

# Annual Quality Assurance Report for Academic Year 2013 – 2014

Submitted by



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

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

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# The Annual Quality Assurance Report (AQAR) of the IQAC for Academic Year 2013-14

## 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/index.php/quality-assurance/annual-quality-assurance-report-ay2013-14>

### 1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> 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

2013-14

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)

Not Applicable – This is the First AQAR being submitted to NAAC after latest Assessment

### 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="03"/>
2.3 No. of students	<input type="text" value="NIL"/>
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. Implementation of Quality Management system through ERP
2. Design and development of form Format for implementation through Quality Management System
3. Implementation of Course feedback, exit feedback, Faculty Appraisal by students
- 4 Training need analysis and implementation
5. Formation of Research steering committee.

2.15 Plan of Action by IQAC/Outcome

Plan of Action	Achievements
<p>1. Implementation of Quality Management System on ERP Platform</p> <p>2. Broadening the scope of Exit Feedback to understand future prospects of students</p> <p>3. To identify Training needs across all Departments</p> <p>4. To establish Research Steering Committee to promote Research activities in the Institute</p>	<p>1. Deployment fo Form Formats on ERP Platform</p> <p>2. Revision in the Exit Feedback form</p> <p>3. Training needs analysed and faculty deputed for relevant Training</p> <p>4. Established Research Steering Committee</p>

2.16 Whether the AQAR was placed in statutory body      Yes       No

Management       Syndicate       Any other body

Provide the details of the action taken

Board of Management Meeting Scheduled in September 2014



## 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	1	0	0	0
Advanced Diploma	-	-	-	-
Diploma	-	-	-	-
Certificate	-	-	-	-
Others	-	-	-	-
<b>Total</b>	24	-	-	-
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\* (On all aspects) Alumni  Parents  Employers  Students

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.

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

Entrepreneurship Development Cell
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## Criterion – II

### 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
221	172	32	17	-

2.2 No. of permanent faculty with Ph.D.

38

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
1	0	9	38	1	8	0	0	11	46

2.4 No. of Guest and Visiting faculty and Temporary faculty

46

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	04	13	20
Presented papers	01	--	--
Resource Persons	01	--	01

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

1. Pre-Semester planning about theory, laboratory and Tutorial courses
2. Predefined self study component for all courses.
3. Experiential learning opportunities through group mini projects in each semester.
4. Exposure to Industry through industry visits.
5. Internship opportunities for hands-on experience in Summer Break
6. Organization of Project Exhibition
7. Skill Development in Computer and Electronics Trades in Engineering Workshops

2.7 Total No. of actual teaching days during this academic year 186

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 42 214 214

2.10 Average percentage of attendance of students 81.02%

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.	72	42	13	9	6	2
B.Tech. Computer Engg.	174	115	28	15	11	5
B.Tech. Electronics & Telecommunication Engg.	143	95	16	20	7	5
B.Tech. Electronics Engg.	112	70	21	9	8	4
B.Tech. Information Technology	46	31	3	3	1	1
B.Tech. Industrial Engg.	31	19	4	5	1	2
B.Tech. Production Engg.	44	24	9	6	3	2
B.Tech. Instrumentation & Control Engg.	75	55	12	7	0	1

B.Tech. Mechanical Engg.	114	67	35	10	9	3
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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	1
UGC – Faculty Improvement Programme	NIL
HRD programmes	1
Orientation programmes	56
Faculty exchange programme	4
Staff training conducted by the university	NIL
Staff training conducted by other institutions	25
Summer / Winter schools, Workshops, etc.	19
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	139	--	--	10
Technical Staff	54	--	--	--

## Criterion – III

### 3. Research, Consultancy and Extension

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

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

#### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	4	4	1	6
Outlay in Rs. Lakhs	26.85	31.09	12.0	173.08

#### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	2	3	2	33
Outlay in Rs. Lakhs	5	4	2	99

#### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	45	25	NIL
Non-Peer Review Journals	24	NIL	NIL
e-Journals	14	NIL	NIL
Conference proceedings	49	14	NIL

### 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	2011-2013	DST SERB	3.2 Lakhs	Completed
	2012-2014	AICTE	5.3 Lakhs	Completed
	2012-14	AICTE	6.5 Lakhs	Completed
	2008-2012	ISRO	11.85 Lakhs	Completed
	2012-2014	DST	10.5 Lakhs	9.1 Lakhs
	2013-2015	DRDO	9.81 Lakhs	2.65 Lakhs
	2013-2016	ISRO	20 Lakhs	11.84 Lakhs
	2014-2016	CSIR EMR	12 Lakhs	NIL
Minor Projects	2012-14	BCUD, UoP	2 Lakhs	0
	2008-09 2014-16	BCUD, UoP <sup>1</sup>	3Lakhs	0.75Lakhs *
	2014-16	BCUD, UoP	2 Lakhs	1.05 Lakhs
	2014-16	BCUD, UoP	2 Lakhs	0.95 Lakhs
	2012-14	BCUD, UoP	2 Lakhs	2 Lakhs
Interdisciplinary Projects	2013-2015	Bil-Milenda Gate Foundation	6 Crores	7.5 Lakhs
Industry sponsored	One year	Nexgen Drying Systems Private Limited	Rs 50,000	Rs 50,000
	One year	Nexgen Drying Systems Private Limited	Rs 40,000	Rs 40,000
	NA	NVIDIA (Graphics K20,K40 cards)	6 Lakhs	6 Lakhs
Projects sponsored by the University/ College	NIL	NIL	NIL	NIL
Students research projects <i>(other than compulsory by the University)</i>	NIL	NIL	NIL	NIL
Any other(Specify)	NIL	NIL	NIL	NIL
Total	14		702.06 Lakhs	42 Lakhs

\* The institute has done the expenditure and Rs. 75,000 amount is expected from BCUD, UoP

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

ii) Without ISBN No.

<sup>1</sup> UOP: University of Pune

3.8 No. of University Departments receiving funds from

UGC-SAP	<input type="text" value="NA"/>	CAS	<input type="text" value="NA"/>	DST-FIST	<input type="text" value="NA"/>
DPE	<input type="text" value="NA"/>			DBT Scheme/funds	<input type="text" value="NA"/>

3.10 Revenue generated through consultancy

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

3.13 No. of collaborations International  National  Any other

3.14 No. of linkages created during this year

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	6
	Granted	NIL
International	Applied	NIL
	Granted	NIL
Commercialised	Applied	NIL
	Granted	NIL

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
15	2	1	NIL	1	NIL	11

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

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  State level   
National level  International level

3.22 No. of students participated in NCC events:

University level		State level	
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.23 No. of Awards won in NSS:

University level	<input type="text" value="-"/>	State level	<input type="text" value="5"/>
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.24 No. of Awards won in NCC:

University level	<input type="text" value="-"/>	State level	<input type="text" value="-"/>
National level	<input type="text" value="-"/>	International level	<input type="text" value="-"/>

3.25 No. of Extension activities organized

University forum	<input type="text" value="-"/>	College forum	<input type="text" value="10"/>		
NCC	<input type="text" value="-"/>	NSS	<input type="text" value="10"/>	Any other	<input type="text" value="-"/>

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

- Vasundhara Society of India (Environment awareness activity)
- Computer literacy Programs for Women, senior citizen and underprivileged children



## 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).	3	--	--	--
Value of the equipment purchased during the year (Rs. in Lakhs)	4.69	--	--	--
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.

#### 4.3 Library services:

	Existing		Newly added		Total	
	No.	Value (Rs.)	No.	Value	No.	Value
Text Books	50185	1,54,17,124 = 76	1932	11,66,212 = 00	52117	1,65,83,337 = 52
Reference Books	2862	79,77,918 = 48	36	2,82,467 = 00	2898	82,60,385 = 48
e-Books	373	1,15,545 = 00	NIL	NIL	373	1,41,050 = 00
Journals	219	6,41,905 = 32	NIL	NIL	213	8,71,273 = 34
e-Journals	2419	13,84,988 = 00	NIL	NIL	2419	14,61,939 = 00
Digital Database NPTEL	132	50,000 = 00	NIL	NIL	132	50,000 = 00
CD & Video	1445	2,56,461 = 00	02	NIL	1447	2,56,461 = 00
Others (specify) 1) BS Standards 2) DELNET	523	44,121 = 00 20,000 = 00	NIL	NIL	523	44,121 = 00 20,000 = 00

#### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	786	268	80	80	80	25	112	8
Added	376	109	0	0	0	3	54	3
Total	1162	377	80	80	80	28	166	11

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

<p>Internet Access through -</p> <p>Aircel Internet leased line : 16 Mbps</p> <p>Reliance leased line : 2 Mbps</p> <p>Training: Google Aps Training for Faculty and staff</p>
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4.6 Amount spent on maintenance in lakhs :

i) ICT	23.27
ii) Campus Infrastructure and facilities	78.72
iii) Equipments	9.04
iv) Others	6.40
<b>Total :</b>	117.43

## 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. Organising and conduction of Technical events such as Robocon, Melange, Viculp, AGON, etc.
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.

#### 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
3383	356	19	--

#### (b) No. of students outside the state

116

#### (c) No. of international students

75

	No	%		No	%
Men	2727	72.93	Women	1012	27.07

### U. G.

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1859	325	82	587	16	3206	1941	338	107	611	27	3383

### P. G.

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
251	22	3	46	1	348	272	30	5	62	2	356

Demand ratio 1:100          Dropout % 1.42

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

--

No. of students beneficiaries

NIL

5.5 No. of students qualified in these examinations

NET	-	SET/SLET	-	GATE	12	CAT	40
IAS/IPS etc	-	State PSC	14	UPSC	11	Others (GRE)	52

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

1000

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
123	900	477	4

5.8 Details of gender sensitization programmes

Improving efficiency of female faculty at work place – Yoga & Aerobics supervised by external expert ( Faculty benefitted 12)

## 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	NIL	NIL
Financial support from government	1582	10,16,82,907 = 00
Financial support from other sources	98	12,26,000 - 00
Number of students who received International/ National recognitions	NIL	NIL

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: Food Court facility

## Criterion – VI

### 6. Governance, Leadership and Management

#### 6.1 State the Vision and Mission of the institution

**Vision** : "From excellence at core to eminence above"

**Mission** : "Our Mission is to prepare competent engineers, imbued with the spirit of professionalism and responsible citizenship in a competitive global environment. To this end, management and faculty commit themselves to the pursuit of excellence in technical education through discovery and dissemination of knowledge, development of technical and social and inculcation of values that define professional conduct."

#### 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 language
- 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.



### 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

### 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 18 Mb
  - Development of mobile app for student related information on website
  - Development of Video conferencing facility
  - LCDs in Sharad Arena – 5200 Lumens
  - PC configuration – upgradation of PCs
  - Online fee collection using Gateways
- 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

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

6.5 Total corpus fund generated 60.00 lakhs

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	Dean Quality Assurance and ISO Consultant

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?

- 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 meets of Chemical Engineering and Instrumentation Engineering pass outs
- Material and technological support

6.12 Activities and support from the Parent – Teacher Association

NIL

6.13 Development programmes for support staff

- English speaking course
- Training of use of Fire Extinguishers

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

1. Paperless online Mid Semester Examination conducted every Semester.
2. Old PCs / Printers are donated to the School instead of writing off.
3. Printouts and photocopies are taken on both sides of the paper
4. Rough printing / draft writing are generally done on rough side of paper
5. Casual leave application are made through software
6. Wasted papers / NEWS papers etc. are forwarded for recycling purpose
7. Toner cartridge are recycled
8. Biometric attendance is used for all employees

## 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. Mobile App development for students related notices
4. SMS alerts about book return deadline by Central Library

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 - Formal approval of Academic Board is taken in 12<sup>th</sup> Academic Meeting (26.02.2014)
2. Plan – To layout revision in CPI Improvement Rule  
Action Taken - CPI Improvement Rule was resolved in 12<sup>th</sup> Academic Board Meeting (26.02.2014)
3. . Plan – Retention period for answer scripts  
Action Taken - Taking references from University of Pune, IITs and other Regional Autonomous Institutes, the answer scripts retention period is finalised
4. Plan – To form Department Advisory Boards  
Action Taken – Identification of Board Members and acceptance of their consent
5. Plan – Identification of Department Mentor  
Action Taken – Identification of Department Mentors and acceptance of their consent
- 6 Plan – To organise HR Meet  
Action Taken – HR Meet was organised on 16.06.2014 in Pune and 25.06.2014 in Bangalore

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: 2008 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. Greenery and plantation are made within the campus

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 a National / International conference in Multidisciplinary areas
2. To conduct orientation program for newly joined faculty
3. To conduct Pedagogy workshop for faculty
4. To increase faculty efforts to procure research funding from various funding agencies.
5. To organize Industry meet as a stakeholder interaction initiative.
6. To form an Industry Advisory Board

*PROF. A. S. MARATHE*

*Sd/-*

*Signature of the Coordinator, IQAC*

*PROF. (DR.) R. M. JALNEKAR*

*Sd/-*

*Signature of the Chairperson, IQAC*

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## 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

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## Annexure II – Academic Calendar A.Y. 2013-14

Bansilal Ramnath Agarwal Charitable Trust's

**VISHWAKARMA INSTITUTE OF TECHNOLOGY, PUNE – 37**

(An Autonomous Institute Affiliated to University of Pune)

### ACADEMIC CALENDAR (For Academic Year 2013 – 2014)

Sr. No.	Activity	Semester I	Semester II
<b>I</b>	<b>College Re-opens for students on</b>	<b>22-07-2013</b>	<b>03-01-2014</b>
<b>II</b>	<b>Welcome and Registration</b>		
1)	Director's Address to SE, TE & BE ME – II and MCA – II and III students (alongwith FE, ME – I and MCA – I students in II <sup>nd</sup> Semester)	25-07-2013	07-01-2014
2)	Director's Address to FE, ME – I & MCA – I students in I <sup>st</sup> Semester	To be announced later on	N.A.
3)	Registration	21-10-2013 to 26-10-2013	15-04-2014 to 20-04-2014
<b>III</b>	<b>Teaching – Learning</b>		
1)	Teaching begins for all classes – UG, / PG / MCA all years	22-07-2013	03-01-2014
2)	Remedial Teaching, Mid-Semester Examination, Project Review, Seminar Review	05-10-2013 to 12-10-2013	22-03-2014 to 29-03-2014
3)	Remedial Teaching for all classes – UG / PG / MCA all years Before End Semester Examination	23-11-2013 to 26-11-2013	02-05-2014 to 05-05-2014
4)	End of teaching for all classes	26-11-2013	05-05-2014
5)	Commencement of teaching for next semester / year	03-01-2014 (for Sem II)	To be Announced
<b>IV</b>	<b>Examination &amp; Assessment</b>		
1)	Class Test	19-08-2013 to 30-08-2013	03-02-2014 to 15-02-2014
2)	Mid Semester Examination, Project Review, Seminar Review	05-10-2013 to 12-10-2013	22-03-2014 to 29-03-2014
3)	Laboratory Course assessments, mini project assessment, seminar assessment	14-11-2013 to 22-11-2013	21-04-2014 to 26-04-2014
4)	End Semester Examination for all classes	27-11-2013 to 06-12-2013	02-05-2014 to 11-05-2014
5)	Comprehensive Viva Voce, Major Project	07-12-2013 to 10-12-2013	12-05-2014 to 19-05-2014
6)	Central Assessment Programme (C.A.P.)	27-11-2013 to 17-12-2013	02-05-2014 to 19-05-2014

Sr. No.	Activity	Semester I	Semester II
<b>V</b>	<b>Breaks, Students' Activities</b>		
1)	Breaks		
	1) Diwali Break	28-10-2013 to 09-11-2013	N.A.
	2) Christmas / Winter Break for students	11-12-2013 to 02-01-2014	N.A.
	3) Summer Break for students	N.A.	19-05-2014 to Commencement of next academic year
2)	Students' Activities		
	1) Annual Social Gathering	N.A.	March 2014 *
	2) Vishwakarakandak	September 2013 *	N.A.
	3) Mélange	N.A.	February 2014 *
<b>VI</b>	<b>Holidays</b>		
	Ramjan Eid	Fri., 09-08-2013	----
	Independence Day	Thu., 15-08-2013	----
	Gokul Ashtami	Wed., 28-08-2013	----
	Ganesh Chaturthi	Mon., 09-09-2013	----
	Anant Chaturdashi	Wed., 18-09-2013	----
	Anant Chaturdashi Next Day	Thu., 19-09-2013	----
	Gandhi Jayanti (office staff only)	Wed., 02-10-2013	----
	Christmas (office staff only)	Wed., 25-12-2013	----
	New Year Day (office staff only)	----	Wed., 01-01-2014
	Makar Sankranti	----	Tue., 14-01-2014
	Shiv Jayanti	----	Wed., 19-02-2014
	Dhuli Vandan	----	Tue., 18-03-2014
	Gudhi Padwa	----	Mon., 31-03-2014
	Ambedkar Jayanti	----	Mon., 14-04-2014
	Maharashtra Day	----	Thu., 01-05-2014

The following Holidays fall on Sunday –  
13-10-2013 : Dassera  
26-01-2014 : Republic Day

(\*) - Details to be finalised

Date : 24/04/2013

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