financial and operational controls, risk assessment and management, clear procedures for managing physical and human resources)	Various deans are nominated for decentralization of work effective monitoring. <ul style="list-style-type: none"> • Dean (Academic) • Dean (R&D) • Dean (SA) • Dean (III) • Dean(RM) • Dean(Finance) Entire revenue is distributed on six funds. The institute has appointed internal auditor as well as Statutory auditor. The account is audited annually. It is over and above government audit done by Accountant General.	
Is the Governing Body monitoring institutional performance and quality assurance arrangements? Are these benchmarked against other institutions (including accreditation, and alignment with national and international quality assurance systems) to show that they are broadly keeping pace with the institutions they would regard as their peers or competitors to ensure and enhance institutional reputation?	Yes. Minute of 4 th , 5 th , 6 th , 7 th , 8 th and 9 th Board of management meetings indicate that Governing body monitors institutes performance	

Has the Governing body put in place suitable arrangements for monitoring the head of the institution's performance?	No formal mechanism	
Section B: OPENNESS & TRANSPARENCY REVIEW IN THE OPERATION OF GOVERNING BODIES		
Does the Governing Body publish an annual report on institutional performance?	TEQIP News Letter has been published in February 2016. The institutional performance is discussed at the end of every financial year before sanctioning the budget for next year.	
Does the Governing Body maintain, and publicly disclose, a register of interests of members of its governing body?	No formal Mechanism	
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, BOM chairman conducted meeting with students, Faculty and staff on 29-02-2016.	
Section C KEY ATTRIBUTES OF GOVERNING BODY		
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?	Size and constitution is as per Govt. of Maharashtra norms Total 12 members. Chairman is MD,DAS offshore Engineering Pvt. Ltd. Other members are reputed industrialists, senior professors, and Ex-officio Govt. nominees.	
Are the recruitment processes and procedures for governing body members rigorous and transparent? Does the Governing Body have activity involved independent members and is the institution free from direct political interference to ensure academic freedom and focus on long- term educational objectives?	As per Govt. procedures All members are nominated on tenure basis.	
Are the role and responsibilities of the Chair of the Governing Body, the Head of the Institution and the Member Secretary serving the governing body clearly stated?	Yes. Govt. of Maharashtra resolution dated 25 APRIL, 2011.	

Does the Governing Body meet regularly? Is there clear evidence that members of the governing body attend regularly and participate activity?	Yes, Sixth meeting held on 03-08-2015 08 members attended, 04 absent . Seventh meeting held on 29-02-2016 08 members attended, 04 absent Eighth meeting held on 29-03-2016 08 members attended, 04 members absent. Ninth meeting held on 20-05-2016 08 members attended , 04 members absent.	
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Section D: EFFECTIVENESS AND PERFORMANCE REVIEW OF GOVERNING BODIES

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?	Yes, The Minister, Higher and Technical Education Department of Government of Maharashtra conducts review meeting annually. The last meeting was conducted on 2 nd February 2016.	
Does the Governing Body ensure that new members are properly inducted, and existing members receive opportunities for further development as deemed necessary?	All members are nominated as per BOM constitution on tenure basis. The induction of newly appointed BOM is done by The Minister, Higher and Technical Education Department of Government of Maharashtra.	

Section E: Regulatory compliance

Does the Governing Body ensure regulatory compliance* and, subject to this, take all final decisions on matters of fundamental concern to the institution.	YES. Ensures the compliance with the norms of AICTE/UGC and the affiliating university.	
Does the regulatory compliance include demonstrating compliance with the 'not-for-profit' purpose of education institution?	Yes, This is a Govt. Institution.	
Has there been accreditation and/or external quality assurance by a national or professional body? If so, give details: name, status of current accreditation etc.	<ul style="list-style-type: none"> Re-accreditation of 4 UG programs for two year. SAR submitted for remaining 5PG program and NBA visit awaited 	
Evaluation Grade for 2.1 Using the 3-point grading scale and grade descriptors in Annex 4(1)		1.0

J. S. Kulkarni

ANNEX 4: PERFORMANCE AUDIT FORM (2.2)
COMPONENT 2: IMPROVING SYSTEM MANAGEMENT

Name of the Performance Auditor: **Dr. J. SRIHARI RAO**
Name of the Institution with location: **Govt. Engineering College, Karad**
Period of Performance Audit: **28-30 August, 2016**

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 	<ul style="list-style-type: none"> Institute Achievement <ol style="list-style-type: none"> Autonomy is granted 04 UG programs are accredited remaining SAR submitted for remaining 5PG program and NBA visit awaited. Total 15 Laboratory is Modernized. Total 08 Laboratory is Newly Established IRG increased Establishment of campus-wide network, computer Center. Faculty Progress: <ol style="list-style-type: none"> Ph.D registrations increased No. of publications/Books are increased 17 Patents are Filled and 05 application are in process in Regular faculty 68. Additionally 27 faculty are appointed at institute level on contract basis. Staff Progress <ol style="list-style-type: none"> Four Personality development program are organized for supporting staff of the institute with participation of 203 staff. Computer hardware training program for supporting staff was organized for laboratory assistance with participation of 22 employees . Organized Laboratory Management training program for supporting staff total 20 employees are participated. Students Progress 	

	<ol style="list-style-type: none"> 1. Student Transition rate is increased 2. Collaboration with industry is increased. 3. Placement rate is increased 4. Last two years institute has taken initiative to prepare students for GATE for qualitative improvement of students. 5. Remedial coaching and additional coaching to failure student is regularly conducted. 	
B. Effective project management and monitoring, including: <ul style="list-style-type: none"> • Precise and reliable information/data through web based MIS available to stakeholders at all time 	All information available through web based MI S.	
C. Effectiveness of faculty evaluation by students, including: <ul style="list-style-type: none"> • Percentage/increase in percentage of faculty evaluated by students in one or more subjects 	The feedback from the students at the end of the academics year is obtained and the improvements/suggestions/remarks are conveyed to faculty by the head of the institute.	
<ul style="list-style-type: none"> • Are results of evaluation properly used for teacher improvement? 	Performance index of faculty as well as department is calculated and is used for counseling the teacher.	
Overall Evaluation Grade for 2.2 Using the 3-point grading scale and grade descriptors in Annex 4(1)		1.0

J. Srinivas

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

Name of the Performance Auditor: Dr. J. SRIHARI RAO
Name of the Institution with location: G C E , Karad, M. H
Date of Performance Audit : 28-30 August,2016

KEY POINTS FED BACK TO THE INSTITUTION AT THE END OF THE VISIT AGAINST THE SEVEN ASPECTS OF EVALUATION.

1. Autonomy was granted and is being used effectively in introducing reforms in teaching- learning process and evaluation methods, like value adding courses and 40% weightage for continuous assessment. Faculty strength and transition rate at the end of B.Tech I st. year have improved.
2. Enrollment into M.Tech program increased. New laboratories established. Industry- Institute interaction increased through a no. of MoUs. Consultancy activity, graduate placement rate and no. of publications increased. There is a significant improvement in the no. of patents filed.
3. Centre of Excellence is not applicable for this institute.
4. More than 80% of the faculty received training in pedagogy. After receiving autonomy ,significant changes have been introduced in the curriculum .There is significant improvement in the Faculty development activity and student training.
5. Various statutory bodies were constituted. De-centralisation of administration , increased financial powers and innovative methods in feedback procedure could be seen.
6. 9 BoG meetings were held. 6 Deans are in position. Vision document was prepared. There is transparency in disseminating the information.
7. Autonomy granted, U G Programs accredited and NBA visit awaited for P G programs. No. of patents were filed. New laboratories established and existing labs modernized..Computer centre and Campus wide network established.

KEY IMPROVEMENTS NOTICED ON SHORTCOMINGS REPORTED DURING EARLIER PERFORMANCE AUDITS

Faculty strength increased.. Work ambience improved. Significant improvements could be seen in all aspects.

BRIEF STATEMENTS ON CONTINUING SHORTCOMINGS, AND REASONS:

Still a no. of contract faculty and vacancies exists . **Recruitment is to be done by Maharashtra Public Service Commission.**

RECOMMENDATIONS FOR MENTORS:

Since 2014, implementation of the project gained momentum and there is significant improvement in all aspects of the project. On the whole, there is good progress under the Guidance of BoG and the Mentor. The BoG has to ensure the sustainability of the developments even after the closure of the project.

Congratulations to the Principal and the entire TEQIP team.


(Prof. J. SRIHARI RAO)