

Annual Quality Assurance Report for Academic Year 2015 – 2016

Submitted by



Bansilal Ramnath Agarwal Charitable Trust's
VISHWAKARMA INSTITUTE OF TECHNOLOGY
666, Upper Indiranagar, Bibwewadi, Pune – 411 037
(An Autonomous Institute Affiliated to Savitribai Phule Pune University)

Submitted to



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission
P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

Contents

	Page Nos.
Part – A	
1. Details of the Institution	..... 1
2. IQAC Composition and Activities	..... 4
Part – B	
1. Criterion – I: Curricular Aspects	..... 7
2. Criterion – II: Teaching, Learning and Evaluation	..... 8
3. Criterion – III: Research, Consultancy and Extension	..... 11
4. Criterion – IV: Infrastructure and Learning Resources	..... 15
5. Criterion – V: Student Support and Progression	..... 18
6. Criterion – VI: Governance, Leadership and Management	..... 21
7. Criterion – VII: Innovations and Best Practices	..... 28
8. Plans of Institution for next year	..... 29
Annexure	
I. Abbreviations	..... 30
II. Student Feedback Analysis, A.Y. 2015-16	..... 31
III. Academic Calendar for A.Y. 2015 – 16	..... 32

The Annual Quality Assurance Report (AQAR) of the IQAC for Academic Year 2015-16

Part – A

I. Details of the Institution

1.1 Name of the Institution	BRACT's Vishwakarma Institute of Technology
1.2 Address Line 1	666, Upper Indira Nagar,
Address Line 2	Bibwewadi,
City/Town	Pune
State	Maharashtra
Pin Code	411 037
Institution e-mail address	director@vit.edu
Contact Nos.	91 20 24202284 (Dean Quality Assurance)
Name of the Head of the Institution:	Prof. (Dr.) R.M. Jalnekar
Tel. No. with STD Code:	91 20 24202221
Mobile:	9552544489

Name of the IQAC Co-ordinator:

Prof. A.S. Marathe

Mobile:

9822418794

IQAC e-mail address:

ashutosh.marathe@vit.edu

1.3 NAAC Track ID (For ex. MHCOGN 18879)

EC/64/A&A/02 dated 08.07.2013

1.4 Website address:

www.vit.edu

Web-link of the AQAR:

http://www.vit.edu/images/PDF/AQAR_2015_16.pdf

1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	A	3.29	2013	5 yrs.

1.6 Date of Establishment of IQAC :DD/MM/YYYY

26.07.2013

1.7 AQAR for the year

2015-16

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011)

2nd AQAR – for Academic Year 2014-15 was submitted to NAAC on 10/08/2015

1.9 Institutional Status

University State Central Deemed Private

Affiliated College Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution Yes No

(eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Co-education Men Women

Urban Rural Tribal

Financial Status Grant-in-aid UGC 2(f) UGC 12B

Grant-in-aid + Self Financing Totally Self-financing

1.10 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

. --

1.11 Name of the Affiliating University (for the Colleges)

Savitribai Phule Pune University

1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University	<input type="text" value="√"/>		
University with Potential for Excellence	<input type="text"/>	UGC-CPE	<input type="text"/>
DST Star Scheme	<input type="text"/>	UGC-CE	<input type="text"/>
UGC-Special Assistance Programme	<input type="text"/>	DST-FIST	<input type="text"/>
UGC-Innovative PG programmes	<input type="text"/>	Any other (<i>Specify</i>)	<input type="text"/>
UGC-COP Programmes	<input type="text"/>		

2. IQAC Composition and Activities

2.1 No. of Teachers	<input type="text" value="09"/>
2.2 No. of Administrative/Technical staff	<input type="text" value="05"/>
2.3 No. of students	<input type="text" value="02"/>
2.4 No. of Management representatives	<input type="text" value="01"/>
2.5 No. of Alumni	<input type="text" value="NIL"/>
2.6 No. of any other stakeholder and community representatives	<input type="text" value="NIL"/>
2.7 No. of Employers/ Industrialists	<input type="text" value="NIL"/>
2.8 No. of other External Experts	<input type="text" value="01"/>

2.9 Total No. of members

2.10 No. of IQAC meetings held

2.11 No. of meetings with various stakeholders: No. Faculty
Non-Teaching Staff Students Alumni Others

2.12 Has IQAC received any funding from UGC during the year? Yes No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. International National State Institution Level

(ii) Themes

2.14 Significant Activities and contributions made by IQAC

1. Improvement in Attendance Monitoring System through ERP
2. Implementation of faculty Appraisal system using Google Forms
3. Development of In-House Outcome Based Education Software
4. Improvement of Student Portal
5. Formation of Research Policy of the Institute for promotion of Research Culture
6. On-Line Project Registration and Progress monitoring through ERP

2.15 Plan of Action by IQAC/Outcome

Plan of Action	Achievements
1. Improvement in Attendance Monitoring System through ERP 2. Implementation of faculty Appraisal system using Google Forms 3. Improvement of Student Portal 4. ISO 9001:2015 standard implementation	1. Messaging the parents through SMS and Mail 2. Google Forms were developed 3. User friendliness has been improved 4. ISO 9001:2015 standard awareness created, Institute got the Certification from BSI , India

2.16 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body

Provide the details of the action taken

Annual Quality Assurance report was presented during the Board of Management Meeting on 14th August 2015.

Part – B

Criterion – I

I. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	6	0	0	0
PG	8	0	0	0
UG	9	0	0	0
PG Diploma	-	0	0	0
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	-	-	-	-
Others	-	-	-	-
Total	23	-	-	-

Interdisciplinary	-	-	-	-
Innovative	-	-	-	-

√ √ √ √

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	√

1.3 Feedback from stakeholders* Alumni Parents Employers Students

(On all aspects)

Mode of feedback : Online Manual Co-operating schools (for PEI)

**Please provide an analysis of the feedback in the Annexure*

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

B.Tech. Syllabus Revision

1.5 Any new Department/Centre introduced during the year. If yes, give details.

Department of Information Technology was established.

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
179	120	31	24	04

2.2 No. of permanent faculty with Ph.D.

49

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
141	0	31	35	26	0	15	0	213	35

2.4 No. of Guest and Visiting faculty and Temporary faculty

-

66

34

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	11	1	90
Presented papers	1	--	--
Resource Persons	--	--	--

2.6 Innovative processes adopted by the institution in Teaching and Learning:

1. Personal Web-sites of Faculty
2. Experiential learning opportunities through group mini projects in each semester.
3. On-line courses with Purdue University
4. Internship opportunities for hands-on experience in Summer Break
5. Organization of Mini and Major Project Exhibition
6. Skill Development in Computer and Electronics Trades in Engineering Workshops
7. Development of Course Outcomes and Program Outcome Attainment logic and corrective academic actions taken

2.7 Total No. of actual teaching days during this academic year

185

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

1. Open Book Examination 2. Online MCQ Examination 3. Online query handling for online Mid Semester Exam
--

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

42	193	42
----	-----	----

2.10 Average percentage of attendance of students

84.26%

2.11 Course/Programme wise distribution of pass percentage :

Title of the Programme	Total no. of students appeared	Division				
		Distinction %	I %	II %	III %	Pass %
B.Tech. Chemical Engg.	78	20	35	4	--	--
B.Tech. Computer Engg.	175	53	61	13	1	--
B.Tech. Electronics & Telecommunication Engg.	152	55	65	4	1	--
B.Tech. Electronics Engg.	116	29	54	4	1	--
B.Tech. Information Technology	54	14	21	2	1	2
B.Tech. Industrial Engg.	38	4	13	2	--	--
B.Tech. Production Engg.	50	13	22	1	1	--
B.Tech. Instrumentation & Control Engg.	74	26	26	3	--	--
B.Tech. Mechanical Engg.	179	73	71	8	--	--

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes :

- 1) Through internal and external academic audits.
- 2) Analysis of faculty feedback given by the students

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	121
UGC – Faculty Improvement Programme	NIL
HRD programmes	45
Orientation programmes	40
Faculty exchange programme	1
Staff training conducted by the university	NIL
Staff training conducted by other institutions	97
Summer / Winter schools, Workshops, etc.	145
Others	NIL

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	117	--	--	9
Technical Staff	48	--	--	5

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

- Establishment of research forum for various activities such as
 - Sharing of research by internal faculty members
 - Arranging expert lectures by outside eminent personalities
 - Developing training modules
 - Arranging conferences and workshops
 - Submitting research proposals for government and non-government funding agencies
 - Pursuing consultancy work, developing incubation centers.
 - Writing patents
- Established research steering committee to coordinate the activities of the research forum.
- Industry Advisory Board (IAB) for every department
- Having a mentor from IIT for every department
- Formalized the procedure for Departmental research data collection
- Formalized Training need Identification, Deputation and Feedback Process
- Formalized the Research Appraisal Scheme For faculty members
- Developed a policy for VIT Research Grant
- Developed Conference and Workshop Deputation Policy
- Conferences and workshops organized by research forum
 - IEEE International Conference of Information Processing : Keynotes by Dr. P.C. Pandey, Dr. Louis Hornyak

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	1	1	--	16
Outlay in Rs. Lakhs	5.3	6	--	613.72

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	--	10	3	6
Outlay in Rs. Lakhs	--	10.1	2.91	15.14

3.4 Details on research publications

	International	National	Others
Peer Review Journals	12	3	-
Non-Peer Review Journals	3	-	-
e-Journals	8	3	-
Conference proceedings	28	-	-

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned	Received
Major projects				
	2014-16	ISRO	27.95 Lacs	25.35 Lacs
	2014-16	AICTE	7.06 Lacs	6.35 Lacs
Projects sponsored by the University/ College	2015-17	BCUD, SPPU	0.3 Lacs	0.15 Lacs
	2015-17	BCUD, SPPU	0.9 Lacs	0.017 Lacs
	2015-17	BCUD, SPPU	2 Lacs	0.57 Lacs
	2015-17	BCUD, SPPU	0.3 Lacs	0.015 Lacs
	2015-17	BCUD, SPPU	1.5 Lacs	0.485 Lacs
	2015-17	BCUD, SPPU	1.2 Lacs	0.333 Lacs
	2015-17	BCUD, SPPU	1.2 Lacs	0.244 Lacs
	2015-17	BCUD, SPPU	1.5 Lacs	0.344 Lacs
TOTAL			41.91 Lacs	34.858 Lacs

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

UGC-SAP	-	CAS	-	DST-FIST	-
DPE	-			DBT Scheme/funds	-

3.9 For colleges

Autonomy	-	CPE	-	DBT Star Scheme	-
INSPIRE	-	CE	-	Any other	-

3.10 Revenue generated through consultancy

168.5 Lac

3.11 No. of conferences

organized by the
Institution

Level	International	National	State	University	College
Number	1	3	2	-	5
Sponsoring agencies	IEEE, BCUD	IMD, BCUD, Mitsubishi	BCUD	-	Infosys, Zensar

3.12 No. of faculty served as experts, chairpersons or resource persons

16

3.13 No. of collaborations

International 1 National 4 Any other -

3.14 No. of linkages created during this year

6

3.15 Total budget for research for current year in lakhs :

From Funding agency	-	From Management of University/College	56.25
Total	56.25		

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	-
	Granted	-
International	Applied	-
	Granted	-
Commercialised	Applied	-
	Granted	-

3.17 No. of research awards/ recognitions received by faculty and research fellows
Of the institute in the year

Total	International	National	State	University	Dist	College
34	-	1	-	-	-	33

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under them

16

60

3.19 No. of Ph.D. awarded by faculty from the Institution

-

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF -

SRF -

Project Fellows -

Any other -

3.21 No. of students Participated in NSS events:

University level 100 State level 2

National level - International level -

3.22 No. of students participated in NCC events:

University level - State level -

National level - International level -

3.23 No. of Awards won in NSS:

University level - State level -

National level - International level -

3.24 No. of Awards won in NCC:

University level - State level -

National level - International level -

3.25 No. of Extension activities organized

University forum - College forum 3

NCC - NSS 2 Any other -

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

Blood Donation Camp, Atma Bodh - Computer Literacy program for women and senior Citizen, I 2 I – Ignited Innovators of India, NSS – Kirloskar Vasundhara International Film Festival (Social Movies)

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	29039 sq.m	--	--	29039 sq.m
Class rooms	52	--	--	52
Laboratories	118	--	--	118
Seminar Halls	10	--	--	10
No. of important equipments purchased (\geq 1-0 lakh) during the current year(2013-14).	-	24	--	--
Value of the equipment purchased during the year (Rs. in Lakhs)	191.50	123.18	--	--
Others	--	--	--	--

4.2 Computerization of administration and library

Central Library is using the SLIM 21 Library Software with various modules for all library activity. Circulation Section, Journal Section, Procurement and Processing Section are fully computerised. Online public access catalogue facility is available within the campus for all students and staff. Bar coded based issue / return of books.

Central Library has started SMS service from February 2014 for the benefit of students. Now students are getting SMS for their overdue books.

News related to UGC, AICTE, DTE, University of Pune as well as News related to our Institute are now available on Institute Website.

Softcopy of old question papers is now available on Institute Website.

Biometric Attendance record keeping of staff

Digitization of important documents such as land documents, service books etc.

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value (Rs.)	No.	Value	No.	Value
Text Books	59764	185.01 Lac	1116	3.15 Lac	60880	188.16 Lac
Reference Books	2937	85.45 Lac	--	--	2937	85.45 Lac
e-Books	2443	1.54 Lac	41	0.22 Lac	2484	1.76 Lac
Journals	216	7.92 Lac	--	--	216	7.92 Lac
e-Journals	3625	16.60 Lac	1026	1.24 Lac	4651	17.84 Lac
Digital Database NPTEL	132	0.50 Lac	--	--	132	0.50 Lac
CD & Video	1657	2.66 Lac	--	--	1657	2.66 Lac
Others (specify) 1) BS Standards 2) DELNET	523	0.64 Lac	--	--	523	0.64 Lac

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1221	377	80	80	80	28	576	--
Added	171	70	--	--	--	--	101	--
Total	1392	447	80	80	80	28	677	--

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

Aircel internet Lease Line – 44 MBPS
Reliance Lease Line – 4 MBPS

4.6 Amount spent on maintenance in lakhs :

i) ICT	<input type="text"/>
ii) Campus Infrastructure and facilities	<input type="text"/>
iii) Equipments	<input type="text"/>
iv) Others	<input type="text"/>
Total :	<input type="text" value="93.08"/>

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

1. Counselling and Grievance Redressal by IQAC members
2. Increase in Food outlets within the Campus
3. Fostering Technical and personality growth of students on the aegis of various students chapters such as IEEE, IE(I), ACM, IETE, ISA, SAE, etc.
4. Sports facilities on campus or by renting playgrounds and premises for students

5.2 Efforts made by the institution for tracking the progression

- Through QMS by checking attendance and academic Non conformity
- Through formative assessment throughout the semester
- Interim reviews for Projects and Seminars
- Counselling through class teachers and Dept. Heads

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
3490	380	14	--

(b) No. of students outside the state

99

(c) No. of international students

104

	No	%		No	%
Men	2833	73.20	Women	1037	26.80

U. G.

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
2135	322	120	590	27	3194	2069	320	126	589	22	3126

P. G.

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
254	29	6	75	1	365	236	33	4	70	2	345

Demand ratio 1:100

Dropout % 1.27

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

By arranging Guest Lectures of past students and experts regarding preparation for competitive examinations such as UPSC, MPSC, IES etc.

No. of students beneficiaries

200

5.5 No. of students qualified in these examinations

NET	--	SET/SLET	--	GATE	89	CAT	21
IAS/IPS etc	--	State PSC	--	UPSC	--	Others (GRE)	237

5.6 Details of student counselling and career guidance

1. Dialogue and discussion with Class Teacher, Senior Faculty Member about routine issues as well as career planning.
2. Career guidance workshop under Entrepreneur Development Cell

No. of students benefitted

343

5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
145	690	468	--

5.8 Details of gender sensitization programmes

1. Ladies Meet – Meditation and Yoga for stress reduction. Dt. 29/01/16. By Dr. Prachiti Punde
2. Safety for ladies Program – Dt. 12/02/2016. By Local Police Officers
3. International Women’s Day – Dt. 08/03/2016 – Invited talks by Ms. Manjiri Prabhu, Ms. Dipti Vaidya
4. Women Empowerment Activity – Dt. 12/10/2015 – NSS Camp . Information about Weaving workshops, Bachat Gat formation, Tomato Sauce making, paper bag making, embroidery was given to rural women

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	108	107.3 Lac
Financial support from government	1580	1151 Lac
Financial support from other sources	101	14 Lac
Number of students who received International/ National recognitions	1	1.6 Lac

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 No. of social initiatives undertaken by the students

5.13 Major grievances of students (if any) redressed: Improvement in Student Portal for better use

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision : To be globally acclaimed Institute in Technical Education and Research for holistic Socio-economic development

Mission : 1. To impart knowledge and skilled based education in collaboration with Industry, Academia and Research Organizations 2. To strengthen global collaboration for students, faculty exchange and joint Research 3. To prepare competent Engineers with the spirit of Entrepreneurship 4. To inculcate and strengthen Research aptitude amongst students and faculty

6.2 Does the Institution has a management Information System

Computerization of administration

Administration at VIT is computerized under ERP. Following are the objectives of ERP.

- To provide one central repository for all information that is shared by all the various ERP facets in order to smooth the flow of data across the organization.
- To enhance productivity, efficiency of processes to achieve institutional objectives.
- Modular design to facilitate seamless integration of new requirements and growth.
- To reduce the response time by effectively transferring crucial information.
- To reduce paper work and increase operational efficiency.
- To streamline the numerous functions performed by the institute as a whole.

ERP provides a fully automated solution for running institutional processes with following Modules

- Registration
- Admission
- Fee Collection
- I-Card Generation
- User Management
- On Line Mid Semester Examination
- Sending Result Of Mid Semester On SMS And Email.
- Sending SMS, mail to students
- Staff Appraisal System (feedback)
- Feedback based courses to faculty. Creation ,updatation of question
- Exam Marks Entry
- Examiner appointment, marks entry of theory TA, ESE and LAB marks.
- Exam Result
- Exam result calculation, declaration, sending SMS
- Exam Gradation
- Exam seating arrangement and many other exam utilities
- Staff Record Storage
- Leave Management
- Load Allocation subject assignment to staff before start of semester
- Timetable generation and various reports
- Room database, time table preconditions. staff conditions, reconditions of departments
- Course ,institute feedback
- Feedback on course contents , institute feedback
- Dynamic Query analyzer
- Availability of different type of information in required format.
- Payroll processing and staff management.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

- Module Pattern
- Reduced Class strength
- Exposure to international languages such as French, German, Spanish
- Four semester long communication and Soft Skill Courses
- Mini Project – Every semester
- Computer and Electronics oriented workshops alongwith conventional workshops
- Commerce, Law, IPR related electives
- Yoga, Philosophy, Ethics related electives
- Health, Hobbies, Skills related electives
- PD Courses designed and conducted by Industry or Industry Experts
- Comprehensive Viva Voce
- Internationally compatible Academic Calendar to provide internship opportunities for substantial duration
- Self paced planning of Engineering – slow learners and fast learners
- Honors – Mini specialisation in special domain and Minor – Interdisciplinary knowledge acquisition facility

6.3.2 Teaching and Learning

English Proficiency tests, bridge courses for Diploma to Degree direct admissions are carried out effectively in the Institute. For advanced learners, internship activities are supported. Possibilities such as Honors course are scheduled from the forthcoming Academic Year. Tutorial sessions are in-built component for many relevant subjects. For mentoring the students, an effective Class Teacher – Guardian scheme is in place for the past few years.

Group discussions, quizzes, open book exams, MCQs based assessment are followed. The use of multimedia such as LCD, OHP is very common. Audio visual aids for language courses are available. The Library has a variety of CDs which are uploaded on a server for common usage. Also the NPTEL (National Program for Technology Enhanced Learning) resources can also be used within the campus through campus wide network. Field visits are a common feature. Through visits, demos, expert lectures maximum efforts are taken by the Institute to supplement the teaching-learning process.

The examination pattern has a strong continuous assessment component. The student progress is monitored by identifying non-performing students and by taking effective measures to address the non conformities. The Institute conducts Class Test, Mid Semester Exam and End Semester Examinations. The students are aware of the continuous assessment performances and are given opportunity for verification and revaluation of marks.

Industry experts also design and teach courses. Faculty from Purdue University teach courses in Mechanical Engg. And Instrumentation Engg.

6.3.3 Examination and Evaluation

- Setting up of question paper to challenge various essential abilities of students such as analysis, synthesis, interpretation, design, etc. based on Blooms' Taxonomy rather than conventional memory recall based questions
- Teacher assessment based on tutorials where ever applicable and Home Assignment for all subjects / courses
- Central Assessment Programme at the end of Semester
- Intimation of student performance and announcement of result via SMS and e-mail
- Declaration of result within 15 days
- Extra term for Final Year Courses – Summer Term
- Identification of academic and attendance defaulters and counselling for improvement in student performance
- Credit based system based on competition of SPI which is dependent on Grade points
- Formative and summative assessment
- Open book / MCQ / conventional Class Test
- MCQ based online Test with objective questions of varying degree of difficulty

6.3.4 Research and Development

1. A research steering committee was set up, whose meetings are held twice a semester
2. This committee is instrumental in working on following initiatives:
 - Setting up VIT research quality policy: Publication requirements, research proposal submission requirements for faculty of various cadres, PhD Scholars and masters students
 - Identifying departmental thrust areas and leveraging consultancy work by the faculty, based on these thrust areas.
 - To develop Industry Institute Linkages, collaborative research entrepreneurship and incubation centres
 - Identifying training needs of the faculty and deputing them to attend various seminars workshops and conferences to fulfil those needs.
 - To conduct inter-departmental research meetings once in a month to foster interdisciplinary research collaborations amongst the faculty of distinct departments.
 - To make sure University of Pune norms are followed for the conduction of the PhD program at the research centre
3. Institute faculty has received Research Grants from ISRO, BCUD - SPPU

6.3.5 Library, ICT and physical infrastructure / instrumentation

- Library :
 - Central Library is using the SLIM 21 Library Software with various modules for all library activity.
 - Circulation Section, Journal Section, Procurement and Processing Section are fully computerised.
 - Online public access catalogue facility is available within the campus for all students and staff.
 - Bar coded based issue / return of books.
 - Central Library has started SMS service from February 2014 for the benefit of students. Now students are getting SMS for their overdue books.
 - News related to UGC, AICTE, DTE, University of Pune as well as News related to our Institute are now available on Institute Website.
 - Softcopy of old question papers is now available on Institute Website.
- ICT :
 - Broadband connection – connectivity speed improved from 16 Mb to 40 Mb
 - Development of mobile app for student related information on website
 - Development of Video conferencing facility
 - PC configuration – upgradation of PCs
 - Online fee collection using Gateway
 - Project registration module
 - Facebook group for First year students
- Physical Infrastructure :
 - Campus security using surveillance cameras
 - Renovation of T&P facility
 - BT road construction
 - Food and canteen facility improvement
 - Refurbishment of Computer , Electronics and DESH Department
 - Construction of elevated service reservoir

6.3.6 Human Resource Management

- Submission of leave and sanctioning through ERP.
- Creation of data base for newly recruited faculty using ERP
- Integration of HR data for time table., feed back and allied activities
- Scanning of service books and other mandatory documents
- Updation of service books for qualification improvements using ERP

6.3.7 Faculty and Staff recruitment

- Presentation , technical / non technical interviews, establishment of panel for faculty recruitment involving Dean, Registrar, Head of the Department, Senior Professor along with Director as a Chairman.
- Induction Training Programme for newly recruited staff
- Exit interview of the retiring / resigning faculty

6.3.8 Industry Interaction / Collaboration

- Representation on Board of Studies, Academic Board and Board of Management
- Consultancy projects
- Placement activity
- Guest lectures
- Professional Development Courses
- U.G./ P.G. Project sponsorship
- Internship opportunities during Summer Vacation
- Industrial visits
- Joint research programme
- Annual HR Meet to enhance employability of students
- Participation in CII and other Industry Surveys
- Formation of Industry Advisory Board in each Department
- Annual HR meet for interaction with recruiters

6.3.9 Admission of Students

- Showcasing VI Institute activities through News papers, campaign
- Counselling and guidance through Book publication
- Academic reforms to address needs of Industry, academia and Society at large

6.4 Welfare schemes for	Teaching	<ul style="list-style-type: none"> • Group Insurance • Kalyankari Yojana • Credit Co-operative Society • Provident Fund and Gratuity • Tie – up with nearby Hospital for immediate medical attention at concessional rates
	Non teaching	
	Students	<ul style="list-style-type: none"> • Earn and Learn Scheme • Scholarships • Educational Loan assistance • Tie – up with nearby Hospital for immediate medical attention at concessional rates

6.5 Total corpus fund generated

6.6 Whether annual financial audit has been done Yes No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Professor from IIT Bombay, Powai	Yes	Dean Quality Assurance and ISO Consultant
Administrative	Yes	External auditor approved by BOM	Yes	Chief Finance Officer

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes No

For PG Programmes Yes No

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

- | |
|--|
| <ul style="list-style-type: none"> • Auto –allocation of seating arrangement. • Personalized Time Table available to the student upon entry of General Registration Number |
|--|

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

N.A.

6.11 Activities and support from the Alumni Association

- Representation in Board of Studies
- Alumni meet at Institute level in December 2015
- Material and technological support
- Interaction with faculty about Academics and Research
- Lectures about career planning

6.12 Activities and support from the Parent – Teacher Association

NIL

6.13 Development programmes for support staff

- English speaking and effective communication

6.14 Initiatives taken by the institution to make the campus eco-friendly

- 1) Utilisation of computers - Number of office procedures are online. Unit Test and its result is also given online to all students. E-journal subscription is available to staff and students in the Library.
- 2) Bio-metric machines are used for daily attendance purpose.
- 3) Maintenance of trees, lawns, bushes by applying fertilizers and pesticides
- 4) Using the back side of one-side printed paper for drafting purposes. Recycling of waste paper through agency is carried out regularly, instead of burning it.
- 5) Dried leaves of trees are used for preparing compost.
- 6) Number of students are making use of municipal transport facility, rather than personal vehicles to avoid air-pollution.
- 7) Low Wattage consuming CFL (Compact Fluorescent Lamps) are installed in the campus. CFL Lamps, fans, computers, printers and other electricity consuming items are switched off or shut down to save electricity.
- 8) Eco-friendly and Energy Star compliant computer peripherals and other electronic and electrical appliances are used.

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

1. Academic innovations to improve teaching learning at M.Tech. level
 - Soft Skill Courses , Semester Projects , Comprehensive Viva Voce
2. Inclusion of online fee payment through Gateways using ERP
3. Facebook Group for First year students
4. SMS alerts about book return deadline by Central Library
5. Filing of patents by faculty and students

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

1. Plan – To revise Under Graduate Structure & Syllabus
Action Taken - Implementation from Academic Year 2016-17
2. Plan – Department Industry Advisory Boards activities
Action Taken - Meetings of Department Industry Advisory Boards took place
3. Plan – Interaction with Department Mentor
Action Taken – Interaction of Department Mentors with Department faculty regarding Research guidance, facility support and academics
4. Plan – To organise HR Meet
Action Taken – HR Meet was organised on 26.04.2016 in Pune

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

1. PD Courses by Industry
2. Student Exchange Programme
3. Internships
4. Proper design of Academic Calendar
5. Declaration of results within 15 days after the Examination
6. Conduction of Online Test
7. Stake Holders' Feedback and its use for improvement
8. Conduction of annual HR Meet
9. ISO 9001: 2015 implementation
10. Active Forum to address Girl students and Women faculty issues
11. Computer literacy and training to High School students and Senior Citizens around the Institute
12. Study Centre for IGNOU - MCA
13. Financial assistance to needy students

7.4 Contribution to environmental awareness / protection

1. All electrical and electronics equipments are switched off when not in use
2. CFL tubes and lamps are installed
3. Photographs / videos are digitally stored instead of paper albums or plastic tape
4. Appeal to all students and staff for using public transport or sharing the vehicle
5. Green coverage area is around 200 sq. mtrs.
6. Underground drainage and storm water system is available which is connected to Corporation line.
7. Research contribution of faculty from Chemical Engg. And Mechanical Engg. Department in development of cost effective toilets for rural India

7.5 Whether environmental audit was conducted? Yes No

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

Institute carries out Management Review Committee meetings periodically to address quality related, academic and other issues .

8. **Plans of institution for next year**

1. To organize National Workshop in Computer Engineering
2. Two State level workshops in Multidisciplinary areas
3. To conduct orientation program for newly joined faculty
4. To revise F.Y. B.Tech. Syllabus
5. To depute students to NTU, Singapore and/or SUNY Binghamton
6. To carry out Examination Automation

PROF. A. S. MARATHE

Sd/-

Signature of the Coordinator, IQAC

PROF. (DR.) R. M. JALNEKAR

Sd/-

Signature of the Chairperson, IQAC

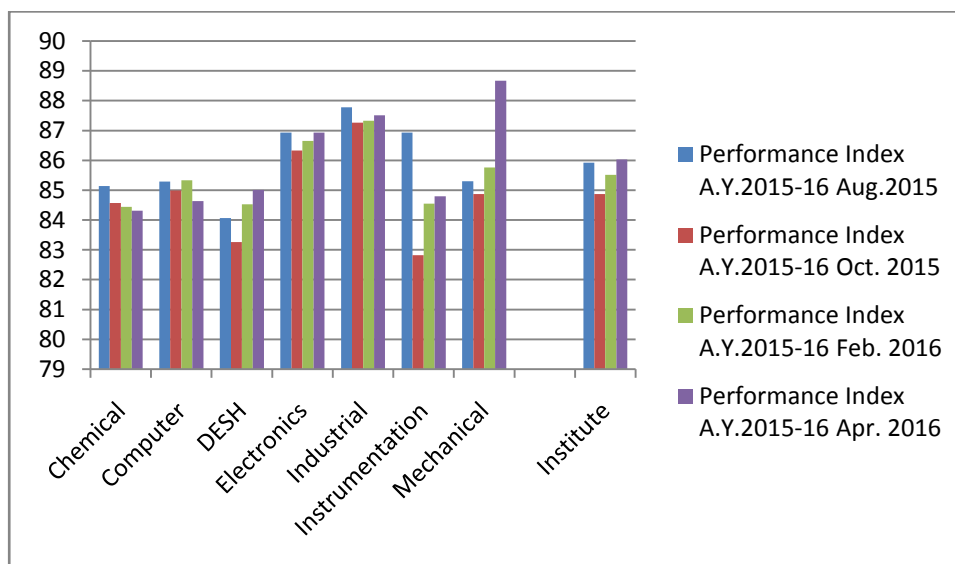
Annexure I

Abbreviations:

CAS	-	Career Advanced Scheme
CAT	-	Common Admission Test
CBCS	-	Choice Based Credit System
CE	-	Centre for Excellence
COP	-	Career Oriented Programme
CPE	-	College with Potential for Excellence
DPE	-	Department with Potential for Excellence
GATE	-	Graduate Aptitude Test
NET	-	National Eligibility Test
PEI	-	Physical Education Institution
SAP	-	Special Assistance Programme
SF	-	Self Financing
SLET	-	State Level Eligibility Test
TEI	-	Teacher Education Institution
UPE	-	University with Potential Excellence
UPSC	-	Union Public Service Commission

Annexure – II
Student feedback Analysis – A.Y. 2015-16

Performance Index A.Y.2015-16				
	Aug.2015	Oct. 2015	Feb. 2016	Apr. 2016
Chemical	85.138	84.574	84.446	84.31
Computer	85.29	84.988	85.331	84.64
DESH	84.07	83.259	84.532	85.01
Electronics	86.927	86.335	86.652	86.93
Industrial	87.779	87.268	87.326	87.52
Instrumentation	86.927	82.817	84.547	84.79
Mechanical	85.296	84.875	85.757	88.67
Institute	85.918	84.873	85.513	86.03



Annexure – III
Academic Calendar – A.Y. 2015-16

Sr. No.	Activity	Semester I	Semester II
I	College Re-opens on	-	02-01-2016
II	Welcome and Registration		
1)	Director's Address to S.Y.B.Tech., T.Y. B. Tech.& Final Year B. Tech., M. Tech. – II and MCA – II and III students (alongwith FE, ME – I and MCA – I students in II nd Semester)	21-07-2015	08-01-2016
2)	Director's Address to F.Y.B.Tech., M.Tech. – I & MCA – I students in I st Semester	17-07-2015	N.A.
3)	Registration for next Semester	26-10-2015 to 31-10-2015	18-04-2016 to 23-04-2016
III	Teaching – Learning		
1)	Teaching begins for all classes – UG, / PG / MCA all years	20-07-2015	04-01-2016
2)	Remedial Teaching, Test 2, Project Review, Seminar Review	03-10-2015 to 15-10-2015	19-03-2016 to 01-04-2016
3)	Remedial Teaching for all classes – UG / PG / MCA all years : Before Test 2 Before End Semester Examination	03-10-2015 26-11-2015	19-03-2016 05-05-2016
4)	End of teaching for all classes	25-11-2015	04-05-2016
5)	Commencement of teaching for next semester / year for students	04-01-2016 (for Sem II)	12-07-2016 (for A.Y. 2016-17)
IV	Examination & Assessment		
1)	Test 1	10-08-2015 to 24-08-2015 (*)	27-01-2016 to 09-02-2016 (*)
2)	Test 2, Project Review, Seminar Review	05-10-2015 to 15-10-2015	21-03-2016 to 01-04-2016
3)	Laboratory Course assessments, mini project assessment, seminar assessment	05-11-2015 to 07-11-2015 & 23-11-2015 to 25-11-2015	28-04-2016 to 04-05-2016
4)	End Semester Examination for all classes, Comprehensive Viva Voce, Major Project	27-11-2015 to 13-12-2015	06-05-2016 to 22-05-2016
5)	Central Assessment Programme (C.A.P.)	27-11-2015 to 19-12-2015	06-05-2016 to 26-05-2016

Sr. No.	Activity	Semester I	Semester II
V	Breaks, Students' Activities		
1)	Breaks		
	1) Diwali Break	09-11-2015 to 21-11-2015	N.A.
	2) Winter Break for students	14-12-2015 to 03-01-2016	N.A.
	3) Summer Break for students	N.A.	23-05-2016 to 11-07-2016
2)	Students' Activities		
	1) Annual Social Gathering	N.A.	26-02-2016 & 27-02-2016
	2) Vishwakarakandak	07-09-2015 to 10-09-2015	N.A.
	3) Mélange	N.A.	10-02-2016 to 13-02-2016
VI	Holidays		
	Ramjan Eid	Sat, 18-07-2015	----
	Independence Day	Sat., 15-08-2015	----
	Gokul Ashtami	Sat., 05-09-2015	----
	Ganesh Chaturthi	Thu., 17-09-2015	----
	Anant Chaturdashi Next Day	Mon., 28-09-2015	----
	Gandhi Jayanti	Fri., 02-10-2015	----
	Dassera	Thu., 22-10-2015	----
	Makar Sankranti	----	Thu., 14-01-2016
	Republic Day	----	Tue., 26-01-2016
	Shivaji Maharaj Jayanti	----	Fri., 19-02-2016
	Dhuli Vandan	----	Thu., 24-03-2016
	Gudhi Padwa	----	Fri., 08-04-2016
	Dr. Ambedkar Jayanti	----	Thu., 14-04-2016
	Ram Navami	----	Fri., 15-04-2016

The following Holidays fall on Sunday –
27-09-2015 : Anant Chaturdashi
01-05-2015 : Maharashtra Day

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[PROF. (DR.) R. M. JALNEKAR]
Dean – Academics and Director