

The Annual Quality Assurance Report (AQAR) – 2016-17

Submitted By



Veer Surendra Sai University of Technology, Burla

Dist. Sambalpur – 768018, Odisha

Website : www.vssut.ac.in

Email : vc@vssut.ac.in

**The Annual Quality Assurance Report (AQAR) of the IQAC
for the academic year July 1, 2016 to June 30, 2017**

**VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA,
BURLA**

Part – A

I. Details of the Institution

| | |
|--------------------------------------|----------------------------------------------------|
| 1.1 Name of the Institution | Veer Surendra Sai University of Technology, Odisha |
| 1.2 Address Line 1 | P.O.-Engineering College, Burla |
| Address Line 2 | SAMBALPUR, ODISHA |
| City/Town | SAMBALPUR |
| State | ODISHA |
| Pin Code | 768018 |
| Institution e-mail address | vc@vssut.ac.in, vcvssut@gmail.com |
| Contact Nos. | (0663)-2430211, 2430204(FAX) +91- 9437572477(M) |
| Name of the Head of the Institution: | Prof. Atal Chaudhuri |
| Tel. No. with STD Code: | (0663)-2430211, |
| Mobile: | +91- 9437572477(M) |

Name of the IQAC Co-ordinator:

Dr.Bibhuti Bhusan Pati

Mobile:

9437420409

IQAC e-mail address:

iqac@vssut.ac.in

1.3 NAAC Track ID (For ex. MHC0GN 18879)

ORUNGN11370

1.4 NAAC Executive Committee No. & Date:

(For Example EC/32/A&A/143 dated 3-5-2004.

This EC no. is available in the right corner- bottom of your institution's Accreditation Certificate)

EC(SC)/12/A&A/4.1

1.5 Website address:

www.vssut.ac.in

Web-link of the AQAR:

www.vssut.ac.in/IQAC

For ex. <http://www.ladykeanecollege.edu.in/AQAR2012-13.doc>

1.6 Accreditation Details

| Sl. No. | Cycle | Grade | CGPA | Year of Accreditation | Validity Period |
|---------|-----------------------|-------|------|-----------------------|-----------------|
| 1 | 1 st Cycle | B | 2.76 | 2016 | 2021 |
| 2 | 2 nd Cycle | | | | |
| 3 | 3 rd Cycle | | | | |
| 4 | 4 th Cycle | | | | |

1.7 Date of Establishment of IQAC :

DD/MM/YYYY

06.01.2015

1.8 AQAR for the year (for example 2010-11)

2016-2017

1.9 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)

- i. AQAR _____ (DD/MM/YYYY)4
- ii. AQAR _____ (DD/MM/YYYY)
- iii. AQAR _____ (DD/MM/YYYY)
- iv. AQAR _____ (DD/MM/YYYY)

1.10 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

1.11 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

1.12 Name of the Affiliating University (for the Colleges)

It is a non-affiliating unitary
University of Govt. Of Odisha

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

| | | | |
|----------------------------------------------|------------------------------------|------------------------------|---------------------------------------------------|
| Autonomy by State/Central Govt. / University | <input type="text" value="State"/> | | |
| 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" value="✓"/> | DST-FIST | <input type="text" value="✓"/> |
| UGC-Innovative PG programmes | <input type="text"/> | Any other (<i>Specify</i>) | <input type="text" value="Centre of Excellence"/> |
| UGC-COP Programmes | <input type="text"/> | | |

2. IQAC Composition and Activities

| | |
|-------------------------------------------------------------------|---------------------------------|
| 2.1 No. of Teachers | <input type="text" value="5"/> |
| 2.2 No. of Administrative/Technical staff | <input type="text" value="3"/> |
| 2.3 No. of students | <input type="text"/> |
| 2.4 No. of Management representatives | <input type="text" value="1"/> |
| 2.5 No. of Alumni | <input type="text"/> |
| 2.6 No. of any other stakeholder and community representatives | <input type="text"/> |
| 2.7 No. of Employers/ Industrialists | <input type="text"/> |
| 2.8 No. of other External Experts | <input type="text" value="1"/> |
| 2.9 Total No. of members | <input type="text" value="10"/> |
| 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

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year *

| Plan of Action | Achievements |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| 1.Orientation & Training programmes to newly joined faculty members | Orientation programme has been conducted on 20 th February, 2017 for the newly joined faculty members. |
| 2. Academic Audit | Academic audits were conducted to ensure completion of syllabus, augmented syllabus, Internal Assessments, Students' Seminar, Projects etc. |
| 3. Automation System | Office automation system has been |

| | |
|---------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| | implemented from the academic session 2016-17 in examination system, result etc. |
| 4. Implementation of CBCS system | The choice-based credit system has been introduced from the academic session 2017-18. |
| 5. NBA accreditation of remaining B.Tech.& M.Tech. programmes | Effort has been taken to apply for accreditation of the remaining B.Tech. and M.Tech. programme by 31 st July, 2018. |
| 6. Selection of teaching and non-teaching posts | On regular basis as per rules embolished in Act and Statute of VSSUT |
| 7. Submission of Application & SAR to NBA | Civil, Electrical, Mechanical, MCA, Computer Science & Engg and IT |
| 8. E-learning Centre | Inaugurated by Hon'ble Chief Minister. |

* Attach the Academic Calendar of the year as Annexure.

2.15 Whether the AQAR was placed in statutory body Yes No

Management

Syndicate

Any other body

IQAC & HOD/Dean Meeting

Provide the details of the action taken

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

| Total | Asst. Professors | Associate Professors | Professors | Others |
|-------|------------------|----------------------|------------|--------|
| 217 | 135 | 49 | 25 | 00 |

2.2 No. of permanent faculty with Ph.D.

113

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 |
| 30 | 34 | 27 | 37 | 02 | 22 | 0 | 0 | 59 | 93 |

2.4 No. of Guest and Visiting faculty and Temporary faculty

80

02

2.5 Faculty participation in conferences and symposia:

| No. of Faculty | International level | National level | State level |
|------------------|---------------------|----------------|-------------|
| Attended | 34 | 65 | 18 |
| Presented papers | 25 | 58 | 12 |
| Resource Persons | 10 | 24 | 32 |

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

Lecture Notes uploaded in the University website, e-journal have been subscribed, Evaluated answer scripts are shown to the students.

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

180

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

Double Valuation, Photocopy, Open Code, online multiple choice questions

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

25

10

17

2.10 Average percentage of attendance of students

80%

2.11 Course/Programme wise distribution of pass percentage :

| Title of the Programme | Total no. of students appeared | Division | | | | |
|------------------------|--------------------------------|--------------|--------------|--------------|--------------|--------|
| | | Above 9 CGPA | Above 8 CGPA | Above 7 CGPA | Above 6 CGPA | Pass % |
| B.Tech | 804 | 10% | 30% | 40% | 8% | 2% |
| M.Tech | 229 | 10% | 30% | 40% | 8% | 2% |
| M.Sc. | 33 | 10% | 30% | 40% | 8% | 2% |
| MCA | 34 | 10% | 30% | 40% | 8% | 2% |
| M.Phil | 05 | 10% | 30% | 40% | 8% | 2% |
| Ph.D | 09 | 10% | 30% | 40% | 8% | 2% |

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

- Internal & External Academic Audit
- Monitor all the academic activities such as syllabus completion and value added courses.
- Monitors the internal assessment test evaluation and suggests for enrichment.

2.13 Initiatives undertaken towards faculty development 225

| <i>Faculty / Staff Development Programmes</i> | <i>Number of faculty benefitted</i> |
|------------------------------------------------|-------------------------------------|
| Refresher courses | 30 |
| UGC – Faculty Improvement Programme | 0 |
| HRD programmes | 5 |
| Orientation programmes | 150 |
| Faculty exchange programme | 10 |
| Staff training conducted by the university | 14 |
| Staff training conducted by other institutions | 10 |
| Summer / Winter schools, Workshops, etc. | 6 |
| Invited Lectures | 8 |

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 | 108 | 20 | 20 | |
| Technical Staff | 72 | 7 | 6 | |

Criterion – III

3. Research, Consultancy and Extension

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

The University has a separate SRIC office which is looking after the research and consultancy work. Faculty members are encouraged to submit research projects to various funding agencies like DST, AICTE, CSIR, DRDO, UGC, etc.

3.2 Details regarding major projects

| | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|--------------|-------------|-----------|
| Number | 01 | 16 | 07 | 12 |
| Outlay in Rs. Lakhs | 7.50 | 153.78 lakhs | 60.06 lakhs | 140.24 |

3.3 Details regarding minor projects

| | Completed | Ongoing | Sanctioned | Submitted |
|---------------------|-----------|---------|------------|-----------|
| Number | 0 | 1 | 0 | 0 |
| Outlay in Rs. Lakhs | 0 | 1.5 | 0 | 0 |

3.4 Details on research publications

| | International | National | Others |
|--------------------------|---------------|----------|--------|
| Peer Review Journals | 22 | 75 | 15 |
| Non-Peer Review Journals | 8 | 14 | 24 |
| e-Journals | 5 | 6 | 2 |
| Conference proceedings | 14 | 66 | 10 |

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 | 2 | AICTE | 153.78 | Yes |
| Minor Projects | 2 | DST | 1.50 | Yes |
| Interdisciplinary Projects | 2 | UGC | 6.00 | Yes |
| Industry sponsored | | | | |
| Projects sponsored by the University/ College | | | | |
| Students research projects <i>(other than compulsory by the University)</i> | | | | |
| Any other(Specify) | | | | |
| Total | | | 104.48 | |

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 (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences organized by the Institution

| Level | International | National | State | University | College |
|---------------------|---------------|-------------|------------|------------|---------|
| Number | 1 | 10 | 2 | 6 | |
| Sponsoring agencies | TEQIP | AICTE/TEQIP | TEQIP, MCL | TEQIP | |

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

3.13 No. of collaborations International National Govt. Org.

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs :

From Funding agency From Management of University/College

Total

3.16 No. of patents received this year

| Type of Patent | | Number |
|----------------|---------|--------|
| National | Applied | 4 |
| | Granted | 1 |
| International | Applied | 0 |
| | Granted | 0 |
| Commercialised | Applied | 0 |
| | Granted | 0 |

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 |
|-------|---------------|----------|-------|------------|------|---------|
| 9 | 0 | 6 | 3 | 0 | 0 | 0 |

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

109

303

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

24

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

JRF 10 SRF 8 Project Fellows 4 Any other

3.21 No. of students Participated in NSS events:

University level 4000 State level

National level International level

3.22 No. of students participated in NCC events:

University level 200 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 20 College forum

NCC NSS Any other 6

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

- Sanskar Kendra
- Cleaning in campus as a part of Swachha Bharat Abhiyan conducted by NSS
- Blood Donation Camp
- Computer Literacy to school children
- Skill development to under matric local youths.

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 | 166.48 acre | | | |
| Class rooms | 62 | 6 Nos. | State Govt. | 68 |
| Laboratories | 58 | | | |
| Seminar Halls | 6 | | | |
| No. of important equipments purchased (\geq 1-0 lakh) during the current year. | | | | |
| Value of the equipment purchased during the year (Rs. in Lakhs) | | | | |
| Others | | | | |

4.2 Computerization of administration and library

- Computerization of Central library.
- Bar coding system followed.
- Internet services provides with 1 Gbps line Connectivity to University & Halls Examination system has been computerised.
- DELNET & IEEE E-learning materials are available.
- NPTEL materials

4.3 Library services:

| | Existing | | Newly added | | Total | |
|------------------|----------|------------|-------------|-------------|-------|------------|
| | No. | Value | No. | Value | No. | Value |
| Text Books | 85000 | 2500 lakhs | 2000 | 40 lakhs | 87000 | 2540 lakhs |
| Reference Books | 13000 | 200 lakhs | 1500 | 3.00 lakhs | 14500 | 203 lakhs |
| e-Books | | | | | | |
| Journals | 296 | 150 lakhs | 10 | 50.00 lakhs | 306 | 200 lakhs |
| e-Journals | 5 | 100 lakhs | 1 | 50.00 lakhs | 06 | 150 lakhs |
| Digital Database | | | | | | |
| CD & Video | 20 | 5.00 lakhs | 5 | 0.25 lakhs | 25 | 5.25 lakhs |
| Others (specify) | | | | | | |

4.4 Technology up gradation (overall)

| | Total Computers | Computer Labs | Internet | Browsing Centres | Computer Centres | Office | Departments | Others |
|----------|-----------------|---------------|----------|------------------|------------------|--------|-------------|--------|
| Existing | 450 | 15 | 2 | 2 | 1 | 10 | 16 | |
| Added | 50 | 1 | 0 | 0 | 0 | 0 | 0 | |
| Total | 500 | 16 | 2 | 2 | 1 | 10 | 16 | |

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

- Each department has developed their own computational laboratory with essential software.
- 1 GBPs internet connection through National Knowledge Network (NKN) available through the academic campus and in the Halls of Residence.
- Online registration of students at entry level in 2017-18.
- Automation of academic and examination system
- Important places are covered under CCTV coverage.
- Biometric attendance system for faculty & staff
- Availability of e-resources in the Central Library (ASME, ASCE, IEEE, Science Direct

4.6 Amount spent on maintenance in lakhs :

| | |
|------------------------------------------|-------------------|
| i) ICT | 200 lakhs |
| ii) Campus Infrastructure and facilities | 1000 lakhs |
| iii) Equipments | 1500 lakhs |
| iv) Others | 200 lakhs |
| Total : | 2900 lakhs |

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

Internet facility with Wi-Fi connectivity is made available throughout the campus to support the students in enhancing their knowledge with easy digital access.

Induction day for the fresher's, where in all the coordinators & conveners of different committees briefed the students about curricular & extracurricular activities

The University is catering to the needs of students belonging to deprived communities of Scheduled castes, Scheduled tribes, other backward classes and low-income groups. SC and ST Students are encouraged to continue their education by way of Scholarships from Government and Non – Government Organizations

Subject wise special coaching classes for slow learners are conducted during the leisure hours.

Industry Institute Interaction cell builds a good relationship between the Industry and Institute for the welfare of the students by organizing regularly guest lectures, seminars, workshops, conferences, industry visits, internships and campus connect programmes.

Training & Placement Cell organizes various training programmes to mould the students with core competency and employability.

Central Library is equipped with various books, references, journals and e-journals to supplement the thrust of students and to enrich their self-learning ability.

A Grievance Redressal Cell is constituted to address the grievances of the students and parents through feedback.

Student association in each department organizes various programmes to widen their exposure in their respective field.

National Service Scheme [NSS], Rotaract club, & other clubs encourage the students to take part in community development activities.

Student support services like multi-disciplinary forums, association with professional bodies, alumni interactions, student forums / clubs, language laboratory, cash incentives to student achievers are provided.

The undertaking of Anti ragging committee Affidavit has been made.

Students' feedback system is followed to obtain opinion from them about the effectiveness of the faculty and the facilities in the college.

Medical insurance for accidental and risk coverage is offered to all the students

Anti-Ragging awareness created among the students.

5.2 Efforts made by the institution for tracking the progression

- The Dean, Students' Affairs, Dean, Academic Affairs and Dean, PGS&R offices look after and to support the students in various academic as well as curricular activities.
- Appeal & Grievances Committee and Sexual Harrassment Committee have been formed to help the students.
- Head of the Department and Warden of Halls are in touch with the parents with the progress of wards and to elicit their views on various issues.
- Department meetings are being conducted twice in a month to monitor the progress of the action plan.
- Academic audit is being conducted every semester to evaluate the progress.

5.3 (a) Total Number of students

| UG | PG | Ph. D. | Others |
|------|-----|--------|--------|
| 3848 | 820 | 300 | 0 |

(b) No. of students outside the state

120

(c) No. of international students

0

| | | | | | |
|-----|------|----|-------|------|----|
| Men | No | % | Women | No | % |
| | 3504 | 70 | | 1464 | 30 |

| General | Last Year | | | | Total | This Year | | | | Total |
|---------|-----------|-----|-----|-----------------------|-------|-----------|-----|-----|-----|-------|
| | SC | ST | OBC | Physically Challenged | | General | SC | ST | OBC | |
| 3986 | 278 | 470 | | | 4734 | 4175 | 297 | 496 | | 4968 |

Demand ratio

Dropout %

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

Dean, CDCE is organizing the coaching classes for the students to face competitive examinations like GATE, GRE, CAT, etc.
 The department specially conducts special coaching to the students for competitive examinations.
 Experts are invited to motivate and provide training to the students for competitive examinations like GATE, CAT, UPSC, OPSC etc.

No. of students beneficiaries

200

5.5 No. of students qualified in these examinations

NET SET/SLET GATE CAT
 IAS/IPS etc State PSC UPSC Others

5.6 Details of student counselling and career guidance

There is a proctorial system in the University Training and Placement Cell which provides Career Counselling to the students.

No. of students benefitted

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 |
| 24 | 876 | 754 | |

5.8 Details of gender sensitization programmes

- Women Development Cell organizes several programmes to enhance the confidence level of girl students for their empowerment in the society. International Women’s Day was celebrated which is an opportunity to appreciate the remarkable contribution of women to our society.
- Personal and academic related problems of women are counselled and solved.
- Yoga and Pranayam programmes conducted in Halls of Residence.
- Induction programme on general etiquette during study.

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 | 01 | |
| Financial support from government | 926 | |
| Financial support from other sources | 100 | |
| Number of students who received International/ National recognitions | 25 | |

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 sanitary facilities in the Halls of Residences
- Provision of pure drinking water in the academic campus as well as in the Halls of Residence
- Provision of deep bore well to address shortage of water in the halls of residence
- Improvement of approach roads to Halls of Residence.
- Solid waste treatment measures taken in the academic and residential areas
- Issue of mark sheets and all certificates streamlined.

Criterion – VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

VISION OF THE UNIVERSITY

To emerge as an internationally acclaimed Technical University to impart futuristic technical education & creation of vibrant research enterprise that creates quality engineers and researchers, truly world class leader and unleashes technological innovations to serve the global society with an aim to improve the quality of life.

MISSION OF THE UNIVERSITY

VSS University of Technology strives to create values and ethics in its products by inculcating depth and intensity in its education standards and need based research through

- Participative learning in a cross-cultural environment that promotes the learning beyond the class room.
- Collaborative partnership with industries and academia within and outside the country in learning and research.
- Encouraging innovative research and consultancy through the active participation and involvement of all faculty members.
- Facilitating technology transfer, innovation and economic development to flow as natural results of research where ever appropriate.
- Expanding curricula as appropriate to include broader perspectives.
- Creation of service opportunity for the upliftment of society at large

6.2 Does the Institution has a management Information System

Steps are being taken to introduce MIS

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

6.3.1 Curriculum Development

In order to keep the students turned to the latest trends in the emerging areas and also to go in the line with the industrial needs and global competition, the curricula and syllabi are updated once in four/five year. However, the content of the syllabi can be changed every year if required. The major industries plays a significant role in curriculum development of the University. Each department takes inputs from the industries regarding the curriculum. The Industry personnel are also included in the Board of Studies.

6.3.2 Teaching and Learning

- Student seminars, group discussions and brain storming sessions have been conducted.
- Students take up mini project work
- Experimental learning is achieved in laboratory classes.
- Outcome based education method has been followed
- Creation of learning environment in classes
- Industrial visit, guest lectures, workshops, seminars.
- Teaching and Learning process is strengthened with the help of e-learning resources.
- Faculty development programmes and in-service training are conducted once in a year to enrich their teaching-learning methods.
- Remedial classes are given to weaker students.
- Mentoring and counselling of slow learners are part of teaching and learning process
- Organising soft skill and personality development classes
- Use of digital learning resources

6.3.3 Examination and Evaluation

The University is following semester system in all the programmes. The timely publication of result is a major strength of the University. One internal examination, Quiz / assignment / technical presentation given due wightage. Showing answer scripts to the students before the publication of result makes the system more transparent.

6.3.4 Research and Development

- SRIC office is established with an objective of promoting research by faculty members in newly emerging and challenging areas of Engineering, Technology, Science and Humanities. This office encourages the faculty members for applying research proposals/ projects and receiving funds from various sponsoring research agencies. Faculty members are provided financial assistance from TEQIP fund for for participating in conference, Symposia, Faculty Development programmes, Seminars etc.
- Encouraging faculty to organize, attend and present papers at state/ national/ international conferences and seminars.
- Faculty members are motivated to publish their research papers in reputed national and international journals / conferences.
- Faculty members guide the students to carryout research under student project

6.3.5 Library, ICT and physical infrastructure / instrumentation

Library:

The Central Library of the University is having an area of 10,900 sq.ft. The Library is fully automated by using SLIM 21 automation software. The Central Library has sufficient e-journals which include Science direct and DELNET & IEEE etc. and sufficient back volumes for all the departments. Digital library facilities with National and International online journals are also provided in the Central The library building is enabled with Wi-fi facility. Every year, additional volumes of books are added based on the requirements from all the departments. Further, all the engineering departments have developed their departmental Library for the benefit of the students in PG and Ph.D.

ICT:

The University has central facilities like Central Internet Facilities, Central Computer Facilities which provides all ICT tools to UG, PG and Ph.D. students. The University has smart class rooms and e-learning centres which provide basic needs of the students in solving their problems in research and development.

Physical infrastructure/instrumentation:

The PIC, Civil Works and campus supervisor is monitoring the maintenance of academic infrastructure and other facilities. The PIC, Horticulture looks after the maintenance of Central Lawns and green landscape. The green ambience of the campus is maintained by the civil maintenance section of the University.

6.3.6 Human Resource Management

The University is maintaining teacher student ratio i.e. 1:20. At present, 309 teaching posts have been sanctioned by the Govt. Of Odisha for various departments and University. The posts are filled up through open advertisement on all India basis. The University has been arranging orientation programmes for the newly joined faculty members of the University every year. Incentives are given to the faculty members for uploading lecture notes in the University website. Incentives are given to the faculty members for presenting research papers in reputed Journals / International and National Conferences. Faculty members are supported financially through TEQIP to attend Conference / Workshop & FDP conducted outside the University. Each faculty members were funded with a seed grant of Rs.1.00 lakhs to create ecosystem for research.

6.3.7 Faculty and Staff recruitment

The faculty and staff recruitment have been made through open advertisement in the leading news papers of Odisha and India. The selection is made through a Selection Board as per the guidelines of VSSUT Act and 1st Statute.

6.3.8 Industry Interaction / Collaboration

The University emphasizes upon career development of the students. This can be achieved by establishing MoUs with reputed core industries to enhance Industry-Institute Interaction activities like internships, industrial visits, value added courses, industrial projects, guest lectures etc., for the benefit of students.

- 1) Infosys Ltd, Bangalore
- 2) NI System (India) Pvt. Ltd, Bangalore
- 3) SKF India Ltd, Pune
- 4) Tech Mahindra, Pune

The University also signed MoU with the following foreign Universities for faculty exchange programmes

- 1) University of New Orleans, USA

Entrepreneur Development Cell is also functioning for enhancing the industry-institute relationship. The Entrepreneurship Awareness Camps are conducted every year by the Cell.

6.3.9 Admission of Students

Admission to B.Tech. programmes is made based on the all India rank secured in JEE(Main) conducted by CBSE. Admission to various M.Tech., M.Sc, Int. M.Sc., M.Phil and Ph.D. programmes are conducted by the University. Admission to B.Tech. (Lateral Entry) & MCA programmes are based on rank through OJEE.

6.4 Welfare schemes for

| Cadre | Scheme | Benefitted |
|--------------|--------|------------|
| Teaching | 8 | 234 |
| Non teaching | 6 | 230 |
| Students | 2 | 4900 |

6.5 Total corpus fund generated

285.4 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 | No | - | Yes | University Committee |
| Administrative | Yes | CAG, LFA | Yes | University Committee |

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?

- 1) Showing answer scripts to the students
- 2) Timely publication of results
- 3) Supplementary examination

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

The University is an Unitary one. It has enjoyed administrative, academic and financial autonomy.

6.11 Activities and support from the Alumni Association

- Alumni Meets are conducted every year. Global Alumni meet is also conducted from time to time. The Alumni Association is providing assistance in building the Golden Jubilee Gate, Seminar Hall etc.
- Alumni are invited to visit the University for guest lecturers & interaction with students to enhance the knowledge & skills of the students.
- The alumni help in bringing industries and companies for campus Placements and provides employment opportunities to the students.
- The Alumni entrepreneurs motivate and guide the students to become entrepreneurs.
- The Innovation and Idea Club provides necessary knowhow and manufacturing facility for pitching of idea, product development and apply for intellectual property rights.

6.12 Activities and support from the Parent – Teacher Association

- The parents are invited in the Orientation programmes organised by the University every year.
- The parents get an opportunity to interact with the faculty advisors and heads of the departments to know about their ward's performance and study.
- They are also invited to attend the meeting arranged for NBA, NAAC team visit from time to time. A feedback system is also introduced by the University.

6.13 Development programmes for support staff

The University is organising Skill development programmes for the supporting staff of the University and local unemployed youth. The Computer Science & Engg. department of the University organises Computer Awareness programmes for the supporting staff of the University.

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

- Solar street lights inside the campus
- Rain Water harvesting
- Energy conservation
- Use of renewable energy
- Green Environment and Regular tree planting.

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.

- Lecture notes and lesson plan prepared by each faculty.
- Improving soft skills of the student through training and placement.
- Improving teaching and technical skills of faculty by various programmes.
- Increasing placement opportunities for the student.
- Improving social involvement of the students through SANSKAR KENDRA and NSS.
- Value added courses improves the technical skills of the student.
- Most of the UG & PG courses are accredited by NBA. Steps are being taken to get all the programmes accredited.

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

Training & Placement Department conducted placement drives for the students.

24 Nos. of companies visited the University and 754 Nos. of students got offers from Campus Recruitment Programme.

Expert lectures, Seminars and events conducted for the students.

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

- 1) Non-negotiable academic calendar
- 2) Faculty Drive – Higher studies and research

****Provide the details in annexure (annexure need to be numbered as i, ii,iii)***

7.4 Contribution to environmental awareness / protection

- 1) Conducting Blood Donation Camp by SSG society
- 2) Collection of seeds from locally flourished trees and distribution of these seeds among various halls of residence.
- 3) Developing plantation in University and Hall premises
- 4) Optimal use of power in the campus
- 5) Solar power and back up

7.5 Whether environmental audit was conducted? Yes No

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

Strengths :

Highly qualified and experienced faculty members with doctorates
Premier Institute with strong alumni support
Top rank students take admission
TEQIP & RUSA funded University

Weakness :

Less number of patents
Faculty exchange programme
Students exchange programme
Industries supported laboratories

Opportunities :

Potential to contribute to economic development of region
Introduction of more innovative programme
Introduction of value added and skill development programmes
Curriculum and syllabus can be updated regularly to meet the ever changing industry requirements.

Challenges :

Collaboration with foreign universities to promote study abroad and student exchange programme
Inculcate ethical values in the mind of students
To upgrade laboratories
Collaboration with foreign Universities for faculty exchange programme

8. Plans of institution for next year

- Enhance of student projects.
- Develop Research ecosystem
- Modernisation of Laboratories
- New Centre of Excellence
- More International conferences

Name Dr. Bibhuti Bhusan Pati

Name Dr. Atal Chaudhuri


4/5/18

Signature of the Coordinator, IQAC

Director
IQAC, VSSUT
Odisha-768018


04.05.18

Signature of the Chairperson, IQAC

Vice-Chancellor
VSS University of Technology, Odisha
Burla
