



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

VARDHAMAN COLLEGE OF ENGINEERING

KACHARAM, SHAMSHABAD

501218

www.vardhaman.org

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Vardhaman College of Engineering (hereafter referred as VCE) was established in the year 1999. At present the college offers six undergraduate programs leading to B.Tech. degree, six postgraduate programs in engineering leading to M.Tech. degree and also MBA program. The college imparts quality education and continuous efforts were made in upholding quality practices. It meets all the requirements more than the standards laid by the apex bodies. The college is known for its state-of-the-art infrastructure consisting of centers of excellence, advanced laboratories, well stacked library with digital offerings, and ICT facilities. In the research front, several externally funded Research and other Projects worth 10.06 Crores of rupees are being executed.

VCE is affiliated to JNTUH and became autonomous (UGC) in 2014. It has been conferred as College with Potential for Excellence (CPE) status. VCE was accredited by NAAC with 'A' grade. Five of its UG Programs were accredited by NBA under Tier-I. The college consistently improving its position over years and stands 152nd rank in NIRF of MHRD in the year 2019 and three departments are recognized as Research Centres by JNTUH.

A dedicated and committed faculty team strive hard for realizing the Vision through well-defined Mission. The college is practicing OBE since 2015 and successful in disseminating OBE culture from designing curriculum through assessment. Based on the AICTE model curriculum, the college tweaked its curriculum for improving the academic standards. In NPTEL certification courses, the college secured A grade and students/faculty have bagged good number of Gold Medals.

A separate Competency Development Cell with qualified and experienced faculty established to support students in the extended learning. The student career options are realized through dedicated Training and Placement Centre, which provides professional guidance and facilitate the campus placement drives. More than 80% of its students are being successfully placed in various companies.

Another career option was nurtured through the Center for Innovation and Entrepreneurship (CIE) for promoting entrepreneurship. CIE conducts entrepreneurship awareness camps, FDPs, entrepreneurship talk series and ideation camps. The activities of CIE are being funded by EDI and well supported by industry experts from TiE-GRAD, Hyderabad.

Vision

To be a pioneer institute and leader in engineering education to address societal needs through education and practice

Mission

- To adopt innovative student-centric learning methods
- To enhance professional and entrepreneurial skills through industry-institute interaction
- To train the students to meet the dynamic needs of the society

- To promote research and continuing education

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- 1) Visionary and benign management
- 2) Vision, Mission, Programme Educational Objective are well defined and followed
- 3) Availability of Strategic Planning
- 4) Excellent infrastructure facilities
- 5) Well qualified, committed and experienced faculty
- 6) Internet with high bandwidth
- 7) Well stacked library of text books, journals and digital resources
- 8) Strong faculty with a balance of interest in teaching, research, and consultancy
- 9) Innovative Curriculum Design and Development
- 10) Purdue university courses in the curriculum
- 11) Integrated Courses for enhancing the learning
- 12) Alternate Assessment Tool (AAT); a freedom for the faculty to implement newer assessments tools
- 13) Question papers are set as per Bloom's Taxonomy
- 14) Assessment Rubrics for mini and major projects
- 15) Practicing outcome-based Education
- 16) Team work of faculty & staff
- 17) Research Development and Growth in terms of several outcomes
- 18) Active student environment-learning communities, programs, student organizations and clubs
- 19) Robust network infrastructure in place
- 20) Input quality of the students is good
- 21) 95% to 100% admissions

- 22) Good Success rate of students
- 23) Good Faculty-Student Ratio
- 24) Adequate research facilities
- 25) University approved research centers
- 26) Good placements record
- 27) Good Classroom ambience for learning
- 28) Use of ICT tools by all faculty members
- 29) Well-equipped and neatly maintained Laboratories
- 30) Documentation and Record keeping is good
- 31) Ever-growing Innovation and Entrepreneurship awareness activities
- 32) Adequate infrastructure for the start-up eco system
- 33) Regular Parent-Teacher Meetings
- 34) Alumni engagement for the institute growth & development
- 35) Encouragement for Innovative teaching practices
- 36) Student Competency (Skill) Development Cell with in house trainers
- 37) Exclusive Training & Placement Cell with adequate facilities for training
- 38) Active engagement of the Stakeholders
- 39) Good relationships with the industry
- 40) Industry specific add-on training programmes
- 41) Extension lectures for strengthening learning
- 42) Industrial Visits in every semester
- 43) Self-learning for space and time for the students
- 44) Well maintained hostels for boys and girls with additional amenities
- 45) Indoor and outdoor sports facilities

46) Separate students lounge

47) Outreach and extension programs

Institutional Weakness

1. Location of the institute
2. Less priority for Sports and games activities and other extracurricular activities
3. Student mentoring system
4. Poor Communication skill of students: As most of the students are first generation learners, their communication skills need to be improved
5. Lack of long-term budget planning and a process that is transparent
6. Lack of diversity
7. Lack of NRI student attraction
8. Lack of targeted advertisements to students out-of-state or out-of-region

Institutional Opportunity

1. Placement opportunities in IT sector
2. Scope for tie up with institute of national and international repute such as IITH, UOH, ISB, CCMB, NIN etc.
3. Scope to harness potential of strong Alumni base for betterment of college
4. Scope for student internship opportunities in and around the city for students of all streams.
5. Institute's proximity to airport may enable us to explore possibilities of networking with national and international personalities of repute
6. The bane that the institute is located away from the city may become boon as most of the day scholars end up staying in the campus till the end of contact hours
7. Transform pedagogical practices and adopt latest technological relevant courses in curriculum
8. Scope to incubation facilities for tech-based startup providing higher viability for market Space

Institutional Challenge

1. Decreasing placement opportunities for Core branches such as Mechanical, Electrical, Civil
2. Input quality of students and their academic performance affects placement record
3. Universities set up by Corporate in the vicinity of our campus.
4. Saturation of engineering education market.
5. Declining interest in traditional (CE, ME, EEE) programs by students.
6. Continuous change in technology that challenges the employability of the students.
7. To develop the language proficiency levels of the students with Telugu medium background and make them reach the expectations of the industry.
8. There is a big challenge to retain experienced and qualified faculty
9. Improper grading by ranking agencies.
10. Students' increasingly possessing an entitlement mentality

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Vardhaman College of Engineering (hereafter referred as VCE) has been conferred autonomous status by UGC in 2014. Since then, the VCE began designing its curriculum based on its Vision and Mission to provide high quality education to its students. The curriculum design and development process remained a continuous and inclusive feature. The institution implements choice-based credit system (CBCS) and offers 160 credit undergraduate programs, based on the AICTE model curriculum to suit the local and industry (global) requirements.

From time to time, the curriculum is being revised based on the technology advancement and feedback received from all the stakeholders. The syllabus initially prepared by the Department Academic Committee, and thoroughly discussed at respective Board of Studies and finally stamped by the Academic Council which is considered and approved by the College Governing Body and then notified to the concerned stakeholders.

An MOU with Purdue University's EPICS program enabled VCE to introduce and embed four courses (4 credits) of international curriculum focus of design thinking & social innovation etc. Sufficient number of credits (weightage) were allotted for internship and mini-project and capstone project. The institution has signed MOUs with relevant organizations to offer internships and provide necessary training related to skill development, entrepreneurship and employment.

During the last five years, about 20% of the syllabus is revised in each of the programs. Around 383 new courses were introduced out of 701 unique courses offered during the last five years. All the courses offered by various programs focus on skill development, multidisciplinary activities, employability and entrepreneurship. The departments conduct, independently, various activities that have direct bearing on skills development, employability and entrepreneurship. Apart from the courses offered as part of the curriculum, 76 value added courses were also offered to the students by all the departments during the last five years and around 51% of the students have undergone these courses and got benefitted out of them. The primary focus of revising curriculum frequently is to meet the industry requirements by introducing the cutting technologies and also achieve the attainment of the Program Outcomes (POs) and Program Specific Outcomes (PSOs).

Teaching-learning and Evaluation

Vardhaman College of Engineering (hereafter referred as VCE) attracts fairly good quality of students in the state of the Telangana. It offers 6 UG and 7 PG programs and seats are filled through state level entrance examinations satisfying the number of seats earmarked under reserved categories as per the GO issued by the Government.

The well qualified faculty with an average experience of over 15 years are the strong back-bone of the TLP and Evaluation. The faculty continuously strive hard to be abreast with latest technologies from time to time. As a testimony of the faculty acumen, 73% of them have received several accolades and awards from diverse trainings and FDPs. More than 90% of the faculty use ICT tools and student-centric methods to focus on experiential learning, participative learning and problem solving. The institution prepares academic calendar and course plan to execute its activities at the department level and institution level.

The learning levels of the students are continuously assessed and based on their performance in the assessments, students were divided into two categories; Category-1 are those students who secure more than or equal to 50% and remaining students fall in Category-2. The Category-1 students were encouraged to participate in activities like project-based learning, explore content beyond syllabus, take-up projects, and on-line certification courses by NPTEL/SWAYAM/MOOCs whereas, the Category-2 students will be provided with remedial classes to enhance their learning levels.

An autonomous examination cell monitors, reviews and revises the conduction of assessments and evaluation in a systematic way and ensures transparency in its processes. The cell is automated and functions effectively starting from student registrations for examinations, question paper generation, ensuring the question paper quality, evaluation, results processing and declaration of results. The examinations branch has a manual of its processes and releases its consolidated examination reports annually.

The departments compute the attainment of COs, POs and PSOs, continuously review the attainment levels and take necessary actions for improvement.

Research, Innovations and Extension

Vardhaman College of Engineering (hereafter referred as VCE) promotes research and innovation among its faculty by creating suitable eco-system. For the last five years, a steady growth in the faculty research outcomes is visible in terms of filing patents, publishing research papers in reputed journals and also fetching externally funded research projects from various government organizations including DST, AICTE, UGC, DRDO, and BARC etc. There are about 36 patents published by the faculty and 37 research projects granted of 8.79 crores rupees worth. Till now approximately 500 research papers are published by our faculty which is two publications per faculty. The quality of publications can be best understood by the h-index. The h-index of the publications of Vardhaman faculty taken from Scopus is 12.

In order to motivate the faculty to take-up research several incentive schemes are initiated by VCE. In addition, a new policy called Vardhaman Research Promotion Scheme (VRPS) is launched to extend support for research and to provide seed money based on a review of experts. This is a modified replacement of the existing seed money policy of the institute. Further, the fellowship and membership fee are paid by the institute to encourage the faculty connect. Faculty members are deputed to national and international conferences to present their research findings. Three research centers are sanctioned by JNTUH to the departments of ECE, Mechanical Engineering and Computer Science & Engineering. As part of promoting research, the college gives incentives to the faculty for publishing research papers. Till now more than 25 lakh rupees is released towards incentives.

To encourage and motivate students' involvement in research activities, a Center for Innovation and Entrepreneurship (CIE) is established in 2016. CIE conducts entrepreneurship awareness camps, talk series and ideation camps to promote entrepreneurship, innovation and incubation.

The College is also actively involved in extension activities to help society by its services. The college organizes number of workshops and sensitization programs to create research spirit among teachers and students. State-of-the-art infrastructure is available like maker space, incubation center, fabrication center, research database.

Infrastructure and Learning Resources

The college has impressive and sprawling campus spread in 14 Acres and 24 Guntas. It has a state-of-the-art infrastructure with a total of 38052 SQM built-up area. Required buildings are having ramps and lift facilities for easy access of PWDs. All these requirements not only meet the prescribed requirement as stipulated by the apex bodies but also almost double than the requirement. This indicates the commitment of the college management towards the development of students and contribution towards the state of Telangana.

The Instructional facilities include 56 classrooms, 14 tutorial rooms, 75 laboratories, 4 Seminar halls and Auditoriums with good ventilation, acoustics and ICT enabled. The Administration facilities include Principal office, 8 HOD rooms, 24 Faculty rooms, spacious Examination Control Office, Placement Office with Interview rooms, Security office and Bank ATM.

The Library is housed in a separate building with an area of 2,788 SQM and 500 seating capacity. The library is automated with NewGenLib 3.1.5 version ILMS. It has 66,201 volumes, 11,045 titles, rare books, manuscripts, and special reports with Reprographic/Scanning/Printing facilities. There is remote access for e-Journals, e-books, DELNET etc. Through Recording Room, faculty are encouraged to develop e-content for LMS, MOOCs etc. which are made available to students.

Computer Centre monitors the overall functioning of IT infrastructure. The institute maintains adequate 2:1 student computer ratio against (6:1) with 1723 Computers, 11 Servers and 200 MBPS Internet bandwidth to support 1 Gbps LAN and Wi-Fi. All building rooms and labs are equipped with UPS of 200 KVA capacity, Power Generators of 450 KVA and other required safety facilities.

Sports facilities include Cricket, Football grounds, Basketball, Volleyball, Tennis courts for outdoor games and indoor stadium for Ball badminton, chess, carrom board, Snookers etc. The Amenities include separate Boys and Girls Hostels, common rooms, Toilets, Gymnasium, Yoga center, Cafeteria and Sick room with all necessary facilities. The college promotes socialization by organizing cultural activities in auditoriums and college open area.

From the feedback of stakeholders adequate budget for upgrading, maintaining and utilizing physical, academic and support facilities is ensured.

Student Support and Progression

The government of Telangana introduced fee reimbursement for all the eligible students who are studying Engineering upto Rs 35,000/- per annum. About 48 % students of our college are receiving scholarship and fee reimbursement from govt. The college also provides few scholarships to the poor students who don't get any other scholarships. During the last five years, about 15 students are benefitted from this scheme from Vardhaman scholarship scheme.

The college conducts number of capability enhancement programs which enable the students to improve their skills other than curriculum. The student competency development center facilitates and provides guidance for Competitive Examinations, Career Counselling, Soft skill development, Remedial coaching, Bridge courses on regular basis to all the students. In addition, yoga and meditation classes were also conducted for better Body-Mind coordination. A Good number of students are benefitted through these training programs which is approximately 50%. Further about 10% of the students got benefitted by vocational training programs conducted by the institution. The institution has grievances and redressal cell which timely addresses within two days if any complaint is received.

VCE has separate Training and Placement Cell through which about 64 % of the Eligible students are placed in reputed companies. About 4% of students are progressing for higher education like M.Tech./MS/MBA/PhD. Good percentage of students are getting qualified in national level competitive examinations like GATE/NET/SLET/GRE/TOEFL. The college involves Students in various committees like Board of Studies, Department Technical Associations, Technical clubs, Sports clubs, Cultural clubs and National Service Scheme (NSS) to cater the overall growth and success rate of the institution

The Alumni Network supports the institution and contribute to its institutional and academic development. The college conducts Alumni meet every year in the name of “MITRA” at college campus and abroad, to bring together all the old students to share their experiences with faculty. The College believes and promotes wholesome/holistic education. Accordingly, the students were provided with wide variety of self-learning opportunities under mentorship. They are empowered to carryout/organize activities independently to hone their soft skills like team work, collaborative activities, networking among the peers and thus building self-confidence.

Governance, Leadership and Management

The governance model of Vardhaman College of Engineering (VCE) is democratic, participative, decentralized, and transparent to all the stakeholders for smooth functioning of the college in line with Institute’s Vision, Mission and Quality Policy. The college relies on well-built strategic plan focusing at tangible objectives. To attain the objectives in terms of knowledge, skills and development, the management aims at holistic development of the institution that includes professional ethics and academic excellence.

It adopts decentralization policy to administer effectively, it is functioning through various statutory and non-statutory committees. All in all, there are 24 committees support the college governance in a participatory and collaborative mode. This helps in smooth conduct of academic, financial and administrative activities of the college. The Institution has an outstanding reputation in Student Discipline, Teaching and Learning Process, Evaluation, Research and Development and Extension activities. The college encourages a worthwhile welfare schemes like Medical Insurance, Employee Provident Fund (EPF), Medical Leave, Maternity Leave and CCL, free transport are extended to teaching and non-teaching staff.

In VCE, the quality is taken as paramount importance. VCE strategically enhanced the quality of Teaching and Learning Process through continuous new initiatives such as Faculty Self-Appraisal, Training Programs for Teaching, Non-Teaching training programs, Workshops, Conferences, Educational Reforms, Setting the Quality Bench Marks, Key Performance Indicators, Incentives, Academic and Administrative Auditing (both internal & external), and Student Mentoring System etc.

VCE is implementing AICTE model curriculum of 160 credits with focus on integrated courses, internships, courses related to social responsibility. In addition, student can choose open and professional electives as per student choice. It ensures the effective utilization of financial and other resources for overall development of the institution. CPE status to VCE, 5 UG courses accredited by NBA under Tier I, NIRF Ranking (2017, 2018 and 2019 -151-200 Band), JNTUH recognized Research Centers are few of the significant improvements in Post accreditation.

Institutional Values and Best Practices

VCE maintains a balanced gender equity not only in-terms of number and also number of opportunities given to women. There are 28% women employees and 32% of girl students in the campus. We believe in providing an equal opportunity for all the genders and take some pertinent steps to bring sensitivity towards the gender related issues. In order to maintain safety and Security of the women faculty and girls' students, Women Cell (Grievance and Redressal) was established. The cell addresses women protection, inequalities and any form of sexual harassment issues faced by women and girls in the campus. As the responsible institution, we understand the waste management is one of the challenges that educational institutions have to face in accomplishing sustainability goals. Hence, we have taken some serious steps to waste management which is in the form of solid, liquid and e-waste. Approximately 22% of Total Energy is being met through renewable energy sources as green initiative.

Our College has successfully installed the rainwater harvesting system to effectively use the water resources. The college has prioritized the green practices and eco-friendly environment in the campus. The campus has aesthetically designed buildings, surrounded by greenery creating good ambience for learning.

Every year the institute organizes national festivals and birth/death anniversaries of the great Indian personalities. The college maintains complete transparency in all the activities like financial, academic, administrative and auxiliary functions. Inculcating social responsibility in students through innovative projects such as Social Innovation and Engineering Exploration, developing entrepreneurship through Centre for Innovation and Entrepreneurship (CIE) are some of the best practices adopted and implemented by the college.

The College has a clear Vision statement, *"To be a pioneer institute and leader in engineering education to address societal needs through education and practice"*. Quality education aimed and achieved through a variety of aspects such as relevant curriculum, delivery of courses, innovative pedagogy (outcome-based education), skill building, assessments, competency development, value-based education, interdisciplinary research, idea promotion, imbibing startup culture, empowering society through introducing projects, internships, and motivating students to be entrepreneurs are some of the distinctive parameters of VCE.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College	
Name	VARDHAMAN COLLEGE OF ENGINEERING
Address	Kacharam, Shamshabad
City	HYDERABAD
State	Telangana
Pin	501218
Website	www.vardhaman.org

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal	S. Sai Satyanarayana Reddy	08413-253335	9502653333	08413-253482	principal@vardhaman.org
IQAC / CIQA coordinator	P. Nageswara Rao	08413-253201	9908843163	-	iqac@vardhaman.org

Status of the Institution	
Institution Status	Private and Self Financing

Type of Institution	
By Gender	Co-education
By Shift	Regular

Recognized Minority institution	
If it is a recognized minority institution	No

Establishment Details	
Date of Establishment, Prior to the Grant of 'Autonomy'	01-01-1999

Date of grant of 'Autonomy' to the College by UGC	19-06-2014			
University to which the college is affiliated				
State	University name	Document		
Telangana	Jawaharlal Nehru Technological University	View Document		
Details of UGC recognition				
Under Section	Date	View Document		
2f of UGC	04-09-2012	View Document		
12B of UGC	04-09-2012	View Document		
Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)				
Statutory Regulatory Authority	Recognition/Approval details Institution/Department programme	Day,Month and year(dd-mm-yyyy)	Validity in months	Remarks
AICTE	View Document	25-04-2019	12	Vardhaman College of Engineering has got the Extended Extension of Approval for three years from AICTE

Recognitions	
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	Yes
If yes, date of recognition?	23-08-2016
Is the College recognized for its performance by any other governmental agency?	Yes
If yes, name of the agency	NBA NIRF DSIR SIRO ISO
Date of recognition	22-05-2019

Location and Area of Campus				
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.
Main campus area	Kacharam, Shamshabad	Rural	14.24	35082

2.2 ACADEMIC INFORMATION

NAAC

Details of Programmes Offered by the College (Give Data for Current Academic year)						
Programme Level	Name of Programme/Course	Duration in Months	Entry Qualification	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BTech,Computer Science And Engineering	48	Intermediate and Rank in State Level Entrance Test or any other Equivalent	English	240	240
UG	BTech,Information Technology	48	Intermediate and Rank in State Level Entrance Test or any other Equivalent	English	120	120
UG	BTech,Electronics And Communication Engineering	48	Intermediate and Rank in State Level Entrance Test or any other Equivalent	English	240	240
UG	BTech,Electrical And Electronics Engineering	48	Intermediate and Rank in State Level Entrance Test or any other Equivalent	English	120	97
UG	BTech,Mechanical Engineering	48	Intermediate and Rank in State Level Entrance Test and any other Equivalent	English	120	93
UG	BTech,Civil Engineering	48	Intermediate and Rank in State Level Entrance	English	60	54

			Test or any other Equivalent			
PG	Mtech,Computer Science And Engineering	24	B.Tech or Equivalent and Rank in GATE or PGCET	English	18	2
PG	Mtech,Electronics And Communication Engineering	24	B.Tech or Equivalent and Rank in Gate or PGCET	English	18	8
PG	Mtech,Electronics And Communication Engineering	24	B.Tech or Equivalent and Rank in GATE or PGCET	English	18	6
PG	Mtech,Electrical And Electronics Engineering	24	B.Tech or Equivalent and Rank in GATE or PGCET	English	18	10
PG	Mtech,Mechanical Engineering	24	B.Tech or Equivalent and Rank in GATE or PGCET	English	18	7
PG	Mtech,Civil Engineering	24	B.Tech or Equivalent and Rank in GATE or PGCET	English	18	15
PG	MBA,Master Of Business Administration	24	Any UG Degree or Equivalent and Rank in ICET or Equivalent	English	60	60

Position Details of Faculty & Staff in the College

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	0				0				0			
Recruited	0	0	0	0	0	0	0	0	0	0	0	0
Yet to Recruit	0				0				0			
Sanctioned by the Management/Society or Other Authorized Bodies	35				60				157			
Recruited	33	2	0	35	46	14	0	60	102	55	0	157
Yet to Recruit	0				0				0			

Non-Teaching Staff						
	Male		Female		Others	Total
Sanctioned by the UGC /University State Government						0
Recruited	0		0		0	0
Yet to Recruit						0
Sanctioned by the Management/Society or Other Authorized Bodies						242
Recruited	162		80		0	242
Yet to Recruit						0

Technical Staff				
	Male	Female	Others	Total
Sanctioned by the UGC /University State Government				0
Recruited	0	0	0	0
Yet to Recruit				0
Sanctioned by the Management/Society or Other Authorized Bodies				56
Recruited	47	9	0	56
Yet to Recruit				0

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	31	2	0	27	8	0	18	6	0	92
M.Phil.	0	0	0	3	1	0	1	0	0	5
PG	2	0	0	16	5	0	83	49	0	155

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt.	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	0	0	0	0
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	0	0	0

Details of Visting/Guest Faculties					
Number of Visiting/Guest Faculty engaged with the college?	Male		Female		Total
	0	0	0	0	0

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	622	17	0	0	639
	Female	285	16	0	0	301
	Others	0	0	0	0	0
PG	Male	52	3	0	0	55
	Female	50	3	0	0	53
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Programme		Year 1	Year 2	Year 3	Year 4
SC	Male	89	90	88	95
	Female	50	50	40	43
	Others	0	0	0	0
ST	Male	41	38	38	36
	Female	15	19	15	17
	Others	0	0	0	0
OBC	Male	370	361	331	335
	Female	153	143	148	153
	Others	0	0	0	0
General	Male	276	297	267	256
	Female	163	166	179	157
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total		1157	1164	1106	1092

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Civil Engineering	View Document
Computer Science And Engineering	View Document
Electrical And Electronics Engineering	View Document
Electronics And Communication Engineering	View Document
Information Technology	View Document
Master Of Business Administration	View Document
Mechanical Engineering	View Document

NAAC

Extended Profile

1 Program

1.1

Number of programs offered year-wise for last five years

2018-19	2017-18	2016-17	2015-16	2014-15
13	13	13	13	16
File Description			Document	
Institutional Data in Prescribed Format			View Document	

2 Students

2.1

Number of students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4055	3984	3908	3807	3631
File Description			Document	
Institutional Data in Prescribed Format			View Document	

2.2

Number of outgoing / final year students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
879	929	829	798	720
File Description			Document	
Institutional Data in Prescribed Format			View Document	

2.3

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3989	3949	3812	3767	3503
File Description		Document		
Institutional Data in Prescribed Format		View Document		

2.4

Number of revaluation applications year-wise during the last 5 years

2018-19	2017-18	2016-17	2015-16	2014-15
117	106	90	18	1

3 Teachers

3.1

Number of courses in all programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
615	567	536	554	574
File Description		Document		
Institutional Data in Prescribed Format		View Document		

3.2

Number of full time teachers year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
284	285	275	281	257
File Description		Document		
Institutional Data in Prescribed Format		View Document		

3.3

Number of sanctioned posts year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
284	285	275	281	257
File Description		Document		
Institutional Data in Prescribed Format		View Document		

4 Institution

4.1

Number of eligible applications received for admissions to all the programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3227	3165	3091	3082	3367
File Description		Document		
Institutional Data in Prescribed Format		View Document		

4.2

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
748	735	722	722	760
File Description		Document		
Institutional Data in Prescribed Format		View Document		

4.3

Total number of classrooms and seminar halls

Response: 83

4.4

Total number of computers in the campus for academic purpose

Response: 1723

4.5

Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
1484.20	1397.70	1607.60	1068.249	1199.636

NAAC

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed /adopted have relevance to the local/ national / regional/global developmental needs with learning objectives including program outcomes, program specific outcomes and course outcomes of all the program offered by the Institution

Response:

Vardhaman College of Engineering became autonomous from the academic year 2014-2015 by UGC approval. Since then, the College started curriculum design and development process on its own. The process remained a continuous and inclusive process. To begin with, the process commenced with introducing curricular reforms by faculty adding/modifying various courses that are relevant to the programmes. The recent revision of curriculum began with the announcement of Model Curriculum for Engineering Programmes by the AICTE, New Delhi and followed by the affiliating University, JNTUH. The Model curriculum proposes of 160 Credits and several new offerings in terms of pedagogy and assessment methods. Drawing motivation from the AICTE model curriculum and also provide quality education through best learning opportunities such that students become skilful, employable and also embark on entrepreneurial journey while on the campus. With this intent, we have taken up revising the curriculum for all the programmes offered by VCE to make them relevant to the local/national/regional/global developmental needs. The course structure follows a typical pattern as suggested by AICTE & hence the curriculum is divided into eight categories viz. Humanities & Science Courses (HSS), Engineering Science Courses (ES), Basic Science Courses (BS), Professional Core Courses (PC), Professional Elective Courses (PE), Open Elective Courses (OE), Mandatory Courses (MC), and Project Work. Curriculum design began with strong focus on teaching-learning process to meet the desired Graduate Attributes. Accordingly, several curricular review meetings were conducted with the stakeholders followed by the meetings of concerned Board of Studies and the Academic Council.

In order to enhance the learning experience of students integrated (theory and practice together) courses were introduced. Course Outcomes were developed for each course by the domain experts from department thus making course effective in terms of delivery and assessment point of view. To run courses efficiently, Outcome-based Education (OBE) has been deployed. In order to ensure proper & effective teaching-learning methodology course packs were developed by the faculty in which the course delivery, assessment patterns specified to achieve stated objectives and outcomes of every course. Proper care was also taken while assessing the courses to yield good results which are devoid of bias and unfairness. The HSS courses not only help students develop core skills such as critical thinking, problem solving, and communication, both oral and written but also achieve the Programme Outcomes, POs 6-12, which were not integral part of the curriculum previously.

The professional courses ensure that the students always up to date and learn cutting edge technologies. It is more likely that the students are more aware of the changing trends, disruptions and directions in profession. The curricular requirements help the students to continue to make a meaningful contribution to their development and contribution to welfare of mankind.

File Description	Document
Any additional information	View Document

1.1.2 Percentage of programs where syllabus revision was carried out during the last five years

Response: 100

1.1.2.1 How many programs were revised out of total number of programs offered during the last five years

Response: 13

1.1.2.2 Number of all programs offered by the institution during the last five years

Response: 13

File Description	Document
Minutes of relevant Academic Council/BOS meeting	View Document
Details of program syllabus revision in last 5 years	View Document
Any additional information	View Document

1.1.3 Average percentage of courses having focus on Employability/ Entrepreneurship/ Skill development during the last five years

Response: 100

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
615	567	536	554	574

File Description	Document
Program/ Curriculum/ Syllabus of the courses	View Document
MoU's with relevant organizations for these courses, if any	View Document
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	View Document
Average percentage of courses having focus on employability/ entrepreneurship	View Document

1.2 Academic Flexibility

<p>1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years</p> <p>Response: 42.08</p>	
<p>1.2.1.1 How many new courses are introduced within the last five years</p> <p>Response: 295</p>	
<p>1.2.1.2 Number of courses offered by the institution across all programs during the last five years</p> <p>Response: 701</p>	
File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

<p>1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented</p> <p>Response: 100</p>	
<p>1.2.2.1 Number of programmes in which CBCS/ Elective course system implemented.</p> <p>Response: 13</p>	
File Description	Document
Minutes of relevant Academic Council/BOS meetings	View Document
Institutional data in prescribed format	View Document

1.3 Curriculum Enrichment

1.3.1 Institution integrates cross cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum

Response:

The College has been practicing Outcome-based Education (OBE) since 2014 onwards. OBE is a student-centric teaching and learning methodology in which the course delivery, assessment is planned to achieve stated objectives and outcomes. The course outcomes (COs) form building blocks of OBE. The CO-PO mapping are being carried out to find the impact on curriculum, based on which a gap analysis made and suitable actions have been taken to improve the curriculum requirements. PO6, PO7, PO8 and PO9 are difficult to achieve through the curriculum unless few HSS courses were introduced. All the programmes offer these courses as a part of its curriculum, which integrates the mainstreaming cross-cutting issues relevant to Gender, Environment Sustainability, Human Values and Professional Ethics.

In order to sensitize the student on the global issue gender inequality and discrimination the college offers Gender Sensitization course to all its students. The college also provides ample number of opportunities to the female staff/students and treats all the gender with the same respect. As part of curriculum, Environmental Science and Disaster Management course was offered with an intent to raise the student awareness and prepare them to become a responsible citizens who can work to put an effort to make the environment clean. A large number of students participate in the NSS program for cleanliness, plantation of trees and encourage the farmers for organic farming.

Various activities were conducted to help the students to understand the importance to protect environment. People have unique ability to define their identity, choose their values and establish their beliefs. It is considered that human values are an integral part of the holistic development of students. As part of curriculum, to inculcate Human values, fundamental insights and inputs will be provided to the student to grow as responsible human beings with a proper personality. Professional Ethics taught to the students to maintain ethical conduct and to perform their professional duties. The college focuses highly on professional ethics while making it part of curriculum as Engineering Ethics. In order to enable them to strengthen their ethics, we provide ample opportunities to discuss life skill, emotional intelligence, empathy, self-regulation and self-awareness as part of our curricular and co-curricular activities. In addition, Engineering Projects in Community Service (EPICS) in association with Purdue University, USA was offered as a learning community to freshman students in the First Year Engineering. A total of four courses were offered viz, Social Innovation, Engineering Exploration, Co-Engineering Laboratory and Engineering Design. We strongly believe that these courses are very much vital and needed for the students to succeed in their real life and their carrier paths. We constantly make all efforts to improve the student behavioral and ethical levels in cross cutting issues like Gender, Environment, sustainability, Human Values and Professionals and confidently face the real time challenges in their careers.

File Description	Document
Any additional information	View Document

1.3.2 Number of value-added courses imparting transferable and life skills offered during the last five years**Response:** 76

1.3.2.1 Number of value-added courses are added within the last five years

Response: 76

File Description	Document
List of value added courses	View Document
Brochure or any other document relating to value added courses	View Document
Any additional information	View Document

1.3.3 Average percentage of students enrolled in the courses under 1.3.2 above**Response:** 51.55

1.3.3.1 Number of students enrolled in value-added courses imparting transferable and life skills offered year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2983	2248	2544	1905	459

File Description	Document
Any additional information	View Document

1.3.4 Percentage of students undertaking field projects / internships**Response:** 64.96

1.3.4.1 Number of students undertaking field projects or internships

Response: 2634

File Description	Document
List of programs and number of students undertaking field projects / internships	View Document
Any additional information	View Document

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni 5) Parents for design and review of syllabus Semester wise /year-wise

Response: A. Any 4 of above

File Description	Document
Any additional information	View Document
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	View Document
URL for stakeholder feedback report	View Document

1.4.2 Feedback processes of the institution may be classified as follows:

Response: A. Feedback collected, analysed and action taken and feedback available on website

File Description	Document
Any additional information	View Document
URL for feedback report	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 3.1

2.1.1.1 Number of students from other states and countries year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
191	172	130	79	39

File Description	Document
List of students (other states and countries)	View Document
Institutional data in prescribed format	View Document
Any additional information	View Document

2.1.2 Demand Ratio(Average of last five years)

Response: 343:34

2.1.2.1 Number of seats available year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
318	313	308	308	332

File Description	Document
Demand Ratio (Average of Last five years)	View Document
Any additional information	View Document

2.1.3 Average percentage of seats filled against seats reserved for various categories as per applicable reservation policy during the last five years

Response: 95.4

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
721	726	688	695	686

File Description	Document
Average percentage of seats filled against seats reserved	View Document
Any additional information	View Document

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners

Response:

The college attracts fairly good students through the entrance examination and also other mode of admission prevailing in the state of Telangana. The first three weeks of the commencement of the engineering education journey, the students were given an extensive awareness about the governance system and all the academic processes. The induction programme was completely designed and organized by the college, involving administration, senior faculty, internal and external stakeholders. The students were exposed off various aspects of student-centric learning experiences right from the academic rules and regulations, the curriculum design and structure, teaching-learning methods and assessment patterns, both formative and summative. They were also well informed about Outcome-based education based on which their curriculum was designed. In addition, students were also exposed to life skills, yoga and code of conduct through various activities by the trained experts.

The college has a transparent mechanism to identify the learning levels of the students which is based on their academic performance. Based on the performance, students were divided into two categories viz, Category-1 and Category-II. The learning levels in pre-university exams and initial assessment in engineering viz., first slip test, and CAT-1 would be taken as diagnostic test in nature. Students who score marks less than or equal to 50% marks in the formative assessments are identified as slow learners(Category1) and those who secure more that 50% are identified as fast learners(Category-2). After identifying the students in two categories, the students fall in the Category-1 were given an extended learning (additional classes) known as remedial classes by the respective faculty who taught them the course. It may be noted that every course that was offered has a lead faculty. The lead faculty closely monitors the performance and the team of faculty offering the course collectively analyses the overall performance of the students in the group and prepares an action plan to conduct the remedial classes and assessments as needed to help the students to better their academic performance. This system has profound impact in improving the learning ability of the students.

The size of the remedial class is limited to 30 in order to ensure proper care and attention towards the leaners. After organizing special programs for slow and advanced learners, these students have shown better performance in university examinations. Those students who have shown better performance in their

respective areas and are recognized and rewarded based on their academic growth and progress. In respect of the Category-2(fast learners) students were encouraged to participate in Project-based learning, to explore content beyond syllabus, interact with industry experts, prepare for department wise NET/SET guidance, engage in MPSC/UPSC guidance (Competitive Examination Guidance), take up basic research projects, and take Science Talent Search Examination and register for NPTEL/SWAYAM online courses. Thus the institution has a systematic procedures in place for assessing the learning levels of first year students, and motivate them to engage into the academics along with all other activities on the campus for grooming them into a skillful engineer.

File Description	Document
Any additional information	View Document
link for additional information	View Document

2.2.2 Student - Full time teacher ratio

Response: 257:18

File Description	Document
Any additional information	View Document

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.1

2.2.3.1 Number of differently abled students on rolls

Response: 4

File Description	Document
List of students(differently abled)	View Document
Institutional data in prescribed format	View Document
Any other document submitted by the Institution to a Government agency giving this information	View Document

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The institute adopts many student centric methods to enable the learner meet their learning goals, academic success with required competencies. Methods such as experiential learning, participative learning and problem solving are used at various stages and levels to enhance learning opportunities to the students. We at Vardhaman strongly believe that experiential learning bridges promote competencies of the students by enhancing their knowledge through application. Through learning and doing the learner is exposed to first-hand experience of practicing what has been taught. This plays a crucial role in retaining concepts and ideas and advance the learning from rote to application based. Experiential Learning Methodologies followed in the Institution are learning by doing nano projects, micro projects, mini projects, internships/industry oriented mini projects and finally the major or capstone project. Thus in the new curriculum more stress and focus was given to practice as a result, students were expected to carry out at least one project per semester. This enhances their ability to solve complex engineering problems during their program of study.

The faculty motivate the students to actively participate in professional society activities, in their related domains and also general ones like ISTE (Indian Society for Technical Education), EWS (Engineers Without borders), EPICS (Engineering Projects in Community Services) thus promoting knowledge on diverse and contemporary areas and technologies. The students were supported by the faculty and link them to real time applications to promote wider learning opportunity. This provides the students a platform to become self-learners and as well as lifelong learners. Further, to give more exposure to practice industrial/site were organised to acquaint students with current industrial practices and thus motivate them to carryout mini projects through industrial collaborations. With regard to Participative Learning Methodologies followed in Institution, variety of methods and approaches were followed. Flipped Classroom, Blended Learning, Group Discussions or Debates and Peer Learning Classes were offered by the faculty with proper planning for focussed attention of the students. In a flipped classroom, students review lecture materials before class as homework. In real-time, the class becomes a dedicated space for interactive discussions with the faculty thus promotes enhanced learning. On the other hand, Blended learning reverses the traditional learning environment by delivering instructional content in a more advanced way through virtual labs. Through Group Discussions and Debates, students were given an opportunity to articulate their thoughts on the spot and to develop their arguments in support of their opinions or claims on relevant topics. Learning begins with experience followed by reflection, discussion, analysis and evaluation of the experience. peer/collaborative learning involves students working in pairs or small groups to discuss concepts, methods, designs to find solutions to engineering problems. Problem Solving Methodologies followed in Institution include approaches such as Think Pair Share, Course-Based Projects and Project Based Learning. Learning in vivid kinds improves the skills of the students. The projects that the students work give those hands on experience in their core area and make them promising engineers the Nation looks for.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 93.66

2.3.2.1 Number of teachers using ICT

Response: 266

File Description	Document
List of teachers (using ICT for teaching)	View Document
Any additional information	View Document
Provide link for webpage describing the " LMS/ Academic management system"	View Document

2.3.3 Ratio of students to mentor for academic and stress related issues

Response: 17:1

2.3.3.1 Number of mentors

Response: 245

File Description	Document
Any additional information	View Document
Any additional information	View Document

2.3.4 Preparation and adherence to Academic Calendar and Teaching plans by the institution

Response:

The institution prepares Academic Calendar with a lot of planning and discussion with head of different departments to take the future course of action. All the discussions and suggestions are put forth to the Academic Committee. The academic committee along with Principal and Deans collectively plan the Academic Calendar. The academic calendar is finally prepared by the Dean (Academics) and distributed to all the Heads of the Departments, faculty and students. This is done in the beginning of the academic year so that course instructors can plan their content delivery and assessment accordingly. The calendar is also displayed on the college website www.varthaman.org, notice boards of all the departments and is made available to the students and faculty before the commencement of the academic year/class work. The institution has an academic calendar for different programs like B.Tech, M.B.A and M.Tech which are available on our college website.

Vardhaman follows unique methods of teaching and learning practices which are learner centric and innovative in nature. Every faculty prepares Academic /Lesson (teaching) plan before the commencement of class work for every semester. The academic plan structure is prepared to comply the needs of Outcome Based Education prescribed by National Board of Accreditation (NBA). The contents of the plan include:

- 1.Course prerequisites

2. Course objectives and outcomes
3. Mapping of course outcomes with program outcomes
4. Learning resources
5. Delivery methodologies
6. Assessment methods
7. Detailed unit wise lecture plan
8. Assignment and tutorial questions
9. Model question paper
10. Link to the video lectures
11. Additional information over and above the curriculum

The copies are prepared by the course lead in consultation with the course instructors and is available in the form of course file in the respective department. The academic plan is following by each and every faculty and the action taken report of the compliance are recorded by the course lead. Later, Dean, IQAC and heads of the departments assess the performance of the faculty for the future course of action.

The Institution supports our faculty to strive to meet the principles of good practice in an effort to provide the best learning experience to their students. The faculty are encouraged to cultivate an attitude towards teaching that include encouraging good communication between teachers and learners; encouraging interaction among learners; providing opportunities for active participation of learners; providing timely and appropriate response and constructive feedback to the learners; emphasising time on task completion; motivating learning by communicating expectations; respecting diverse talents and ways of learning; encouraging classroom participation and classroom discussion; conducting periodic formative assessment; enhancing metacognitive strategies; encouraging collaborative teaching and collaborative learning; usage ICT and Blended Teaching; and focusing on lifelong learning.

We evaluate our students learning using processes in the form of diagnostic tests, assignments, projects, class tests, quizzes, problem solving activities, computer aided practices, tutorial classes for average or below average students, power point presentations, continuous internal evaluation and semester end examination and so on.

Link for Academic Calendars of Last Five Years: <https://vardhaman.org/academic-calendar/>

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 100

File Description	Document
Year wise full time teachers and sanctioned posts for 5 years	View Document
List of the faculty members authenticated by the Head of HEI	View Document
Any additional information	View Document

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years**Response:** 20.65**2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
104	80	55	27	23

File Description**Document**

List of number of full time teachers with PhD and number of full time teachers for 5 years

[View Document](#)

Any additional information

[View Document](#)**2.4.3 Teaching experience per full time teacher in number of years****Response:** 15.08**2.4.3.1 Total experience of full-time teachers**

Response: 4283

File Description**Document**

Any additional information

[View Document](#)**2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years****Response:** 3.26**2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
4	4	1	00	00

File Description	Document
Institutional data in prescribed format	View Document
e-copies of award letters (scanned or soft copy)	View Document

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 28.65

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
89	88	81	76	63

File Description	Document
List of full time teachers from other state and state from which qualifying degree was obtained	View Document
Any additional information	View Document

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results during the last five years

Response: 36.2

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
40	30	36	33	42

File Description	Document
List of programs and date of last semester and date of declaration of result	View Document
Any additional information	View Document

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years**Response:** 1.69**2.5.2.1 Number of complaints/grievances about evaluation year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
117	106	90	18	0

File Description**Document**

Any additional information

[View Document](#)**2.5.3 Average percentage of applications for revaluation leading to change in marks during the last five years****Response:** 9.13**2.5.3.1 Number of applications for revaluation leading to change in marks year-wise during the last five years**

2018-19	2017-18	2016-17	2015-16	2014-15
19	10	8	2	0

File Description**Document**

Any additional information

[View Document](#)**2.5.4 Positive impact of reforms on the examination procedures and processes including IT integration and continuous internal assessment on the examination management system****Response:**

The college has been following several procedures and processes to bring the positive impact on the examination system. At the beginning of the academic year, a calendar of events which includes all academic processes will be given to all students and also kept in college website. A prior approval of this academic calendar will be taken in the Academic committee. A book which consists of all academic rules, regulations, course structures and syllabi will be given to all the students.

To take the advantage of “Hands on experience”, the college has introduced a new course called “integrated course” which has both theory and practical components. Apart from the integrated course,

curriculum is also having theory and practical courses. To assess all these courses, the college is having a prescribed rules and regulations which have been approved in academic council. All the courses are assessed in two stages viz. Continuous Internal Evaluation (CIE) and Semester End Examination (SEE). The CIE will be assessed by conducting an alternate assessment test (AAT) and two Continuous Assessment Tests and Laboratory (in case of only integrated course). To get promoted, a student should secure not less than 40% of marks in each and every assessment tool of CIE. If a student fails in SEE then in such an event, he/she shall be provided one opportunity to appear SEE with the same CIE marks in the immediate supplementary semester. The student must get a PASS grade in the said course during the supplementary exam; otherwise he/she shall re-register for the course again and follow the normal rules to obtain the PASS grade. A student who FAILS in obtaining 40% of marks in CIE and those who have not cleared in supplementary examination (Advanced supplementary examinations are exempted) has to re-register for the same course. In the event the said course is not offered, the student shall register for the equivalent course prescribed by the college.

Students are eligible to apply for re-valuation/ personal verification, if he/she fails in semester end examination.

The college has a very strong student portal, wherein all the relevant data which belongs to the students is uploaded in the portal. It is also very important the parents should continuously monitor their ward performance including his/her regularity to the college. Hence, the access to the student portal is also given to the parents. The college will also conduct parent teacher meeting in once a year to bring the awareness in the parents about their ward performance. The director, principal and Dean (Acads) would continuous meet the students regarding academic activities.

The project work is the first primary step towards Research. Projects are assessed on the basis of its scope, content, social approach, student's attitude, conclusion, etc. Students are given guidance regarding the projects works, if required. Well defined rubrics were developed to evaluate the performance of the students. The academic performance has witnessed an upward swing over the years with the aid of a well-planned evaluation system.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.5.5 Status of automation of Examination division along with approved Examination Manual

Response: A. 100% automation of entire division & implementation of Examination Management System (EMS)

File Description	Document
Current manual of examination automation system and Annual reports of examination including the present status of automation	View Document
Current Manual of examination automation system	View Document
Annual reports of examination including the present status of automation	View Document

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

Program Outcomes and Program Specific Outcomes

Program Outcomes (POs) represent the knowledge, skills and attitudes the students should have at the end of a four-year engineering program. It describes the learning that will take place across the curriculum through brief statements, made in specific and on measurable terms. PSOs are statements that describe what the graduates of a specific engineering program should be able to do after the successful completion of engineering program. The parameters are based on initial capabilities, competence, skills, etc. keeping in mind the outcomes desired by the concerned profession. POs and PSOs are stated and proliferated for all programs clearly. There are certain parameters known as Graduates Attributes and they vary from discipline to discipline and level to level such as Undergraduate and Postgraduate Programmes. POs for undergraduates are Engineering Knowledge, Problem Analysis, Design/Development of Solutions, Conduct Investigations of Complex Problems, Modern Tool Usage, The Engineer and Society, Environment, Sustainability and Ethics, Individual and Team Work, Communication, Project Management and Finance, and Lifelong Learning.

Course Outcomes (COs)

Identifying the important things students should learn within your course is the first step in deciding what should be assessed. Students are provided a way to articulate the knowledge and abilities to the fullest by honing their cognitive processes through the relevant courses. COs are student centric and they focus on knowledge and skills that students can demonstrate. Thus, COs are the consequential knowledge skills that the student acquires at the end of a course. COs are set by the institution, by consulting with the department heads, faculty, students and other stakeholders. Courses are designed in such a way that all the objectives are attained in the form of course outcomes and are stated in all the courses so that it is clearly understood by the students and teachers. When it comes to assessments, the mapping methods used are almost similar in every one of them. Like in exams, each question prepared for an exam will be mapped to one or more COs which effectively will help to determine the achievement by each students in the exams. Also, every question should be mapped to a CO and every CO should be mapped to a PO. The proper assessment of the COs and POs is the most imperative processes followed in the Institution.

Dissemination of POs, PSOs and COs

POs, PSOs and COs are displayed and propagated to all the stakeholders (Industry, alumni, Parents, faculty and graduating students) by conducting face to face meetings with the same and notifying them about the outcomes clearly. COs of the programs are displayed on the walls of each and every classroom so the students and teachers can perceive and work with perseverance. Also the soft copies of the curriculum and course outcomes are also uploaded on the website of the Institution for reference. Hard copy of Course packs are given to all students and teachers for ready reference. Moreover, students are acquainted with the same through tutorial meetings.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution**Response:**

Program outcomes (POs) and Program Specific Outcomes (PSOs) are the paramount to maintain the quality in the graduation program. Each department of the college has developed the curriculum taking all the POs into consideration. The PSOs are also appropriately designed along with the curriculum development.

Course Outcomes (COs) describe the learning that will take place across the curriculum through concise statements, made in specific and measurable terms. These COs are then mapped with POs and PSOs. During the CO-PO/PSO mapping, the strength of the mapping will be assessed by Course Lead at the beginning of the semester. During the semester the course is assessed using assessment tools to computer CO attainment. These tools are Direct Assessment Tools and indirect assessment tools. In Direct Assessment Tools are given by Alternative Assessment Test 1&2 (AAT) Continuous Assessment Test 1&2 (CAT) and Semester End Examination (SEE) and the Indirect Assessment Tool is given by the Course End Survey (CES).

The questions which are given in the CAT 1&2 are mapped to the framed COs which are in turn are already mapped with the POs with a mapping level. A similar process happens for AATs also. The course end survey questions are framed by the course instructor to indirectly find the level of confidence of the students on the COs framed.

In general, a challenge would occur the questions which are framed in SEE. It is decided in academic council that the question to CO mapping is possible, then the CO computation weightage would be as follows: 45% for CIE, 45% for SEE and 10% for Course End Survey. Similarly, if the mapping is not possible, then the CO computation weightage among different components would be as follows: 80% for

the CIE, 10% for the SEE and 10% for the course end survey. All the course outcomes are measured using every assessment method that has been considered throughout the semester. Similarly, all the COs of the all the courses excluding electives are computed. Once all COs are computed a rigorous qualitative analysis is done in terms of attainment of the COs for that particular course. This detailed report will be shared to course instructor as a part of continuous improvement. At the end of the programme, the POs/PSOs are computed using the CO computation value of all the COs that are mapped to a PO/PSO and through Exit Survey

The PO/PSO computation are done using the weighted average of all the COs that are mapped to that PO/PSO. The Exit survey questions are framed by the department to indirectly measure the POs/PSOs.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

2.6.3 Average pass percentage of Students

Response: 91.46

2.6.3.1 Total number of final year students who passed the examination conducted by Institution.

Response: 975

2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution

Response: 1066

File Description	Document
List of programs and number of students passed and appeared in the final year examination	View Document
Any additional information	View Document
Link for annual report	View Document

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response: 3.22

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution has a well defined policy for promotion of research and the same is uploaded on the institutional website

Response: Yes

File Description	Document
Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View Document
Any additional information	View Document
URL of Policy document on promotion of research uploaded on website	View Document

3.1.2 The institution provides seed money to its teachers for research (average per year)

Response: 6.12

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
17.58	3.81	2.42	4.7	2.08

File Description	Document
Minutes of the relevant bodies of the Institution	View Document
List of teachers receiving grant and details of grant received	View Document
Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized	View Document
Any additional information	View Document

3.1.3 Number of teachers awarded international fellowship for advanced studies/ research during the last five years

Response: 6

3.1.3.1 The number of teachers awarded international fellowship for advanced studies / research year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
04	02	00	00	00

File Description	Document
List of teachers and their international fellowship details	View Document
e-copies of the award letters of the teachers.	View Document

3.1.4 Institution has the following facilities

1. Central Instrumentation Centre
2. Animal House/Green House / Museum
3. Central Fabrication facility
4. Media laboratory/Business Lab/Studios
5. Research / Statistical Databases

Response: A. Any four facilities exist

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

3.2 Resource Mobilization for Research

3.2.1 Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years (INR in Lakhs)

Response: 3.43

3.2.1.1 Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0	2.93	0.50	0	0

File Description	Document
List of project and grant details	View Document
e-copies of the grant award letters for research projects sponsored by non-government	View Document

3.2.2 Number of research centres recognised by University and National/ International Bodies	
Response: 4	
3.2.2.1 Number of research centres recognised by University and National/ International Bodies	
Response: 04	
File Description	Document
Names of research centres	View Document
Any additional information	View Document

3.2.3 Percentage of teachers recognised as research guides	
Response: 4.71	
3.2.3.1 Number of teachers recognised as research guides	
Response: 23	
3.2.3.2 Number of full time teachers worked in the institution during the last 5 years	
Response: 488	
File Description	Document
Details of teachers recognized as research guide	View Document
Any additional information	View Document

3.2.4 Number of research projects per teacher funded, by government and non-government agencies, during the last five year	
Response: 0.38	
3.2.4.1 Number of research projects funded by government and non-government agencies during the last five years	
Response: 37	

File Description	Document
Supporting document from Funding Agency	View Document
link to funding agency website	View Document

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations including Incubation centre and other initiatives for creation and transfer of knowledge

Response:

The institution has a well-balanced eco-system for promoting the student talent through qualified and experienced faculty duly supported by excellent infrastructure facilities. The college offers Undergraduate, Postgraduate and PhD programmes thus creating an eco-system that enriches the young minds through various learning opportunities which are well supported. As a result of such eco-system, students co-work with the faculty in design and development of systems. There are many on-going funded research programmes where faculty continuously work. This provides an opportunity to the students to work on live projects and the same is resulted in generation of research publications, patents and products.

The Centre for Innovation and Entrepreneurship at VCE has a vision to establish Innovation Hub by building eco-system through industry partnership and our focus is on generating and nurturing the next generation of entrepreneurs. The College nurture startup ideas and technology innovations from their idea stage by conducting boot camps, entrepreneurship awareness camps, Industrial visits, Hackathons, technical talks by startup mentors, awareness Programmes to sensitize and create awareness among students and provide the resources required to build products/prototypes and help them to find customers for their products. It also support the startups to gear for growth through access to global partners and investors with the Help of The Indus Entrepreneurs (TiE), a non-profit organization. The CIE at VCE will Assist and help the startups to get value proposition by providing mentor support, connect them with Government organizations like Entrepreneurship Development Institute of India (EDII), Ministry of Micro, Small & Medium Enterprises (MSME), Interaction with Industry Personnel, and also Higher education institutes like IIT Hyderabad. Legal support like Company Registrations (Firm Registrations), IPR filing, Patenting, Partnership with Industry people will also be provided to the students.

Incubation Center at CIE of the College funds, mentors and nurtures ideas, start-ups and entrepreneurs. Virtual incubators can operate from anywhere in India. The Incubation policy and guidelines includes the complete information related to incubation process like, eligibility, admission procedure, infrastructure and services provided to incubate, mandatory mentorship, period of incubation/ exit, intellectual property evaluation, seed funding, periodic assessment, conflict of interest and agreements. The college recognized as host institution (HI) for setting up Business incubator by MSME. Incubator helps us in strengthening R&D and thus knowledge creation. The major objective is to explore the new innovative ideas from incubators of various sectors which may be entrepreneurs or students from the any streams. Financial assistance is provided for nurturing and developing student ideas.

File Description	Document
Any additional information	View Document
link for additional information	View Document

3.3.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry - Academia Innovative practices during the last five years

Response: 68

3.3.2.1 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
16	12	13	14	13

File Description	Document
Report of the event	View Document
List of workshops/seminars during the last 5 years	View Document

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

Response: 0

3.3.3.1 Total number of awards for innovation won by institution/teachers/research scholars/students year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
List of innovation and award details	View Document
e- copies of award letters	View Document

3.3.4 Number of start-ups incubated on campus during the last five years

Response: 15

3.3.4.1 Total number of start-ups incubated on campus year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	6	0	0	0

File Description	Document
List of startups details like name of startup, nature, year of commencement etc	View Document
e- sanction order of the Institution for the start ups on campus	View Document
Contact details of the promoters for information	View Document

3.4 Research Publications and Awards**3.4.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research****Response: Yes**

File Description	Document
Institutional data in prescribed format	View Document
Any additional information	View Document

3.4.2 The institution provides incentives to teachers who receive state, national and international recognition/awards**Response: Yes**

File Description	Document
e- copies of the letters of awards	View Document
Any additional information	View Document

3.4.3 Number of Patents published/awarded during the last five years**Response: 25**

3.4.3.1 Total number of Patents published/awarded year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
14	8	2	0	1

File Description	Document
List of patents and year it was awarded	View Document
Any additional information	View Document

3.4.4 Number of Ph.D.s awarded per teacher during the last five years

Response: 0.35

3.4.4.1 How many Ph.Ds are registered within last 5 years

Response: 8

3.4.4.2 Total number of teachers recognised as guides during the last 5 years

Response: 23

File Description	Document
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc	View Document
Any additional information	View Document
URL to the research page on HEI web site	View Document

3.4.5 Number of research papers per teacher in the Journals notified on UGC website during the last five years

Response: 1.27

3.4.5.1 Number of research papers in the Journals notified on UGC website during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
140	150	15	23	24

File Description	Document
List of research papers by title, author, department, name and year of publication	View Document

3.4.6 Number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings per teacher during the last five years**Response:** 0.57

3.4.6.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
64	34	23	20	17

File Description	Document
List books and chapters in edited volumes / books published	View Document
Any additional information	View Document

3.4.7 Bibliometrics of the publications during the last five years based on average citation index in Scopus/ Web of Science or PubMed**Response:** 2.16

File Description	Document
BiblioMetrics of the publications during the last five years	View Document

3.4.8 Bibliometrics of the publications during the last five years based on Scopus/ Web of Science - h-index of the Institution**Response:** 13

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document

3.5 Consultancy**3.5.1 Institution has a policy on consultancy including revenue sharing between the institution and the individual****Response:** Yes

File Description	Document
Soft copy of the Consultancy Policy	View Document
Minutes of the Governing Council/ Syndicate/Board of Management related to Consultancy policy	View Document
URL of the consultancy policy document	View Document

3.5.2 Revenue generated from consultancy during the last five years

Response: 25.29

3.5.2.1 Total amount generated from consultancy year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
10.25	9.5	3.876	0.714	0.95

File Description	Document
List of consultants and revenue generated by them	View Document
Audited statements of accounts indicating the revenue generated through consultancy	View Document
Any additional information	View Document

3.5.3 Revenue generated from corporate training by the institution during the last five years

Response: 5.81

3.5.3.1 Total amount generated from corporate training by the institution year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
5.0	0.40	0	0	0.41

File Description	Document
List of teacher consultants and revenue generated by them	View Document
Audited statements of account indicating the revenue generated through training	View Document
Any additional information	View Document

3.6 Extension Activities

3.6.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

Vardhaman College of Engineering NSS Unit, UBA and Engineering Projects in Community Services (EPICS) organizes every year the orientation program for the first years to inculcate the importance of community service to sensitize and motivate them to enroll for the said programs. The extension activities by the above programs to inculcate volunteers towards social issues and holistic development in the neighborhood community in terms of impact and sensitizing students.

Faculties of various departments also at regular intervals organizes and motivate the volunteers to participate in various extension activities with a dual objective of not only sensitizing students about various social issues but also contribute to community in terms of projects and strengthen the community by participation like awareness programs, health camps etc.

There is also a MoU with different NGOs like Dhatri Foundation (Swab Donation), Rebox (Waste Management System) etc. to facilitate the enrichment of volunteers social consciousness. NSS unit take part in various initiatives like organizing Swab donation (lifelong cure for Thalassemia People), Adopted Schools (Enhancing the learning abilities and providing educational resources and necessary stationary), Regular Health camps (In adopted villages and in the campus for the welfare of society concern like eye camps, dental camps and general health check-up), Swachh Bharat initiatives (Inculcating green campus by plantation as well as clean campus by removing debris at frequent intervals of time and mobilizing towards converting organic manure from wet waste and dry waste disposal through Rebox organization), Blood donation camps (Tie up with different government and private blood banks like Redcross, Impact solutions, Osmania hospital, Gandhi hospitals, to donate for the needy, whenever required along with live donors), Awareness programs on AIDS prevention, Suicides prevention, Anti-drug rallies, lake protection rallies etc.

The College also has numerous NGO club members of which has diversified activities based working with Orphanages, environmental issues by involving youth and staff. Our Institution is well known for its Corporate Social Responsibility in serving the society. It establishes contact with the neighborhood communities and interacts with them to explore the opportunities for social work interventions. The students and staff get opportunity to participate in various activities organized by our college under the umbrella of National Service Scheme, Unnath Baharath Abhiyan, Red Cross and Interact Clubs, to develop interpersonal relationship, social responsibility and service orientation.

The joint ventures between NSS Unit and other NGOs helps to serve the needy like Mathru Abhya Foundation(Orphanage , Services to them with new clothes, educational stationary , daily personal needs and necessary stationary for regular activities), Amma Nanna Oldage Home and Aramghar (Mentally retarded people , serve them with clothes and food facilities)

The Institution organizes the events like world consumer day, International yoga day, Khadi Diwas, Mathru Basha Diwas, NSS Formation Day, Women's day etc. Another dates of festival like , the brith anniversaries of great Indian personalities like Dr B.R. Ambedkar Jayanthi , Gandhi Jayanthi etc. Adding to the national festivals like Independence day and Republic day also Celebrated.

File Description	Document
link for additional information	View Document

3.6.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 20

3.6.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
4	6	5	3	2

File Description	Document
Number of awards for extension activities in last 5 years	View Document
e-copy of the award letters	View Document

3.6.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 115

3.6.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
21	19	31	27	17

File Description	Document
Reports of the event organized	View Document
Number of extension and outreach programs conducted with industry,community etc for the last five years	View Document

3.6.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 67.64

3.6.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1965	3023	2463	2898	2713

File Description	Document
Report of the event	View Document
Average percentage of students participating in extension activities with Government or NGO etc	View Document

3.7 Collaboration

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year

Response: 0

3.7.1.1 Total number of Collaborative activities for research, faculty exchange, student exchange year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description	Document
Number of Collaborative activities for research, faculty etc	View Document
Copies of collaboration	View Document

3.7.2 Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years

Response: 152

3.7.2.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
53	46	29	12	12

File Description	Document
e-copies of linkage related Document	View Document
Details of linkages with institutions/industries for internship	View Document

3.7.3 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 58

3.7.3.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

2018-19	2017-18	2016-17	2015-16	2014-15
17	16	12	10	3

File Description	Document
e-copies of the MoUs with institution/ industry/ corporate house	View Document
Details of functional MoUs with institutions of national, international importance, other universities etc during the last five years	View Document

NAAC

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching - learning. viz., classrooms, laboratories, computing equipment, etc

Response:

The college, since its inception in 1999, has never compromised with infrastructural facilities be it physical buildings, machinery, equipment, software, books and other learning resources. Thus, it has built up an impressive and state-of-art infrastructure with modern facilities and learning resources as per the prescribed norms of statutory bodies like UGC, AICTE and JNTU-H. The College strongly believes that the right and adequate infrastructural facilities will provide ample of opportunities for both the faculty and students' academic development and growth. In fact the college strongly believes that infrastructure is the key element of its resources for providing quality education leading to innovations. Thus the main focus was on creating such a learning environment that would enable the students to transform into capable, confident and responsible engineering graduates the country is looking for. The college has a good academic ambience, spread in a sprawling campus of 14.24 acres, lush green environment having a lots of trees and lawns conducive for learning atmosphere.

The available facilities are almost double than the requirement prescribed by the AICTE and JNTUH. The total land area available is 98% more than the prescribed. The access and circulation (staircase and corridors) area is 209% more than that prescribed by the apex bodies. The carpet area of the amenities (boy's & girl's common room, toilets, cafeteria, sports complex, gymnasium, yoga, principal quarters, hostels) is 197.2% more than the required area. The administrative (principal office, HOD and faculty cabins, examination cell, placement office, security etc.) carpet area is 103.3% more than the required area. The instructional (classrooms, tutorial room, laboratories, library and reading room, seminar halls, auditoriums, workshops, drawing halls, computer centers, etc.) carpet area is 66.4% more than the specified area. In summary the overall built up area is 100.7% more than the required.

All laboratories are fully equipped with latest state-of-the-art technology and equipment. The computing facility consists of licensed software (system software-09 and applications software-47) and also a good number of open source software are also being used by the faculty as and when the curricular requirements. Adequate Administrative and support facilities are also available to foster an academic requirements. The computing facilities of the college cater to the needs of faculty and students to foster an effective TLP. There are sophisticated IT facilities like 1723 Computers, 81 Printers, 9 Legal System Software and 47 Legal Application Software, 125 Multimedia Projectors, 200 Mbps of Internet Bandwidth and 60 secured Wi-Fi connectivity access points. A health computing ratio of 1:2 computer to student against the prescribed ratio of 1:6 is being maintained. The Central Library with an area of 2,788 SQM is located in two floors with a seating capacity of 500. The digital library is equipped with 30 PCs which are connected with Wi-Fi and LAN for fast and seamless access of the Internet for streaming NPTEL lectures and using e-Resources for the benefit of its users.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities

Response:

The college believes in wholesome grooming of its students and ensures that students acquire all the graduate attributes before leaving its portals. Wholesome education is nothing but the Holistic education which not only make the graduating students competent but also develop passion towards engineering and compassion towards humanity in general and fellow peers in particular. Ample time and space is provided to balance the curricular (academic), co-curricular, extra-curricular and extension activities for the all-round development of its students. Accordingly, efforts are made to ensure maximum utilization of the space, infrastructure and human resource by blending them in appropriately so that the all-round development of students can be achieved through Indoor and Outdoor Sports, Yoga, Gymnasium, Cultural and Extension activities.

The college ensures that the students maintain a fine balance between their studies and other activities, thus enhancing the mind-body coordination through participation and practice such that students lead a disciplined life and become a good citizen of the country. The College is located on the lap of nature and sprawling greenery everywhere in the campus. The college has sophisticated sports facilities for both outdoor and indoor games. The facilities for the outdoor games include a professional cricket stadium (stands capacity of three thousand audience), Football ground, Hockey ground, Volleyball, Throw ball and Badminton Courts. The Indoor Stadium is available to play games like chess, carom board, table tennis and shuttle badminton. The college is an exclusive sports period in the time table scheduled at different timings so that all the students get opportunity to play games of their choice. Special provision for practice is in place for the students and faculty on demand after the college hours.

The college promote socialization and create friendly environment among the students by promoting cultural activities. The college celebrates Bathukamma festival with great fervour. The Bathukamma festival is followed by Traditional Day. A two-day annual college festival "ORTUS" would be organised by the students of the college, under the guidance of the faculty team, where students participate actively in various sports activities and cultural events to showcase their talents of their choice.

Yoga is a great way to work on flexibility and strength of the body, thus the well-being of staff/students. In order to promote the Physical and Mental health of the staff/students, the college offers yoga classes to all the interested staff/students. The Sports Advisory Committee constituted with senior faculty from various departments along with PDs convene meetings twice during an academic year to prepare sports calendar, budget estimate for various events. The following facilities were augmented since 2014-2015: Cricket Ground with floodlights 3 Volleyball courts, Throw ball court, Football Grass Court, Basketball court, Six Physical Education Teachers/Trainers to supervise the activities; Renovation of the courts, Indoor stadium of 730 SQM accommodating Chess, Carom, Table Tennis and shuttle badminton courts; Separate gymnasium for boys and girls, 4 Snooker Boards; Yoga Practice; 3 Table-Tennis boards and an amount of Rs.180.4 Lakhs of rupees has been spent on sports infrastructure and its activities.

File Description	Document
Any additional information	View Document
link for additional information	View Document

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 83

File Description	Document
Number of classrooms and seminar halls with ICT enabled facilities	View Document
Any additional information	View Document
Link for additional information which is optional	View Document

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 24.78

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
190.00	198.00	700.00	419.00	170.00

File Description	Document
Audited utilization statements	View Document

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

The Institution has a spacious Central Library in an independent building with an area of 2,788 SQM spread over two floors and has a seating capacity for 500 users with lift facility. It is automated with NewGenLib 3.1.5 version, which is an Integrated Library Management System (ILMS) that supports in-house operations of Cataloguing and Circulation through a dedicated server (<http://192.168.0.15/>). The library has a rich collection of 66,201 volumes of text books with 11,045 titles. There is an online access to e-Resources on Engineering, Science and Technology, Management, Basic Sciences and Humanities etc. The college also provides Book Bank facility to SC/ST students for their academic needs

The college subscribed more than 8,813 e-journals of IEEE/ IET Electronic Library (IEL), Elsevier (ScienceDirect), ASME, ASCE, ESS–Social Science & Humanities. 45,99,351 e-Books and lacs of journal articles, audio books, etc. of World E-Book Library and Elsevier's SCOPUS (Bibliographic and Citation Database) in addition to the subscription of 174 print periodicals that include National and International journals and technical magazines are available. Library resources have been completely bar-coded and computerized. Circulation counter is available for issue, return and renewal of books using ILMS package. Book self-check-in /check-out using Automated Self Service Library Kiosk (Touch Screen) is set up is used to generate the receipt with details of library documents and due dates. The Library offers computerized Catalogue Search Services for user community through the On-line Public Access Catalogue (OPAC) (<http://192.168.0.15.8080/newgenlibctx/>) which allows access of bibliographic details of the books available in the Central Library. Biometric system is used instead of the manual gate register, which is mandatory for check-in and check-out of library users.

The Library provides NPTEL video content and web courses to the students and faculty members for updating their curriculum/pedagogy and learning beyond syllabus and is hosted in local FTP Server (<http://192.168.0.25/>).

The library subscribes full-text e-resources providing access to e-journals and e-books, etc. and access to the e-resources are based on the authenticated IP address (<http://103.102.86.2/>). The users can access these resources from anywhere on the campus at any time through the Intranet. Digital Library is equipped with 30 Desktops with Wi-Fi and LAN enabled with 100 Mbps for fast and seamless access the Internet and e-Resources for the benefit of their academic and research. Library webpage (<https://vardhaman.org/central-library/>) provides access to various services as well as e-resources, Online Public Access Catalogue (OPAC) etc., besides giving detailed information about library, rules and regulations and necessary contact details.

The library organizes regular User Orientation Programmes for the library users both students and faculty regarding the use of Library Sources and Services. Beginning of every academic year, the newly admitted students are given orientation.

The library conducts a Book Exhibition by inviting local approved vendors/distributors and various prestigious publishers to inculcate reading habit among the students and faculty members.

Eight Desktops are provided to library staff for smooth functioning of library activities. Resources like digital scanners, printers, photocopiers and CC Camera surveillance system for security etc. are available.

File Description	Document
Any additional information	View Document
link for additional information	View Document

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resource for library enrichment

Response:

The central Library gives importance to the preservation of rare books considering their value. The information which the faculty and students are getting from the rare books are being best utilized in different aspects like contribution of research work in their respective fields. Library users can read a large number of books free of cost by utilizing this facility, which is a place for close and careful study on various fields of engineering, science, humanities, religion, spiritual and motivational.

The rare books are primarily serving the institution stakeholders and ensure value both for intellectual content and as historical interest. Materials for the collections are acquired a wide variety of subject areas. In addition to the printed books, the library also subscribes to a lot of eBooks, journals, journal articles, audio books, bibliographic and citation databases, NPTEL videos, web enabled courses, and full-text e-resources to enrich the knowledge of its users namely, faculty members, research scholars, post graduate students, under graduate students and the technical staff.

The college library subscribed more than 8,813 e-journals of IEEE/ IET Electronic Library (IEL), Elsevier (Science Direct), ASME, ASCE, ESS–Social Science & Humanities.

45,99,351 e-Books and lacs of journal articles, audio books, etc. of World e-Book Library and Elsevier's SCOPUS (Bibliographic and Citation Database) in addition to the subscription of 174 print periodicals that include National and International journals and technical magazines are available.

The Library offers computerized Catalogue Search Services for user community through the On-line Public Access Catalogue (OPAC) (<http://192.168.0.15.8080/newgenlibctx/>) which allows access of bibliographic details of the books available in the Central Library.

The Library provides NPTEL video content and web courses to the students and faculty members for updating their curriculum/pedagogy and learning beyond syllabus and is hosted in local FTP Server (<http://192.168.0.25/>).

The library subscribes full-text e-resources providing access to e-journals and e-books, etc. and access to the e-resources are based on the authenticated IP address (<http://103.102.86.2/>).

With the help of rare books, students and faculty have produced their academic projects as well as PhD theses. Moreover, the library is always stocked with rare books for the benefit of its students, faculty and researchers.

File Description	Document
Any additional information	View Document

4.2.3 Does the institution have the following

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

Response: Any 4 of the above

File Description	Document
Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc	View Document
Any additional information	View Document

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 27.89

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
26.8	26.58	37.13	27.16	21.78

File Description	Document
Details of annual expenditure for purchase of books and journals during the last five years	View Document
Audited statements of accounts	View Document
Any additional information	View Document

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

File Description	Document
Any additional information	View Document

4.2.6 Percentage per day usage of library by teachers and students

Response: 20.63

4.2.6.1 Number of teachers and students using library per day over last one year

Response: 895

File Description	Document
Any additional information	View Document

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The IT infrastructure of the college is maintained by trained and experience professionals. The Computer Centre was established in 2009 which is a Central Facility of the College. The Centre is now headed by senior faculty member belonging to the Computer Science and Engineering who is well supported by an experienced team of Network and System Administrators and software developers. The objective of computer centre is to provide state-of-the-art and robust hardware facility, softwares and networking support for securely maintaining the College Academics, Administration, Examinations and Research related activities. It has been the epicentre of all network and application needs of the College since its inception and efficiently manages the core IT infrastructure.

The Computer laboratories are being upgraded from time to time to provide the best computational infrastructure to the students. The Infrastructure consists of one Gbps Fiber optic cable network of 2 kms connecting all the building blocks of the college; Wired and Wi-Fi equipment of 100+ Hub racks, 200+ network switches, 70+ routers etc; 11 Servers hosting different applications which provide computational environment; Internet Facility of 200 Mbps from Inet Fiber Pvt Ltd. from Airtel Broadband; 9 System softwares and 40Application softwares; 100+ Air conditioners to maintain 1700 plus computers in various laboratories, research centres and administrative offices. The ICT equipment of 125 multimedia projectors, 10 Public Address Systems, 9 Sound mixers; 50 Biometric Finger-Print, Face Recognition, Aadhaar Enabled Attendance System and Access card equipment; 50 Fire protection and safety equipment; and 350 CC Cameras surveillance equipment for campus safety and management. .

The centre also provide continuous and uninterrupted services by coordinating and extending hardware & networking support to all the eight academic departments, examination branch, administration office, Central library, hostels, and other central facilities. Be as single point of support for designing, procuring, installing, interfacing, troubleshooting and maintaining of IT devices and peripherals; Developed, configured and implemented necessary software for different office and examination activities with a view to improve productivity, reduce expenses, increase transparency and extend anywhere and anytime

working; Provide complete web services, support for online activities, site hosting, online learning, online examinations, etc; Provide support for open source technologies and implementations and encouraged their use in the college activities; Conducted 3 training programs in the fields of hardware, software and networking usage and management;

Conduct annual academic and placements related online exams; it maintains exclusively two computer labs for internet browsing for students and staff, one server room, one control room and one maintenance room for networking. Updating the Internet facility and services from time to time to cater to the academic and research needs in the Campus. Consecutive up gradation arrangements are incorporated into yearly spending plan. The exercises have been arranged in a manner that, the IT framework and related offices are dependably keeping pace with best in class innovation.

File Description	Document
Any additional information	View Document
link for additional information	View Document

4.3.2 Student - Computer ratio

Response: 233:99

File Description	Document
Any additional information	View Document

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

Response: ?50 MBPS

File Description	Document
Any additional information	View Document

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

Response: Yes

File Description	Document
Facilities for e-content development such as Media Centre, Recording facility,LCS	View Document
Any additional information	View Document
Link to photographs	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 71.77

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
1020.31	979.88	971.2	899.35	904.54

File Description	Document
Details about assigned budget and expenditure on physical facilities and academic facilities	View Document
Audited statements of accounts.	View Document

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

The institute has well defined system of maintenance of its physical, academic and support facilities like laboratory, library, sports, indoor stadium, computers, classrooms etc. Maintenance Supervisor and his team are involved in the maintenance of overall infrastructure facilities. This team looks after the regular maintenance of civil works such as furniture repairs, masonry and plaster works, painting, carpentry, plumbing and housekeeping. The workers look after the maintenance of rest rooms, approach roads and neatness of the entire premises. Housekeeping services are regularly executed and monitored.

The College has strong system for maintenance team under the guidance of Administrative Officer. The overall maintenance of infrastructure like instructional rooms, administrative, amenities and circulation area, academic and support facilities are done systematically with the support of qualified and trained technical and administrative staff. Adequate in-house staff is employed to meticulously maintain hygiene and cleanliness on the campus so as to provide a clean and congenial learning environment. Periodic reporting on requirements of repairs and maintenance are submitted by the HODs to the Administrative officer. The requirements are collectively processed during every semester breaks so as to keep things ready for the next academic year/semester.

Laboratories: All the laboratories are well equipped and maintained to conduct laboratory courses. The number of laboratories established as per the norms of AICTE and JNTUH. The equipment and infrastructure in the laboratories is based on the curriculum and strength of the class. The laboratory

equipment is augmented on a continual basis and also based on the demand the list of the experiments to be conducted in a given domain area. The laboratory equipment are maintained cleanly and calibrated periodically to provide accurate results and maintain reproducibility. The lab classes are conducted systematically. A minimum 15% to 20% of unutilized lab slots/week are allotted for regular maintenance works in the laboratories. The equipment and machineries in the laboratory/workshop are maintained by well-trained technical staff. All laboratories are supported with power backup system (UPS) and in addition to the standby power generators. The laboratories are provided with adequate ICT facilities in order to facilitate the computation and conduction of experiments. Safety of the student and staff is paramount important in the institution. Each and every lab is provided with the safety equipment and student/staff were given necessary instructions to maintain safety in the laboratories.

Classrooms: The Classrooms, Seminar halls and Laboratories, Departmental office, Staff rooms, Administrative office are cleaned and maintained hygienically. There are designated staff for the purpose who are assigned to a designated location. A designated supervisor ensure the job is carried-out regularly. The Dustbins are placed in every floor in the campus. The Green Cover of the campus is well maintained by full time gardeners. The Classrooms, Seminar halls and Laboratories, Departmental office, Staff rooms, Administrative office are having the access to wi-fi facilities. All the building blocks are connected with fire hydrant system as a prevention measure. Fire extinguishers were also placed at prominent locations and spots as a safety measure. The building blocks are well maintained and periodical maintenance checks are being carried to ensure the safety and security of the students.

IT Infrastructure: Trained technical staff and the lab assistants under the supervision of the System Administrator maintain the college IT Infrastructure effectively and efficiently. The IT infrastructure include computers hardware and peripherals, safety and security equipment and other accessories. There are a good number of system software and application software available in the college. The college also promotes the use of open source software to enhance the ability and application of the same to solve the engineering problems.

Electrical Works and Maintenance: The College has a very strong in-house team of well-trained electricians and plumbers who maintain the IT and electrical services such UPS backup, Generator, Air Conditioners, CCTV cameras, lift-maintenance, STP Plant, Water Purifiers. In addition, the system administrator ensures the validity of the software and also maintain them. The electrical maintenance team also maintain the solar power panels and institutional lighting and electrical transformer.

Transport Facility: The College is having a fleet of busses. The transport wing is maintained by an experienced technician and in charge who effectively manages the transport logistics of the college without any flaws. All the drivers are licensed professional and maintain punctuality in the service. The transport in charge takes care of the drivers and schedule the bus routes and maintain the buses in an effective and efficient manner to ensure safety of all the commuters.

Library facility: The Library headed by a qualified Librarian and ably supported by library staff ensures smooth and efficient functioning of the Library. He also tackles issues relating to library facilities. A suggestion box is installed inside the reading room to take users feedback. Their continuous feedback helps a lot in introducing new ideas regarding library enrichment. To ensure return of books, 'no dues' from the library is mandatory for students before appearing in examination. The proper log of visitors/users (students and staff) is maintained on daily basis.

Sports facilities: Regular maintenance of the college indoor and outdoor sport and games are being

supervised and maintained by well qualified staff appointed for the purpose. The Director Physical Education maintains and monitors the Sports facilities. There are Six Physical Directors available on rolls to support the students in various sports and cultural activities of the colleges. They also help the administration in ensuring the campus discipline during their leisure time.

Ambulance Service: The staff and students health and well-being is a very important priority of the management. The College is having a dedicated ambulance to cater to the students in case of any emergency and immediate requirement during untoward incidents take place. The college is having a dispensary and also MOU with a nearby hospital which monitors the health and well-being of staff and students.

The college believes preventive maintenance and periodic checks to ensure all the infrastructure and equipment are well maintained without any troubles/interruption in service.

File Description	Document
link for additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 48.38

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1929	1888	1901	1888	1768

File Description

Document

Upload self attested letter with the list of students sanctioned scholarships

[View Document](#)

Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

[View Document](#)

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 0

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

File Description

Document

Any additional information

[View Document](#)

5.1.3 Number of capability enhancement and development schemes –

1. Guidance for competitive examinations
2. Career Counselling

3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and Meditation
8. Personal Counselling

Response: 7 or more of the above

File Description	Document
Details of capability enhancement and development schemes	View Document
Any additional information	View Document
Link to Institutional website	View Document

5.1.4 Average percentage of students benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 50.61

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
3396	1989	1754	1586	1193

File Description	Document
Number of students benefited by guidance for competitive examinations and career counselling during the last five years	View Document
Any additional information	View Document

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 9.14

5.1.5.1 Number of students attending VET year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
749	327	317	289	120

File Description	Document
Details of of students benefited by Vocational Education and Training (VET)	View Document
Any additional information	View Document

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

File Description	Document
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	View Document
Details of student grievances including sexual harassment and ragging cases	View Document
Any additional information	View Document

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 63.69

5.2.1.1 Number of outgoing students placed year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
638	610	590	510	325

File Description	Document
Self attested list of students placed	View Document
Details of student placement during the last five years	View Document
Any additional information	View Document

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 3.75

5.2.2.1 Number of outgoing students progressing to higher education

Response: 33

File Description	Document
Upload supporting data for student/alumni	View Document
Details of student progression to higher education	View Document
Any additional information	View Document

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 41.65

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) year wise during last five years

2018-19	2017-18	2016-17	2015-16	2014-15
65	40	57	55	61

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: NET/SLET/GATE/GMAT/CAT, GRE/TOEFL/ Civil Services/State government examinations) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
153	188	172	142	84

File Description	Document
Upload supporting data for the same	View Document
Number of students qualifying in state/ national/ international level examinations during the last five years	View Document
Any additional information	View Document

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) during the last five years

Response: 4

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
1	0	3	0	0

File Description	Document
Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years	View Document
e-copies of award letters and certificates	View Document

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The College believes and promotes wholesome (holistic) education and also continuous and autonomous learning is the key to quality of life. . Accordingly the students were provided with wide variety of self-learning opportunities under mentorship. They are empowered to carryout/organize activities independently to hone their soft skills like coordination, team work, collaborative activities and networking to building self-confidence. The college provides autonomy and freedom for the students to govern, manage and learn themselves while on the campus. The self-learning leads effective learning at their own pace and interest. In other words it is nothing but character (attitude) building activity. The Student centric

learning focus on skills and practice that enable lifelong learning and independent problem solving. This theory emphasizes the learners' critical role in constructing the meaning from information and prior experience. Lifelong learning is not confined to childhood or in the classroom but takes place throughout life in a range of situations. In order to promote these important skills student were empowered to form various administrative bodies and vivid committees to pursue wide variety of activities comprising of curricular, co-curricular and extra-curricular activities on the campus and out of the campus.

There are several student committees, councils and forums established to develop their skills in curricular, co-curricular and extracurricular activities. A senior faculty member is appointed as Associate Dean (Student Affairs), as a single window system, for quickly assisting and processing their requests and render the necessary advice based on the need. It may be noted that students were also active members and take part in various curricular committees like Board of Studies, Curriculum design workshops, professional bodies and extension activities at the institute levels. They also take active part in various technical committees in the department /domain specific committees, like Department Technical Associations and Technical clubs. They also actively participate in extracurricular activities like Sports clubs, cultural clubs. Extension activities like National Service Scheme (NSS), Community development and other outreach activities.

All these activities not only develop their personality & character but also develop a positive attitude, mindset and empathy towards the Humanity. The students contribute to the overall growth and success of the institution by their achievement in all the above spheres. As an important stakeholder and beneficiary of the institutional resources, the students actively provide inputs/comments in designing its Vision, Mission and PEOs of the College and as well as their respective department. They actively participate in the process of designing the curriculum of their respective program. Student feedback plays a vital role in the continuous development of the institution, faculty, facilities, curriculum, and other issues. They also participate in various surveys like course-end survey and other surveys. The students organize and participate in technical activities. Further, students create a lot of awareness in about Anti ragging measures and thus making the campus a Ragging Free Zone. Students take active role and involvement in the technical activities and also part of various professional bodies like IEEE, ISTE, IET, and CSI etc.

File Description	Document
Link for Additional Information	View Document

5.3.3 Average number of sports and cultural activities / competitions organised at the institution level per year

Response: 5

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
05	06	05	04	05

File Description	Document
Report of the event	View Document
Number of sports and cultural activities / competitions organised per year	View Document
Any additional information	View Document

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

Vardhaman College of Engineering has well connected Network of its Alumni. The alumni support the institution and contribute to its institutional and academic development. The college conducts Alumni meet every year in the name of “MITRA” at college campus and abroad, to bring together all the old students to share their experiences with faculty. The alumni participate actively as the members of Board of Studies (BOS) and give valuable suggestions for framing innovative curriculum to include latest technologies, which helps in meeting the industry requirements. The college alumni meets periodically to discuss the plan of activities during an academic year. The alumni regularly visit the campus during weekends and participate in knowledge sharing activities which would help current students to decide upon the right career options either to go with the placement opportunity or choose higher studies or to take the path of startup journey (entrepreneurship). Such talks/training and Hands-on sessions by the alumni to the students is on the rise and thus helping the students to identify their career path by enhancing the required aptitude in their respective domains.

The Alumni also actively involve and support the student on placement opportunities and in pre-placement in training so as to build the necessary skills/training such that the students choose right path and become skillful and employable. They also advice students on the importance of Internships in Industry and how to approach the Industry for seeking an Internship. They also help in arranging extension activities such as blood donation camps, practical sessions on meditation and tree plantation, Swachh Bharat and many other such activities.

The College regularly publishes the activities conducted during the academic year to all its alumni in the form of Periodical Magazines, Newsletters and Bulletins with valuable information useful to students’ community. College has developed an automated alumni platform which includes Publishing, Job Portal, Alumni Directory, automated emailing system and peer to peer invite links, to better the alumni network. The alumni platform is also integrated with social media platform which allows the institution to manage all social media channels via a single point thus maximizing the reach with ease. The College invites the alumni for all activities such as Curricular Design Workshops/ meetings, Partial course delivery, Orientation Day Program, Graduation Day Program, Annul Day Program, Cultural Day Program, Sports Events, and NSS Activities etc., The alumni contribute to the institution to orient the students on Personality Development, Current Opportunities, Stress Management, Career Management, Time Management, Emotional Awareness etc., Special talks are also arranged on Higher Education Topics, Current Events, Industrial revolutions and technological changes. Alumni also help us to conduct Industrial

Institution Summit to discuss on latest technologies, opportunities and innovations. Thus, the alumni connectivity contributes significantly to the development of the institution through their involvement with financial and non-financial means.

File Description	Document
Link for Additional Information	View Document

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

Response: 2 Lakhs - 5 Lakhs

File Description	Document
Any additional information	View Document
Alumni association audited statements	View Document

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 10

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
2	2	2	2	2

File Description	Document
Report of the event	View Document
Number of Alumni Association / Chapters meetings conducted during the last five years	View Document
Any additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

Governing Body (GB) is the highest decision making body of the Institute and it constitutes as per the guidelines of University Grants Commission (UGC). The GB consist of Management representatives, Government Nominee, UGC nominee, University (JNTUH) Nominee, Industrialist, Educationalist, Faculty members of the College, Principal is the Ex-officio member secretary. The GB ensures preparation of Strategic Plan through bottom up approach involving all the stakeholders and implementation through top down approach. The GB through the director/principal ensures that all decisions on the matters such as admission, budget, infrastructure, Teaching-Learning Process and placements are in line with Institute's Vision, Mission and Quality Policy properly reach the stakeholders and ensure proper implementation of the same. The GB meets 3 to 4 times in a year to review the performance and makes active contributions for overall growth of the organization. All the meeting proceedings are duly recorded (minutes of the meeting) and the Action Taken Reports were also prepared and appraised to the GB regularly.

The Vision of the institute is to be a pioneer institute and leader in engineering education to address societal needs through education and practice. The Mission of the institute is to adopt innovative student centric learning methods; to enhance professional and entrepreneurial skills through industry institute interaction; to train the students to meet dynamic needs of the society and to promote research and continuing education. The Quality Policy is to endeavor to uphold excellence in all spheres by adopting best practices in effort and effect.

The governance approach of the GB is truly democratic (participatory), de-centralized, and transparent. It promotes participation of all stakeholders for smooth functioning of the college. The GB ensure the involvement and contribution of all senior faculty by constituting various academic and administrative committees like Finance Committee, Board of Studies (BOS), Board of Examiners (BOE), Training and Placement Officer (TPO) and Heads of various Academic/Administrative committees. To strengthen administration, senior faculty members are deputed to attend various capability building training programs. Various committees as mentioned below are in place to monitor the institute progress towards realizing its vision, mission while adhering to quality policy.

The GB also monitors the quality activities through the Institute Quality Assurance Cell (IQAC). The IQAC monitors quality of all activities of the institute by reviewing them periodically through conducting audits, awareness programmes, student feedback, student survey and training programmes for the faculty and staff. Thus, the GB adopts good governance policies to monitor and ensure participative and productive involvement of various stakeholders to promote the growth of the College.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.1.2 The institution practices decentralization and participative management

Response:

The management believes good governance is essential to run an effective system for the growth and development of an institution and enhancing its outcomes. The objective of this focus on decentralization of the governance and delegating responsibilities to various senior functionaries and heads of the departments. This objective promotes inclusiveness and participatory management style of functioning. As an integral part of the governance, the management delegated power (both administrative and academic activities) to the Principal and academic heads for smooth running of the institutional activities. The decentralization also helps the decision making with proper authority and financial power. Thus, decentralization has shown a significant impact on the policy making, planning, and management with reference to engineering education.

The college includes all the stakeholders while framing various guidelines to fortify the systematic functioning of the college. At the same time, decentralization should be seen as a means of improving the efficiency of the system and its quality. There are several committees, both statutory and other, are in place to administer and effectively govern the institute.

The members of the Governing Body (GB) has responsibility for institutional performance. The chairman and members of the GB are actively engage themselves in the institute developmental activities. All of its decision and policies are made in the best interest of the institution with due consultations with the concerned stakeholders. This top-down approach of the GB not only motivate the stakeholders but also effectively helped the development of institute. The minutes of the governing body, other committees and academic activities are published on the college website as act of transparent governance. The information is also shared with the employees through various meetings and circulars from time to time. Achieving academic excellence requires that the all the responsible people work together with defined role, responsibility and authority. The college organization chart provides an insight into the overall structure and authority with responsibility of various administrators and their levels in the organization.

There are as many as 24 active committees in the college which work constantly to uphold all-round development of the students. The following are the few operational level decentralization of various activities in vogue in the institution: **High Level Committees:** The Governing Body and Statutory committees partake in the overall development and growth, policy decisions, financial and disciplinary issues. **Middle Level Committees:** Principal, Deans, COE, Associate Deans, and HODs partake in rules and regulations, academic development, curricular and co-curricular activities etc. **Lower Level Committees:** Various committees constituted for purpose of monitoring the policies and rule and regulations of the institutes.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.2 Strategy Development and Deployment

6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution

Response:

The college is having a five year strategic plan in place which was drafted in the year 2015. It was developed with the stakeholders, both internal and external participation. The strategic Plan was prepared for five successive years from 2015-16 to 2020-21. The management's vision of providing holistic education which imbibes academic excellence and professional ethics in the students during the course of their education at the College. Further, it was also stressed the need to build technology integrated development, global competence and fostering entrepreneurship in young learners and faculty members of the college. Therefore, the college identified and developed strategic plan consists of the following seven important goals keeping creation of knowledge in the mind. They are: Institutional Holistic Development, Infrastructure Development, Strengthening Faculty, Research & Development, Student Career Development Cell, Academic Excellence, and Examination Reforms

The college offers UG, PG and PhD programmes. Over the past four years the college successfully implemented its strategic vision and almost all the goals have been met adequately. The management strongly believes that strong Research makes the foundation for knowledge creation and several measures have been taken to strengthen the research and development. Accordingly, faculty were encouraged to take research as priority and created an ambience to foster R&D. As a result of continuous and consorted efforts the following outcomes were arrived under this important strategic goal, the Research and Development has uplifted the graph of development in terms of Research, Projects and Patents. As a result of its continuous efforts three departments were recognized as Research Centres by the University and 46 research and other funded projects of the faculty got approved by external funding agencies amounting to 10 Crores. The management introduced incentives to the faculty involved in research work and college has paid more than ten lakhs toward the incentives. It may be noted that a number of papers published in prestigious journals like Scopus and SCI.

Consultancy works have been significantly improved. At present 31 number of projects worth around Rs.25 lakhs are being carried out by various faculty members of the college. A gradual increment in the number papers published enhanced from a meagre number of 31 papers to 163 publications indicate the successful accomplishment of this goal and Published 36 patents.

File Description	Document
Any additional information	View Document
Strategic Plan and deployment documents on the website	View Document
Link for Additional Information	View Document

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

The college has a well-structured organizational structure which clearly shows the people responsible for various tasks and the levels of supervision. The Governing Body is the highest body of the college and it is supreme decision making body. The Governing Body of the college meets three to four times in a year. In the governing body several issues pertaining to various academic and administrative matters were taken-up, discussed and appropriate decision would be taken keeping the student development as its central agenda. The Governing Body strongly feels that the students should accomplish their desired goals and thus makes all the efforts (right educational methods - outcome-based education, infrastructure, equipment and tools) to creating a student centric environment. It follows the guidelines laid by the apex bodies like UGC, AICTE and JNTUH and comply them with utmost sincerity. The Governing Body continuously monitors the strategic plan and make suitable advice/direction for the administration to execute the plan.

In addition to the governing body there are several statutory and other committees are in place to administer various activities related to academic, administrative and extension. Thus the governance of the college is more participatory and led by the governing body. This ensures holistic growth and development of the student stakeholders. Societal impact and responsibility are given prime importance by the Institute so as to contribute and promote sustainable socio-economic development through globally competitiveness.

Administrative Set-Up	Functions
Statutory Committees	Policy- making, Financial matters, Recruitments, approving annual budget
The Non-Statutory Committees	Planning and Evaluation, Student welfare, Co-Curricular and Extra-Curricular Activities, Industry Institute Interaction
Service Rules and Procedures	Regulate the service conditions of all Teaching and Nonteaching staff of Vardhaman College of Engineering, either regular or probationary /ad hoc appointed in the vacancy of an approved post
Recruitment Policy & Promotion Policy	Identification of a vacancy, advertisement of the same, Short-listing of the applications, API score
Grievances Redressal Cell	Helps students and Parents to record their complaints and solve their problems relevant to academics, resources and personal grievances.
Women Grievance Redressal Cell	Deals with the cases/complaints of sexual harassment and any other type of harassment of the female students, teaching and non-teaching women staff of

the college. Also, assist the faculty for taking preventive measures in the matter of gender discrimination and sexual harassment

The students can send their grievances to any one of the emails:

grievances.student@vadhman.org or grievances@vardhaman.org or grevce@gmail.com or write an application and submit to Centre convener.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document
Link to Organogram of the Institution webpage	View Document

6.2.3 Implementation of e-governance in areas of operation

1. Planning and Development
2. Administration
3. Finance and Accounts
4. Student Admission and Support
5. Examination

Response: All 5 of the above

File Description	Document
Screen shots of user interfaces	View Document
ERP Document	View Document
Details of implementation of e-governance in areas of operation Planning and Development, Administration etc	View Document
Any additional information	View Document

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

All the bodies, cells and committees are actively involved in the institutional growth and development activities. These are divided into statutory and non-statutory committees. The Governing Body, Academic Council, Board of Studies and Finance Committee are the statutory bodies. And as many as 24 non-statutory committees in vogue which actively involve in various activities of the institutional governance.

Both the statutory and non-statutory committees meet regularly to review the progress and advice for improvement accordingly. In every meeting of a committee, the previous committee resolutions/decision

and the corresponding action taken by the institution would be deliberated. The Action Taken Report would be presented the respective committee in its minutes. The bodies/committees discuss and deliberate the agenda items (various issues) presented and record its resolutions/decisions/approvals. The minutes of the meeting are recorded and documented as per the guidelines of each of the committee.

Governing Body is the highest authority in the Institution, as an act of ensuring quality in its educational practices, the governing body decided to go for accreditation of its UG programmes. Accordingly, in its meeting number 16 held on 30-05-2018, the Governing Body (GB) resolved to apply for Re-accreditation of B.Tech. Programmes under Tier-I (Washington Accord) under the National Board of accreditation. The decision of the GB was communicated to all the HODs and it decided to apply for 5 UG programmes. The following programmes were identified, namely Computer Science and Engineering, Information Technology, Electronics and Communication Engineering, Electrical and Electronics Engineering and Mechanical Engineering.

In the meeting number 17 held on 16-07-2018, the GB appreciated the efforts of the institutional faculty and staff for approval of Pre-Qualifier. Further, the GB directed the Principal to prepare and submit the self-assessment report (SAR) within the stipulated time. As per the directions by the GB, the Principal distributed the work of preparation to their respective SAR. The NBA Expert Team visited the college from 14-12-2018 to 16-12-2018 and evaluated all the five under graduate programs applied for accreditation. All the five programs applied were given the status of accreditation for a period of 3 years from 2018-2019 to 2020-2021, vide F No. 11-131-2010-NBA dated 22-05-2019 from the NBA. Further, all the programmes secured high score (more than 690 marks). As desired by the GB, the Institution continues its growth plans by setting ambitious academic goals and by gauging teaching excellence and student satisfaction. Thus, the GB resolution taken and minted (based on the minutes of the meeting held on 30-05-2018) activity of obtaining the accreditation status for its programmes was successfully implemented.

The effectiveness of various bodies/cells/committees is evident through the decisions/resolutions recorded and the action taken report by the institution. The Chairpersons and members of various committees actively partake not only in the meetings but also in various activities of the college. They also interact with the students and faculty on regular basis.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

The college in general takes care of its employees well. There are several welfare measures in place for the teaching and non- teaching staff. The college encourages a worthwhile welfare schemes to all the teaching

and non-teaching staff to boost the morale of the employees and thus make them motivated to work efficiently.

The college trusts the contribution of its employees towards its overall development and progress of the institution. It also encourage the employees to utilize the welfare measures with ease. Some of the welfare measures the institute provide to its employees include Promotion and increments based on self-appraisal, cash awards and certificate of appreciation for academic excellence, incentive for publication of papers / research articles, supporting faculty members to conduct/organize guest lectures, supporting faculty members to conduct/organize a conference/Seminar/workshop/FDPs. All the employees are provided free transport facility for their daily commuting to the college.

All the employees are covered under medical insurance facility up to a sum of Rs. 1 lakh towards accidental and health insurance per annum. The institution also provides the facility of Employee Provident Fund (EPF) for its employees. Interest-free advance to staff, financial support in case of need in the form of festival advance is also other benefits/incentives provided to the employees. The following is a list of other existing welfare measures are in vogue: 6th Pay commission recommendations as per the norms of AICTE; annual membership in Indian Professional Bodies like IEEE/IET; Incentive scheme to take-up research activities or endeavors; Registration fees, TA &DA for attending conferences, seminars and workshops; Special Incentives for the best research work; Seed Money for research projects; Sports, gym and yoga facilities in the institution; ATM facilities in the campus; Gift to all the employees on their birthdays; Time-bound increments to the non-teaching staff and Gratuity.

In addition, the colleges also provides various leave benefits to all the employees such as casual Leave, special leave, medical leave, maternity leave and Special Casual Leave (SCL) to both teaching as well as non-teaching staff. An employee can avail 12 casual leaves, special leaves not exceeding 14 days in an academic year to attend seminars/symposia/ workshops organized by institutions of national and international repute, On Duty leave to faculty representing the college either for administrative work or to presenting research project report/ AICTE/ JNTUH/ Technical Education/UGC, 5 Medical Leaves (after completion of the probation), and maternity leaves. For the enrichment of the employee profile, the teaching and non-teaching staff is provided a pool of welfare schemes with the aid of The Central Bank of India which offers/provides to the employees of the college the loan facilities such as Personal Loan, Educational Loan, Housing Loan, Vehicle Loan, Employee Provident Fund Scheme.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.3.2 Average percentage of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the last five years

Response: 54.67

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
230	285	133	93	28

File Description	Document
Details of teachers provided with financial support to attend conferences, workshops etc during the last five years	View Document
Any additional information	View Document

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 23.6

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
30	20	24	22	22

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centres).	View Document
Reports of Academic Staff College or similar centers	View Document
Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff	View Document
Any additional information	View Document

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 72.89

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program,

Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
223	267	268	145	111

File Description	Document
Reports of the Human Resource Development Centres (UGC ASC or other relevant centers).	View Document
IQAC report summary	View Document
Details of teachers attending professional development programs during the last five years	View Document
Any additional information	View Document

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The college focuses and believes that an effective performance appraisal system is vital for optimizing the contribution of individual faculty and also its alignment towards the institutional Vision & Mission. It aims at self-growth in terms of both personal and professional development of the employee which directly impacts the success of students. The appraisal system is based on stipulated criteria and parameters that are mandatory for the faculty to fulfil for fetching the benefits associated with it. A brief description of Performance Appraisal system is as detailed below. The performance appraisal is being assessed annually based on the submission of self-appraisal/ assessment report by employees (teaching/non-teaching) on various indexed parameters. The parameters of achievement of a faculty majorly include Teaching-Learning Processes, Research publications, Faculty Development Programs and Training underwent, Patents, Outreach/Extension activities, professional activities and involvement in the administrative responsibilities and developmental activities of department/institute.

The self-appraisal submitted by the employees undergoes three levels of reviews/evaluation first the IQAC, followed by the Principal and finally by the Management. After the reviews, based on the report, suggestions on areas of improvement would be communicated to the concerned faculty. A faculty, based on the score achieved in his/her Annual Performance, would be awarded annual increments. Another evaluation method used for assessing the faculty is the teaching learning process and their effectiveness. The tools used for this purpose are Students' feedback, student success rate in the courses taught, number of research papers published in reputed journals, papers presented in national and international conferences and workshops, and proposals submitted to funding agencies. The feedback of the faculty is taken on a five point scale (5-very great extent, 4-great extent, 3- moderate extent, 2-some extent and 1-not at all). The feedback is judged on different parameters like clarification of doubts, clarity of content, application of theory to real time situations, teaching aids used and effectiveness in delivery of content. Equal impetus would be given to research and innovation. Faculty are also evaluated on the research projects of innovation, patents applied/received, consultancy works carried out and outreach programs in collaboration

with industry/other colleges.

Performance Appraisal of Non-Teaching staff would be based on their regularity, punctuality and sincerity in service rendered. The foremost criteria comprises of the roles and responsibilities carried out by the respective staff in terms of regularity in attendance, upgradation of qualification, The number of training programs attended for skill development during the service, the key strengths the staff holds and how that has benefitted the organization (department/institute) and consideration of specific comments by the concerned HOD for the respective staff based on his/her performance.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Financial planning and management is the foresight of the institution in strategize its growth and development activities. The institution has a robust financial management system in place. The institution conducts regular internal audits by the authorized and recognized auditors. In addition the state government also monitors and audits the institutional finance/accounts through TAFRC (Telangana State Admission and Fee Regulatory Committee). It may be noted that the state government pay the fees (through reimbursement) of all eligible students admitted into the college. Thus, the receipts are very transparent and known. All the expenditures incurred by the college is maintained by the college accounts department and duly submitted to the government from time to time. After thorough review, the state government (committee) approves the expenditure made by the institute. Then committee (AFRC) considers the report for fixing the revised fee for the next block period (the duration of a block period is three years).

The College has a Finance Committee. The finance committee reviews the financial planning periodically. The institute is registered under section 12A of the Income Tax Act. The finance committee acts as an advisory body to Governing Body (GB) on matters of finances connected to the college. The Institution accounts are audited both internal and external auditors to ensure financial compliance. The third party qualified auditors prepare the institute level budget for every assessment year and present it to the governing body for further proceedings. The finance committee reviews the income/expenditure statements and report the same to the governing body for further recommendations and action plan. Optimal utilization and execution of the budget is monitored through internal and external auditing.

The annual budget for institute is prepared and proposed at the beginning of financial year, for recurring and non-recurring potential income and expenditures involved for the year. The departmental budget proposals of the requirement are also prepared and submitted for the approval of the GB. Mobilization of funds in the institute is through resource and fund mobilization policy. The primary source is through collection of tuition fees. In addition, revenue generated through the financial grants obtained through

external research projects and revenue generated through the consultancy works carried out by the faculty.

Internal Audit: Qualified and certified internal auditors appointed do the audit on regular basis. The college auditors conduct the audit of accounts quarterly, scrutinizes and verifies all payments, receipts and journals vouchers of the transactions, cash books, ledger account and all bank accounts in every financial year. The accounts are also subjected to external auditor. The auditors prepare and submit the income and expenditure statement and Balance Sheet and Depreciation statement. All government Scholarships and Funds received from government as Grants are audited separately by the Auditor appointed by government. As an act of transparency, the audited financial statements are published on the college website and also sent to the statutory and regulatory bodies.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 13.08

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
0.15	3.33	2.70	6.90	0

File Description	Document
Details of Funds / Grants received from non-government bodies during the last five years	View Document
Any additional information	View Document
Annual statements of accounts	View Document

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

The college implements academic and non-academic reforms within their self-conceived development programs that focus on quality and relevance, excellence, resource mobilization, greater institutional autonomy with accountability, research and equity. The receipts primarily generated through the fees paid

by the students joining in the programmes offered by the college. Any deficit in the receipts would be managed by seeking funds from the parent trust or borrowed from the banks in the form of OD. Another form of receipts is obtained grants received through faculty projects submitted to the funding agencies through Research proposals. These funds are utilized for the research and laboratory development for the benefit of society and students. The institute has a well-defined mechanism to examine effective and efficient utilization of available financial resources for the development of the academic processes and infrastructure development.

The institutional budget is prepared by Principal every year taking into consideration of recurring and non-recurring expenditures. Accordingly, all the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this all coordinators of different cells viz., R& D Cell, Exam Cell, T&P Cell, NSS Cell, etc. were also instructed to submit their budget through the Principal. All the major financial decisions are taken by the Institute's Governing Body (GB). All the major financial transactions are analyzed and verified by the governing body under different heads like Research & Development, Training & Placement, Software & Internet charges, Library Books/ Journals, Repair & maintenance, Printing & stationary, Equipment & Consumables, Furniture & Fixtures.

Wherever funds are inadequate, the management borrows loans to meet out the expenditure. Given the nature of the institute, it stands a limited scope for fund mobilization. Despite of this, the college management never compromised on providing high quality engineering education with an affordable cost to the students as per the directions of the state government. It clearly indicate that the management has the social commitment of serving the society and thus sincerely contribute to the mission of the state government and partnered in the progress of the state in a little manner through empowering the young minds.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

The Internal Quality Assurance Cell (IQAC) of the institution is a cell which continuously monitors the quality practices and ensures all the institutional academic policies thoroughly followed as prescribed by the apex bodies. The prime responsibility of IQAC is to initiate, plan and supervise various activities that are obligatory to increase the quality of the education imparted in the college. The role of IQAC in maintaining quality standards in teaching-learning processes and evaluation becomes crucial. The IQAC Cell strategically ensures the quality of teaching-learning practices through stringent initiatives and measures taken such as Faculty Self-Appraisal, FDPs, and Training Programs for Non-Teaching, Workshops on OBE, Conference Educational Reforms, Setting Quality Bench Marks, Key Performance

Indicators, Auditing and Impact Mentoring, and Academic and Administrative Audit. Thus the IQAC monitors the continuous quality improvement of the academic processes. The two best practices and bench marked processes of the College are Key Performance Indicators, and Setting the quality Bench Marks.

Key Performance Indicators: The performance of a department is based on various parameters that play a key role in the assessment of quality. The assessment for quality improvement is done regularly and report is generated for all the departments every month, every semester and every year. Few Parameters on which the quality is measured are the academic performance of the students, success rate of the students, academic audits, number of publications done and the quality of the journal in which it is published, include the number of faculty awarded PhDs degree in that year, number of funded research projects, total grants received, patents applied and granted. Besides these impetus is also given to consultancy works and faculty's contribution to writing books.

Setting the quality Bench Marks: The IQAC has initiated a standard for setting a performance at two levels viz the Faculty level and the Department Level. First bench mark set for the faculty are based on the number of papers published in International Journals of repute like IEEE, Elsevier, another being Doctorates form a cluster and work together for publications and also write proposals for funding projects, Faculty refresher courses, one week or FDP program guiding at least two UG projects, pursue online certificate courses, student's feedback and maintenance of academic performance index (API) score. The bench marks on which the departments assessed are, the no of paper publications maintained with a minimum set at 1:1 ratio, funding projects starting with minimum 20 Lakhs per annum, consultancy work with minimum 20 lakhs PA, Faculty Development Programmes, Workshops, Hands-on Training Programmes, Higher education guidance, Student publications, Student Innovations, Student hardware working prototypes, Outcome-based education, computing CO-PO attainment and analyzing the impact of the TLP in deriving the outcomes, Increasing success rate of the students right from the first year. In order to gauge the true reflection of the activities carried out by the performance metric used in strategic management to identify and improve various internal functions, departmental score was devised and used to measure efficiency and effectiveness of the processes.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

The institution monitors and periodically reviews its teaching-learning processes and adopted methodologies/practices through various operations and expected outcomes. This process was monitored on continual basis by the Institutional Quality Assurance (IQAC). In addition, the IQAC also initiates necessary steps to measure the quality of education through regular and continuous follow-up actions. The roles and responsibilities of the IQAC committee are the same as defined by the NAAC. The institution follows Choice Based Credit System (CBCS) and adopted the AICTE model Curriculum of 160 credits

since 2018-19. The curriculum was designed by the faculty of the College following a lot of brainstorm sessions involving various stake holders including the current students undergoing the programme. The students are provided a platform to the cutting edge technologies through the new curriculum. The students were given more lab/practice-based courses. From the academic year 2018-19, the concept of integrated course have been introduced. To expose the students to global learning a methods and learn the human skills to reflect upon societal needs few new courses (four credits) such as social innovation and engineering exploration were introduced in the curriculum drawing from EPICS program of the Purdue University, USA. All the suggested changes in the curriculum by the departments and their BOS are put forth to the academic council for approval. In case the COs and POs are not achieved then necessary changes in the teaching methodology to reach the target levels of attainment are made. Attainment of the student learning outcomes was done through measuring the Course Outcomes (COs), Programme Outcomes (POs) and Programme Specific Outcomes (PSOs). The IQAC ensure the quality of the attainment levels of the learning outcome through a continuous vigil of the whole process through thorough monitoring of the every process at every stage.

The measurement of the learning Outcomes was done to several assessment tools at different levels. The first level is the continuous assessment tests (formative) such as slip test/class test where the student is primarily assesses based on comprehension levels and continuous assessment test (CAT-1) and CAT2. After CAT1, the students are divided into two categories, Category-I (fast learners) and Category-II (slow learners). For enhancing the academic performance, remedial coaching for the slow learning students and project-based alternate assessment for the fast learning students is being carried-out. This helps the students to upgrade their knowledge levels. This process of continuous assessment has resulted in the students to learn and reflect on the learning that they do in the classroom. At the end of the semester, the students undergo the Semester End Examination (SEE) which results in awarding the SGPA based on their performance in each examination.

The college follows a grading policy. Semester grade point average and cumulative grade point average at the semester level and at the end of the program respectively. The question papers for all the assessments were made qualitatively adopting the knowledge levels as described in Bloom's Taxonomy. Thus, the institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through its IQAC.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 4.2

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
9	7	2	2	1

File Description	Document
Number of quality initiatives by IQAC per year for promoting quality culture	View Document
Any additional information	View Document
IQAC link	View Document

6.5.4 Quality assurance initiatives of the institution include

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

Response: Any 4 of the above

File Description	Document
e-copies of the accreditations and certifications	View Document
Details of Quality assurance initiatives of the institution	View Document
Any additional information	View Document
Annual reports of Institution	View Document

6.5.5 Incremental improvements made during the preceding five years (*in case of first cycle*) Post accreditation quality initiatives (*second and subsequent cycles*)

Response:

Quality is paramount to any organization, be it academic, research, industry and business etc. Further, the Quality Assurance provides the maintenance of a desired level of quality in the educational experience provided to students by taking utmost care through a well-designed curriculum, teaching-learning processes, and assessments. The student learning is assessed through various direct and indirect test administered during their formative and summative assessment tools. Quality checks are deployed at every stage of student learning to not only measure it, but also improve them continuously. In order maintain the quality standards, every process is thoroughly monitored through wide-range of testing tools/audits/surveys/feedbacks through the college quality cell. The quality cell at the institution level is known as Institution Quality Assurance Cell. It is customary that continuous improvement is an essential tool in academics and administration, to set up quality learning ambience. IQAC played a key role in

initiating the necessary measures to meet the desired objectives and to foster an effective and efficient educational practices. The following are the achievement/academic improvements wherein the IQAC put its stamp of quality practice:

- The college got NBA Accreditation Under TIER-1 in 2018 for all the five UG programs-CSE, ECE, IT, ME and EEE with high scores that is between 690 to 742 out of 1000 marks
- Implementation of Outcome-based Education as per AICTE-NBA
- According to NIRF Ranking 2019, the college stands at 152 place as compared to 2017 and 2018 where it was placed under the band of 151-200
- According to Times Engineering Institute Ranking Survey 2019, the College of Engineering is ranked fourth among top 25 private engineering institutes. It is also ranked number one position under two categories i.e., the Top Telangana Private Institution-Research and top Telangana Private Institute-Infrastructure. When it comes to placements, the College ranked 4 in the top Telangana private institutes
- Improvement in the input quality of the students, percentage cut-off marks is increased.
- Academic audit has been made mandatory to evaluate the progress of quality education imparted to the students through teaching learning process.
- Decentralization of work-Deans and Associate Deans are appointed, various committees and cells are formed

The initiatives taken by IQAC resulted in fruitful outcomes over the years and journey is continued further. Some of the significant academic achievements are as follows:

Doctorate faculty members increased from 23 to 92,

Technical papers published in reputed national/international journals increased from 26 to 163

Significant increase in the percentage of campus placements.

Patents increased from 2 to 36 and

Increase in external grants, at present stands around rupees 10 crores.

The journey of the quality is a ongoing process. In the coming years, institution focus would be generating employers (enabling youth) from the campus thus contributing to nation's prosperity and growth.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 22

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
6	4	4	4	4

File Description	Document
Report of the event	View Document
List of gender equity promotion programs organized by the institution	View Document
Any additional information	View Document

7.1.2 Institution shows gender sensitivity in providing facilities such as

- a) Safety and Security
- b) Counselling
- c) Common Room

Response:

Institution shows gender sensitivity in providing facilities such as a) Safety and Security b) Counselling

c) Common Room

The college encourages women empowerment right from recruitment of women in both teaching and non-teaching to promotion practices. It has 28% women employees and 32% of girl students in the campus. Women are given equal chance to progress on par with men. Girls are encouraged and given opportunity to hold positions like president, vice-president and secretary of various technical and non-technical clubs of the college. Girl topper and boy topper are given an opportunity to address freshers on fresher's day.

Safety and Security: The college has established a grievance and redressal cell for women protection, inequalities and any sexual harassment issues, on campus and hostels. Students are continuously educated through, various awareness programs on self-defense, health and hygiene. Speakers from She Teams from

the state police department also educate girls to address issues on cybercrime, eve teasing and sexual harassment etc.,

- In college buses there are pre-defined seats for girls and lady staff thereby avoiding inconvenience
- Anti-Ragging helpline numbers are displayed at all vulnerable points
- In-house hostel facility for girls in campus with single entry, 24X7 Security, CCTV Surveillance, Solar Fencing and In-House Warden
- A sanitary napkin vending machine and an incinerator are available to maintain health and hygiene
- Round the clock ambulance service
- Inward and the outward movements are registered and allowed only with the prior information from the parents
- For fitness of girls along with boys there is a separate high-quality equipment of games, sports, and gym is provided

Counselling:

- For every student there is a faculty counselor and they meet as per the schedule apart from schedule hours students can meet their mentors in office hours of the faculty
- 1:20 is the mentor mentee ratio maintained. Every first-year student will have two mentors one from freshmen and one from the department
- Students meet their mentor for every fortnight & discuss the issues on academic, non-academic and personal for which mentors provide the feasible solution
- Issues that are out of mentor's control are escalated to the notice of Women Grievance and Redressal Cell
- Parent-teacher meet every semester to update the status of their wards & timely updates about the hostel students to the parents.

Common Room:

- Waiting room in every block
- Reading area for reading newspapers, technical and non-technical journals and discussion area

- Indoor and outdoor stadium, cricket stadium with international standards
- Healthcare facilities full time and a part time doctors with 04 beds, 02 consultation rooms and a pharmacy; 24 hours service on the campus
- Anti-ragging cell with squads available to ensure ragging free campus and hostel

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.1.3 Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 21.92

7.1.3.1 Annual power requirement met by renewable energy sources (in KWH)

Response: 143997.97

7.1.3.2 Total annual power requirement (in KWH)

Response: 656926

File Description	Document
Details of power requirement of the Institution met by renewable energy sources	View Document
Any additional information	View Document

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 57.74

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 73.745

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 127.71

File Description	Document
Details of lighting power requirements met through LED bulbs	View Document
Any additional information	View Document

7.1.5 Waste Management steps including:

- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

Solid waste management: Solid waste is segregated as degradable and non-degradable and are handed over to the concern authorities and NGOs under MOU as a part of Swachh Bharat initiative & clean and green campus. Each block and each floor is provided with dry waste collecting bins every day and collected, the same is transported to the concerned places and segregate and hand over to concern. Sufficient quantity of bins provided at wet waste prone areas like cafeteria, food courts and food processing along with daily collected vegetable waste, food waste is treated and converted into vermi compost and used the manure further to develop terrace garden and plants growth in the campus. The infrastructural waste like construction materials used for the fills and road ways where ever necessary in the campus or for the needy people. The vermi compost manure also given free of cost to nearby formers for their crops. The cow dung available in the cattle field in the campus helping the vegetable waste to manure in course of time for regular use. There are dustbins placed at specific points to prevent littering in the campus. The college is striving to be a plastic free zone and in process of vertical garden with the available waste pet bottles and making the campus ecofriendly and greenery to reduce global warming. The cartridges are refilled and re-used in the printers. UPS batteries are refurbished by the sellers. As a motivational project under EPICS, students developed ecofriendly plastic fuel with single time used plastic available in the campus and another developed vertical garden plastic stem to use the space properly to crop more with the available manure produced.

Liquid Waste Management: In chemistry laboratory, organic solvents are collected in a special container, chemically compatible, securely fitted with a tight-fitting lid and labelled as hazardous waste and safety aspects before utilizing them. Corrosive liquids are appropriately diluted to a pH between 5.5 and 10.5 and then, these can go down the drain. The labs are well ventilated and spacious. 24-hour water supply is available in Chemistry lab and safety of the students is given top priority in planning a facility. In the campus the waste water coming from wash rooms and other used areas collected and processed. The recycled water is utilized for plantation and garden area.

E-waste management: The E-waste management has been given due focus and all Electronic goods are put to optimum use; the minor repairs are done to set right the equipment by the staff and the Laboratory assistants; and the major repairs, by the professional technicians, and are reused. The old computers are used by the instructor for demonstration purposes in the practical sessions. The ones which are unusable in any manner they are exchanged with new equipment in Exchange offer. UPS Batteries are recharged / repaired / exchanged by the suppliers. The waste compact discs are used by students for decoration and Participation in competitions 'Best out of Waste' in various club activity events held in institution such as

Annual day celebrations, Techno Management fest. Computers, printers and other equipment are donated to charitable organizations after a given period of usage. Entered MoU with URBAN REBOXIT for collecting any processable dry waste like stationery and all e waste for making use of e-waste to good products. The main aim is to collect E-Waste and segregate the useful circuits and components and make it into useful products. Establishing E- Waste Collection Plant in future will help by providing employment to youth in the adopted villages.

File Description	Document
Any additional information	View Document

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Rapid population growth, combined with industrialization, urbanization, agricultural intensification and water-intensive lifestyles lead to a global water crisis. About 25 per cent of the population currently lacks access to safe drinking water, while 60 per cent lacks access to a safe sanitation system at international level. Falling water tables are widespread in India and worldwide and causes serious problems lead to water shortages. India is land of versatile weather where inconsistency in rain is frequent. So as an option of having a backup for water needs, one system becomes necessary which provides much saving of water; would be helpful in reducing wastage of water. Although rainwater harvesting (RWH) is gaining popularity as a sustainable water saving system in urban as well as rural areas. The college campus has successfully installed the rainwater harvesting (RWH) system to improve the water quality and quantity through this form of optimization technique. The campus located at 78.30708E longitude and 17.2550N latitude and this zone average amount of annual rainfall is 781.5mm. The main objective of this RWH practice is to fulfill the scarcity of the water in the campus including hostels and then it needs to be use it for domestic, gardening, sanitary (toilet flushing), fire safety purpose, and drinking water supply (potable quality). The RWH system functioning are monitored and controlled by the concern faculty and specialized student team from the department of civil engineering. This team monitors all four stages of catchment, conveyance, filtration, storage in the campus. Also, this team monitors and ensure that the terrace must be clean and there is no chemical, toxic or rusting materials on the roof surfaces in VCE campus. The rainwater harvesting (RWH) system is installed in the entire campus. In addition two bore wells, seven RO plants, and two sump tanks to meet the requirements of water consumption in the college campus and hostel. This RWH system helps us in the optimum utilization of rainwater. The campus is A GREEN CAMPUS and promotes sustainable environment and eco-friendly campus.

File Description	Document
Any additional information	View Document

7.1.7 Green Practices

- Students, staff using

- a) Bicycles
- b) Public Transport
- c) Pedestrian friendly roads
 - Plastic-free campus
 - Paperless office
 - Green landscaping with trees and plants

Response:

I. Green landscaping with trees and plants: The campus has aesthetically designed buildings, surrounded by greenery creating good ambience for learning. The Institute has a canopy of trees and plants that make the environment carbon dioxide free to safeguard the health of all the inmates. Dustbins are kept along all major corridors. Firefighting services have been installed all around the campus as per the regulatory norms suggested during the approval for the building plans.

II. Green energy: Solar panels are installed in the campus to generate solar electricity and Gobar gas plant is constructed to generate bio gas from cow dung.

III. Prohibition of the fossil fuel vehicles in the college campus: Vehicles are parked outside the college campus to make the campus free from the smoke. Solar energy vehicles are used in the campus to transport materials from one place to another place.

IV. Reduce Reuse and Recycle hierarchy is followed to minimize waste to create sustainable life in the campus.

Plastic free campus: On campus use of plastic is discouraged. Plastic cups, metal tins and paper cups are banned in the campus. The hot beverages are served in steel mugs/glass. Awareness posters and pamphlets are displayed in prime locations of the campus.

Paperless office: Most of the official communications like notices, programme communications, minutes are shared through SMS or WhatsApp or e-mails. Most of the office files are shared through softcopies on computers. Surveys, feedback from students, parents, alumni, midterm exams, leave forms, payrolls etc., are made online, through Google forms/Google docs. Double sided use of record sheets is followed in the laboratory. Double sided printing option is being used to print papers.

V. Environment friendly transport systems

Common transport system: College provides common transport system for students and staff from distant locations in the city. An exclusive public transport is also available for the students and staff from distant locations in the city with the help of TSRTC.

Pedestrian friendly roads: The path from the main gate to the academic buildings has Pedestrian friendly foot paths. The campus has a good network of bitumen roads and the walkway is lined with trees.

VI. Environment friendly festivals

Ganesh Chaturthi: Ganesh Chaturthi is celebrated in college campus by installing Ganesha clay idols.

Bathukamma (floral festival): Bathukamma is floral festival celebrated predominantly by the Telangana. This festival is regularly celebrated in the college campus.

Eco friendly canteen: Steam cooking is practiced in the canteen to reduce LPG consumption. Fumes and emissions from the canteen are released outside the campus. College has reverse osmosis (RO) water purification unit to supply safe drinking water to the students and staff.

File Description	Document
Any additional information	View Document

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 2.24

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

2018-19	2017-18	2016-17	2015-16	2014-15
9.86	3.87	14.00	89.88	11.44

File Description	Document
Green audit report	View Document
Details of expenditure on green initiatives and waste management during the last five years	View Document
Any additional information	View Document

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

Response: A. 7 and more of the above

File Description	Document
Resources available in the institution for Divyangjan	View Document
Any additional information	View Document
link to photos and videos of facilities for Divyangjan	View Document

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 45

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
10	10	10	10	5

File Description	Document
Number of Specific initiatives to address locational advantages and disadvantages	View Document

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 42

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
8	10	9	10	5

File Description	Document
Report of the event	View Document

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

File Description	Document
Any additional information	View Document
URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics	View Document

7.1.13 Display of core values in the institution and on its website

Response: Yes

File Description	Document
Any additional information	View Document
Provide URL of website that displays core values	View Document

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

File Description	Document
Details of activities organized to increase consciousness about national identities and symbols	View Document

7.1.15 The institution offers a course on Human Values and professional ethics

Response: Yes

File Description	Document
Any additional information	View Document
Provide link to Courses on Human Values and professional ethics on Institutional website	View Document

7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions

Response: Yes

File Description	Document
Provide URL of supporting documents to prove institution functions as per professional code	View Document

7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years

Response: 26

7.1.17.1 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties year-wise during the last five years

2018-19	2017-18	2016-17	2015-16	2014-15
5	5	5	5	6

File Description	Document
List of activities conducted for promotion of universal values	View Document
Any additional information	View Document

7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities

Response:

India is a land of multi-ethnicity where people of different languages and cultures live together with peace and harmony. India is worldwide known for its cultural diversity and colorful national festivals. The National festivals Gandhi Jayanti, the Independence Day and the Republic Day have a distinctive quality which sets them apart from other festivals. The institute recognizes and attests to the overriding importance of these red-letter days. The National Festivals are celebrated with enthusiasm. Every year the institute organizes national festivals and birth / death anniversaries of the great Indian personalities viz., social reformers and freedom fighters. These National festivals are celebrated to make the students aware about their contribution to the nation.

Independence Day	
Republic Day	
Engineers Day – Birthday Celebrations of Sir M Visvesvaraya	
Birth Anniversary of Bharat Ratna Dr B R Ambedkar	
Teachers Day – Birthday Celebrations of Dr.S.Radhakrishna	

National Mathematics Day - Birth anniversary of Srinivasa Ramanujan
Birth Anniversaries - Mahatma Gandhi and Lal Bahadur Shastri

Academic Year 2014-15			
S.No.	Name of the activity	Date	Number of teachers pa
1	Independence Day	15.08.2014	47
2	Engineers Day	15.09.2014	147
3	Republic Day	26.01.2015	35
Academic Year 2015-16			
S.No.	Name of the activity	Date	Number of teachers pa
1	Independence Day	15.08.2015	39
2	Engineers Day	15.09.2015	122
3	Republic Day	26.01.2016	32
4	Dr B R Ambedkar jayanthi	15.04.2016	47
Academic Year 2016-17			
S.No.	Name of the activity	Date	Number of teachers pa
1	Independence Day	15.08.2016	48
2	Teachers Day	05.09.2016	149
3	Engineers Day	15.09.2016	151
4	Republic Day	26.01.2017	45
5	Dr B R Ambedkar jayanthi	15.04.2017	39
Academic Year 2017-18			
S.No.	Name of the activity	Date	Number of teachers pa
1	Independence Day	15.08.2017	52
2	Teachers Day	05.09.2017	132
3	Engineers Day	15.09.2017	135
4	Mahatma Gandhi and Lal Bahadur Shastri jayanthi	02.10.2017	41
5	Republic Day	26.01.2018	65
6	Dr B R Ambedkar jayanthi	15.04.2018	42
Academic Year 2018-19			
S.No.	Name of the activity	Date	Number of teachers pa
1	Independence Day	15.08.2018	64
2	Teachers Day	05.09.2018	152
3	Engineers Day	15.09.2018	145
4	Mahatma Gandhi and Lal Bahadur Shastri jayanthi	02.10.2018	39
5	National Mathematics Day	22.12.2018	42
6	Republic Day	26.01.2019	56
7	Dr B R Ambedkar jayanthi	15.04.2019	49

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

Vardhaman college of Engineering maintains complete transparency in all the activities like financial, academic, administrative and auxiliary functions

Financial:

1. The budget requirements are taken from the all the departments
2. The finance committee will finalize the budget requirements for the Financial year
3. The detailed budget will be kept before the Governing body for approval.
4. The approved budget will be sanctioned to the departments.
5. The audited statements will be placed in the website.

Academic:

1. The faculty in our institute has the academic flexibility of choosing the subjects for teaching every semester.
2. Decisions related to academics are approved by the Academic Council and the minutes of the committee are made available in the website.
3. Programs offered, curriculum and academic regulations are uploaded to the website.
4. Academic calendar, course pack, Timetables are displayed to the students prior to the starting of the semester.
5. Course registration will be done online. Examination related notifications and circulars are widely displayed, circulated and kept on the website.
6. Internal marks are displayed on department Notice Board and students are given an opportunity to verify the evaluated papers and marks can be seen by the parents/students portal.
7. Provision for students to apply for revaluation and recounting.

Administrative:

1. Transparency is maintained in admission of students and the Admission policy is as per the State Government norms.
2. Service rules are made available on the institution website.
3. The Administrative Policy Manual is made available to all the stakeholders where the roles and responsibilities are well defined.
4. The institution has a participative management model where the faculty and the students are members of various committees.

Auxiliary:

1. Research and Consultancy policy is kept in the institute website and is circulated to all the faculty through heads of the department.
2. Information about the funding opportunities and when released by funding agencies is circulated to provide equal opportunities to the entire faculty.
3. Training and Placement activities are mailed to all the students from time to time the details are also uploaded on the website.
4. Funds received from the Government agencies are audited separately and submitted to the respective agencies.
5. Student attendance is sent to the parent/guardian on a daily basis and available in the college portal.

Important Document Links available on the college website

1. Service Rules & Procedures, Recruitment Policy & Promotion Policy, Leave Rules and Incentive Policy are available on the college website (https://vardhaman.org/images/Service_Rules_and_Procedures.pdf).
2. Regulations, Syllabi, Academic Calendars, All examination related schedules, Committees etc are available on college website (www.vardhaman.org).
3. Students can verify examination results on college website (<https://vardhaman.org/examinations.html>).
4. Student Nominal rolls, Internal Circulars, API Formats, etc are placed in the faculty login (faculty.vardhaman.org).
5. All student related circulars including placement drives are placed in the student corner (studentcorner.vardhaman.org).
6. Contact information is available on the college website (<https://vardhaman.org/contact-us.html>)
7. AICTE Mandatory Disclosure is available on the college website (<https://vardhaman.org/mandatory-disclosure.html>).
8. Audit Statement available on college web site <https://vardhaman.org/governing-body-2/>

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practices

I. Centre for Innovation and Entrepreneurship (CIE)

The entrepreneurship and startup culture are the trend and the government of India has given a huge thrust promoting the culture of innovation and incubation at the higher educational institutions in general and Engineering Colleges in particular. Taking a cue from this the college initiated promoting the culture of innovation and incubation among its students. Accordingly, the college has established a Center for Innovation and Entrepreneurship (CIE) to promote and support the spirit of entrepreneurship among the graduated and graduating students.

Entrepreneurship education imparts qualities at individual level such as self-motivation and financial responsibility. In addition, this kind of education empowers people to have self-discipline since entrepreneurship involves taking well calculated risks. People who have gone through this kind of training are able to recognize opportunities. Entrepreneurship education also encourages innovation in the running of organizations.

Teaching people innovative ways to make a living enables them to take control of their circumstances. In Tanzania, for example, entrepreneurship education is being used as a tool to empower women. Technically trained women, for example, struggle to find employment in a male dominated domain. The education is aimed at improving their self-confidence and giving them a chance at becoming self-reliant so that they are not totally dependent on employment. This form of education also builds up self-awareness.

The CIE wishes to facilitate the creation of ideas and inventions that benefit society. To this end, CIE has established an Incubation center and adopted this Incubation Policy to provide guidance and management structure to facilitate the development of entrepreneurship. The incubation center is registered as separate LLP Firm with name “VEC Experimental hub Private Limited” and all the incubated firms are registered under VEC Experimental hub private limited. VEC Experimental hub Pvt Ltd, under the aegis of CIE Vardhaman and supported by the institute that funds, mentors and nurtures ideas, startups and entrepreneurs. Virtual incubates can operate from anywhere in India. Incubation center supports:

? Early stage startups

? Mid to large sized companies with developed ideas

? Mentors to help our startups

Primarily the aim of this training is to enable creation of employment as unemployment is a rampant problem in many societies. Entrepreneurship education aims at empowering people to create employment opportunities. Small and Medium Enterprises account for half the private workforce in India. Most people seeking employment depend on entrepreneurs to embark on new ventures and hire them.

Entrepreneurship Activities on campus

Various Activities were organized regularly to encourage and support students and faculty members. Frequency of the activities are weekly, monthly and annually.

1. Entrepreneurship Talk series
2. Entrepreneurship Awareness camps
3. Ideation camp
4. Business Development Bootcamps
5. Visit to startups
6. Faculty development workshops
7. Establishment of Entrepreneurship development cell
8. Organized E-Summit 2018 in the college

Start-ups like Utor AI, GRAD, Acads360 India, Strada Technologies, FATCAT and Aakriti were a few start-ups that emerged here and the journey of entrepreneurship continues very promisingly. The college is hopeful to take this initiative in a big way with the support of EDI, MSME, and Government of India.

II. Student Skill Development Cell (Competency Development Cell)

Many of the students enter the portals of the institution are from the first-generation families who look for a job immediate as career option after completion of their graduation. The challenge here is that their

eligibility for a campus placement opportunity (the industry expects a minimum of 60% marks at both 10th and 12th standards). The college is totally concern about this. In order to facilitate the students to improve their academic performance and communication skills the college felt there is need for continuous skill building activity. Accordingly, a dedicated student skill development cell was established in the year 2016. The main objective of the Skill Development Cell is to bridge the gap between academia and industry and train the students on the required skill sets. Students are trained on employability skills to suit the requirement of the industry.

The institute hires skilled trainers specialized in various fields related to the requirements of the job market. The students are trained in areas of Aptitude knowledge, Quantitative theory, Soft Skill and Technical Skills. These trainers offer courses for the 2nd and 3rd year students for the semester and the syllabus is designed accordingly to suit the requirement of the job market. Apart from the regular classes, students are also provided the industry related training for 15 days or weekly based on the student's requirements. Gradually the trainers were taken on rolls and on full time job in order to spare more time and focus for the training and imparting skills. The impact of this shown a gradual increase in the placements due to persistent efforts in preparing and training the students for employability. Most of our students before they graduate, get job offers from companies of repute like, Cap-Gemini, Tata Consultancy Services, Amazon, Salesforce, Wipro and several others.

There are several students who opt for the internship, however, the students don't have a clear idea of how to get the internship and the various assessment processes. Hence, the Student Skill Development Cell assist such students to go through the process and help them to attend and clear the interview. Some of our graduates prefer going for the higher studies in the foreign universities, however, they cannot afford to go without the scholarship. Hence, they need to appear for various test like GRE, TOFEL, PTE, IELTS etc, the trainers also extend helping hand and personal guidance to the desired students for achieving success in the test. The cell also extends its reach to the staff and faculty in aiding to improve their communication and connect with the industry for fetching a professional internship during the semester breaks. Since the Student Skill Development Cell also offers the assistance to the faculty/staff it is named as competency Development Cell (CDC) in the year 2018. The cell is headed by a senior faculty in the capacity associate dean of the institute. The competency development cell focusses on gathering the requirement of students, staff and faculty through various surveys and identify the gaps and offer suitable services for enhancing the competencies of the concerned.

III. Engineering Projects in Community Service (EPICS)

Engineering Projects in Community Service (EPICS) is a unique program offered by the college in which teams of undergraduate students' design, build and deploy the real systems to solve engineering-based problems for local community. EPICS programme was initiated by Purdue University of the United States. The main objective of EPICS is to expose student to address the societal issues and to make the students socially responsible by finding and providing viable solutions for the problems stated by the community partners. EPICS faculty has been mentored by Purdue University Professor, Dr. William Oakes, who is the founder of EPICS program at Purdue University. The EPICS in IEEE program connects engineering with community service in four categories of community improvement effort:

? Access and Abilities—By bringing together student branches at universities, secondary students and nonprofit organizations, there is a greater ability to solve accessibility issues within communities. EPICS in IEEE Access and Abilities projects help enable adaptive services, clinics for those in need (such as children with disabilities), programs for adults and assistive technologies.

? Education and Outreach—EPICS in IEEE strives to help young students to discover the benefits of science, math, technology and engineering for their futures. Many projects give students hands-on experiences in order to stimulate their interests in those fields.

? Environment— Many EPICS in IEEE projects concern themselves with new ways to create electricity and energy, recycling and the use of renewable energy sources. Through these EPICS in IEEE projects, young students learn about the impact of environmental issues and how engineering can be part of the solution. They also gain exposure to potential jobs with a growing demand for alternative energy and environmental solutions.

? Human Services—Through their experiences in Human Services EPICS in IEEE projects, students find connections between engineering and the tremendous scope of community needs globally. This includes homelessness prevention, affordable housing, family and children agencies, neighborhood revitalization and local government.

This program became popular among the students as it gives more exposure to them and also establish connect with community and an opportunity to solve their problems with the application engineering.

A team of 15 college faculty members from various departments have enrolled in this program voluntarily to be the mentors for the students. These 15 faculty members have successfully completed the Design Thinking Course which is a six months course. In the month of April 2018, the college has signed an MOU with IEEE and EPICS in Purdue to introduce this EPICS course in the curriculum.

Eleven modules of Social Innovation and Engineering Explorations courses were successfully implemented so far to the students. As a part of pilot program, prototyping is also being done since 2017-18. The implementation phase has started and as a part of it five different projects and process are successfully completed. Thus, the EPICS included in the curriculum from the academic year and it profoundly helps in attaining the desired graduate attributes expected from the undergraduate engineering students of the institution.

IV. Innovative Teaching to achieve Program Outcomes

Innovative teaching is necessity for all teachers in order to meet the educational needs of the new generations. The purpose of education is not just making a student literate, but adds rationale thinking, knowledge, ability and self-sufficiency. The college practices Outcomes-based Education (OBE) approach in all aspect of TLP. Faculty members of the college use innovative teaching methods and techniques to fulfill the needs of OBE system. Some pedagogical initiatives used include role-playing, case studies, group projects, think-pair-share, peer teaching, debates, Just-in-Time Teaching, and short demonstrations followed by class discussion. The primary purpose of this practice being followed is to practice Student Centric Learning and strengthen technical Skills through Course-end projects and interdisciplinary projects and usage of Technology in teaching learning practices.

Active learning has enhanced the team spirit, learning capabilities and technical skills of the student. It created an environment to think more about technology, research and societal problems and find a solution for the problems around them, which also created a responsibility towards addressing the societal problems. Many of the students are part of research projects leading to patents, publications, startup ideas and few startups are initiated in the campus related to day- to-day student life problems. The proactive involvement in course-based projects enhanced the team spirit and motivated towards participation in

National and State level competitions as well. The students' success rate improved and this is reflected in quality and statistics of the placements. The employer's feedback is a clear testimony of this claim. The students opting for international studies are able to come up with good grades and involve in research because of the self and interactive learning aptitude.

V. Online Student Feedback System

The college has a robust Online Student Feedback System (OSFS). OSFS is a web application which provides a base to conduct student's feedback online. Transparency and precision are the hallmarks of this system without any room for tampering. Feedback from students allows the institution to evaluate how its service provision is viewed by its most important stakeholders. This system was initiated to override the problems that the students face in the institution. The students, in a convenient, consistent and anonymous manner can submit their feedback about the faculty, the facilities and the courses offered to them during their period of their study. This system approaches all about institutional and educational practices and processes that are taken into consideration and the student's concerns of the level of the knowledge they receive. This procedure ensures that there is a good and cordial relationship between the students learning environment and the teachers. This has been very effective in identifying the issues related to curriculum and facilities successfully.

The results of the student feedback process, as well as the recommendations and the action taken are important considerations for the program review which each department is required to undertake. Online Feedback System has been instrumental in gathering the required information from students about the faculty, facilities and courses. It has also been an effective quality checking device that provides scope for improvement in various sections, thus enabling a positive learning environment for the students.

However, a few problems have been encountered which are divergent in terms of gathering productive feedback. In some instances, a few students were found to be deviating from what was required of them and in few other cases of students are not providing exact feedback and also showing low levels of interest were also registered. Overall this system implemented with great transparency and feedback taken was reviewed seriously and necessary corrective actions were also taken for improvement.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

Vardhaman College of Engineering has a clear Vision statement: *To be a pioneer institute and leader in engineering education to address societal needs through education and practice.* We have always aspired

to be distinctive using a variety of aspects such as interdisciplinary research, motivating startups, innovative teaching pedagogy, value-based education, empowering society through introducing projects and motivating entrepreneurship.

Interdisciplinary Research

Designing curriculum in a way to introduce and train students through interdisciplinarity is an approach practiced in Vardhaman College of Engineering. This type of study allows the student to learn by making connections between ideas and concepts across different disciplinary boundaries. Students learning in this way are able to apply the knowledge gained in one discipline to another different discipline as a way to deepen the learning experience. The most effective approach to interdisciplinary study enables students to build their own interdisciplinary pathway between the courses offered in their respective semesters. A carefully facilitated induction programme in the first year ensures that students are educated on the benefits of inter-disciplinary studies in the first year itself.

Vardhaman College of Engineering strives to achieve true interdisciplinarity through collaboration of educators. Professionals from different disciplines are often brought to the education environment of Vardhaman College of Engineering for an effective facilitation of interdisciplinary teaching and learning. Such interaction supports the constructive paradigm which allows for new knowledge construction and a deeper understanding of ideas.

Making connections between different concepts is essential in interdisciplinary study;

- Students are highly motivated as they have a vested interest in pursuing topics that are interesting to them. As a result, the content is often rooted in life experiences, giving an authentic purpose for the learning and connecting it to a real world context.
- Students cover topics in more depth because they are considering the many and varied perspectives from which a topic can be explored.
- Critical thinking skills are used and developed as students look across disciplinary boundaries to consider other viewpoints and also begin to compare and contrast concepts across subject areas.
- Exploring topics across a range of subject boundaries motivates students to pursue new knowledge in different subject areas.
- Interdisciplinary knowledge and application of different disciplines can lead to greater creativity.

Motivating Startups

Following the footsteps of the policy drafted by the AICTE, Vardhaman College of Engineering has a policy of promoting Start-Ups in its academic environment. Students are introduced to this policy through the First Year Induction programmes. Start-up Policies play a vital role in the economic and social development of a nation. In developing economies, these policies extend support to entrepreneurs and startups in overcoming the numerous barriers while trying to promote their start-ups. Vardhaman College of Engineering strongly believes that technical education institutes play an imperative role in shaping the Start up movement of a nation. We also have college students who have taken their business ideas to the next level and started out on their own as entrepreneurs. We have fully supported them in their journey and on the way both have gained from it. These startups have mentored and supported the campus companies and done honorary related work for Vardhaman Start-Up community as well.

Innovative Teaching Pedagogy

Vardhaman College of Engineering has adopted innovative teaching pedagogy using Smart Classrooms to help teachers in delivering the concept better, and produce more meaningful learning experiences by using audio/visual aids from various sources.

- **Group Classroom Experiments:** A number of students work in groups on carefully designed guided inquiry questions.
- **Role Plays:** Role Plays are an effective method of getting the message across. Students take on the role of a person affected by an issue and studies the impacts of the issues on human life and/or the effects of human activities on the world around us from the perspective of that person. More rarely, students take on the roles of some phenomena, such as part of an ecosystem, to demonstrate the lesson in an interesting and immediate manner.
- **Projects and Models:** Known as the effective teaching tools, models and projects are used as demonstrative tools to explain a particular concept. Once the child creates his/her own project, it is easier for the child to internalize the concept by 'learning by doing'.
- **Context rich problems:** Short realistic scenarios giving the students a plausible motivation for solving the problem. The problem is a short story (beginning with "you") in which the major character is the student. Context rich problems reflect the real world, and may include excess information, or require the student to recall important background information.
- **Interactive Lectures:** Easy way for instructors to intellectually engage and involve students as active participants in a lecture. Students are encouraged to participate in an activity that lets them work directly with the material.
- **Questioning:** This approach turns a lecture into a guided discussion wherein the instructor poses thoughtful questions to students.
- **Comprehensive and Continuous Assessment:** Provides educators with a better understanding of what students are learning and engages students more deeply in the process of learning.

Societal Consciousness

Social awareness and consciousness serve as a precursor to social movement. Educational institutions build moral essence and ethical values to produce socially desirable behaviour, personality and character which promote innovation, peace, equal opportunities and justification among individuals, society and nation. Vardhaman College of Engineering strives to attain its Mission statement: *To train the students to meet dynamic needs of the society*. VCE, through its curriculum, aims to focus on dynamic needs of the society through a variety of courses such as Gender Sensitization, Engineering Exploration, Social Innovation, etc. RWT is a DST funded project undertaken by Vardhaman College of Engineering to improve economic conditions of Telangana Farmers. The project leverages women empowerment and education to efficiently transform the society. As part of the RWT Project, women farmers in rural areas have been given an opportunity and training to engage in the cultivation of Quinoa and Chia seeds.

File Description	Document
Any additional information	View Document
Link for Additional Information	View Document

5. CONCLUSION

Additional Information :

Unique selling points of Vardhaman College of Engineering

1. Vardhaman College of Engineering is recognized as center for potential excellence
2. Outcome based education compliant
3. Accredited by NAAC with CGPA 3.24
4. Five UG programs Accredited by NBA under Tier-I
5. UGC autonomous
6. ISO certified
7. More than 35 % of the faculty having Ph.D qualification
8. SIRO recognition by DSIR
9. NIRF (MHRD) ranked institution (152 rank)
10. World class infrastructure and state of art laboratories
11. Comfortable and hygienic hostels for boys and girls
12. Strong academic and industry interface
13. Choice based credit system
14. Better than 1: 15 Faculty student ratio on average for the last Five years
15. Separate Competency development cell with dedicated in-house faculty
16. Published 36 patents
17. 37 Funding research projects worth more than 8 crores
18. Well established incubation center with 4 active start-ups
19. State of the art Auditorium with 1500 capacity with centralized AC
20. Add-on courses to fill the gap in the curriculum

Concluding Remarks :

Vardhaman College of Engineering with support from its visionary management, able administrators and dedicated staff has been on rapid growth trajectory in terms of quality and quantity since its inception in 1999. The College with Potential for Excellence (CPE) status bestowed on us by UGC is a testimony of institutes commitment to all-round development of students through its innovative curriculum, delivered through experiential learning model creating opportunities for research, innovation, and entrepreneurship. Hence contributing to the growth of the state and nation at large.

The initiatives towards promoting research, industry-academia interface, faculty with research bent of mind and doctoral degree, extension and outreach programmes have helped institute transform from teaching institute into a research institute.

The institute has been leveraging ICT tools to its fullest to provide great learning experience and a transparent academic administration. The institute also has been continuously upgrading its facilities and infrastructure to respond to the changing pedagogic and research environments to stay relevant and be a role model for other organizations in this part of India. And it is doing so, through AICTE's Margadarshan Program(scheme).

The large base of alumni who have taken their rightful places in the society are directly contributing towards the development of nation. It is only their contribution which is bringing laurels to the institute time and again.

The exercise of autonomy at all levels has brought a sense of ownership among all the stakeholders in the institute. It is only through their participation the institute could get NBA accreditation for all the five programs applied under Tier-1. This SSR report (cycle II) is no different and is prepared with the contribution and participation of all the stakeholders under the supervision of IQAC.

The institute in particular IQAC never ceases an opportunity to improve the quality of learning and teaching process. It continuously adopts best practices and do away with unproductive, obsolete practices. It is because of such practices the institute has fared well during and after the accreditation process be it NAAC cycle-I, NBA, ISO etc. Hope to do well in NAAC - II cycle too.

6.ANNEXURE

1.Metrics Level Deviations

Metric ID	Sub Questions and Answers before and after DVV Verification																				
1.2.1	<p>Percentage of new Courses introduced out of the total number of courses across all Programs offered during last five years</p> <p>1.2.1.1. How many new courses are introduced within the last five years Answer before DVV Verification : 383 Answer after DVV Verification: 295</p> <p>1.2.1.2. Number of courses offered by the institution across all programs during the last five years Answer before DVV Verification : 701 Answer after DVV Verification: 701</p> <p>Remark : As per the supporting documents the highlighted courses are '295'</p>																				
2.4.4	<p>Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years</p> <p>2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>85</td> <td>54</td> <td>22</td> <td>19</td> <td>22</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>4</td> <td>1</td> <td>00</td> <td>00</td> </tr> </tbody> </table> <p>Remark : Edited as per supporting documents submitted. Online course completion cannot be considered as awards as per the metric.</p>	2018-19	2017-18	2016-17	2015-16	2014-15	85	54	22	19	22	2018-19	2017-18	2016-17	2015-16	2014-15	4	4	1	00	00
2018-19	2017-18	2016-17	2015-16	2014-15																	
85	54	22	19	22																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
4	4	1	00	00																	
3.1.3	<p>Number of teachers awarded international fellowship for advanced studies/ research during the last five years</p> <p>3.1.3.1. The number of teachers awarded international fellowship for advanced studies / research year-wise during the last five years Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>60</td> <td>35</td> <td>15</td> <td>3</td> <td>35</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2018-19	2017-18	2016-17	2015-16	2014-15	60	35	15	3	35	2018-19	2017-18	2016-17	2015-16	2014-15					
2018-19	2017-18	2016-17	2015-16	2014-15																	
60	35	15	3	35																	
2018-19	2017-18	2016-17	2015-16	2014-15																	

04	02	00	00	00
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Remark : Edited according to the documents submitted by HEI.

3.2.1 Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution during the last five years (INR in Lakhs)

3.2.1.1. Total Grants for research projects sponsored by the non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
185.15	138.82	101.65	270.95	182.84

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
0	2.93	0.50	0	0

Remark : HEI responded that the inputs are according to the Manual asking to provide the funds received from both the government and non-government sources. Response is edited as the metric 3.2.1 is specified as Grants by the non-government sources.

3.3.3 Number of awards for innovation won by institution/ teachers/ research scholars/students during the last five years

3.3.3.1. Total number of awards for innovation won by institution/teachers/research scholars/students year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
16	11	5	2	1

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

Remark : Opted out metric

3.4.5 Number of research papers per teacher in the Journals notified on UGC website during the last five years

3.4.5.1. Number of research papers in the Journals notified on UGC website during the last five

years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
148	107	43	39	27

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
140	150	15	23	24

Remark : Edited according to the revised data template and verified web links.

3.5.2 Revenue generated from consultancy during the last five years

3.5.2.1. Total amount generated from consultancy year-wise during the last five years (INR in Lakhs)

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
11.52	8.35	3.89	0.95	0.95

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
10.25	9.5	3.876	0.714	0.95

Remark : Edited according to the revised documents submitted by HEI.

3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange per year

3.7.1.1. Total number of Collaborative activities for research, faculty exchange, student exchange year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
176	108	33	43	24

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
0	0	0	0	0

Remark : Relevant supporting documents not provided. As per SOP, The collaboration activities should be facilitated through the mentioned collaboration only. Copies of collaboration/related documents not provided.

3.7.2	<p>Number of linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the last five years</p> <p>3.7.2.1. Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="304 389 1046 524"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>54</td> <td>48</td> <td>29</td> <td>12</td> <td>12</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="304 602 1046 736"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>53</td> <td>46</td> <td>29</td> <td>12</td> <td>12</td> </tr> </tbody> </table> <p>Remark : Edited according to the revised documents submitted by HEI.</p>	2018-19	2017-18	2016-17	2015-16	2014-15	54	48	29	12	12	2018-19	2017-18	2016-17	2015-16	2014-15	53	46	29	12	12
2018-19	2017-18	2016-17	2015-16	2014-15																	
54	48	29	12	12																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
53	46	29	12	12																	
5.1.2	<p>Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years</p> <p>5.1.2.1. Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="304 1095 1046 1229"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>4</td> <td>3</td> <td>2</td> <td>3</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="304 1308 1046 1442"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> </tr> </tbody> </table> <p>Remark : Opted out metric</p>	2018-19	2017-18	2016-17	2015-16	2014-15	3	4	3	2	3	2018-19	2017-18	2016-17	2015-16	2014-15	0	0	0	0	0
2018-19	2017-18	2016-17	2015-16	2014-15																	
3	4	3	2	3																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
0	0	0	0	0																	
5.3.1	<p>Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) during the last five years</p> <p>5.3.1.1. Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="304 1879 1046 2013"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>7</td> <td>12</td> <td>15</td> <td>5</td> </tr> </tbody> </table>	2018-19	2017-18	2016-17	2015-16	2014-15	7	7	12	15	5										
2018-19	2017-18	2016-17	2015-16	2014-15																	
7	7	12	15	5																	

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
1	0	3	0	0

Remark : Edited according to the revised documents submitted by HEI.

5.3.3 Average number of sports and cultural activities / competitions organised at the institution level per year

5.3.3.1. Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
22	21	21	20	20

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
05	06	05	04	05

Remark : Edited according to the revised documents submitted by HEI.

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

6.5.3.1. Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
21	19	9	7	4

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
9	7	2	2	1

Remark : According to the clarification provided by HEI

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

Answer before DVV Verification:

2018-19	2017-18	2016-17	2015-16	2014-15
5	5	5	5	5

Answer After DVV Verification :

2018-19	2017-18	2016-17	2015-16	2014-15
8	10	9	10	5

Remark : Edited according to the revised documents submitted by HEI.

2.Extended Profile Deviations

ID	Extended Questions																				
1.1	<p>Number of programs offered year-wise for last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>13</td> <td>12</td> <td>11</td> <td>11</td> <td>14</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1"> <thead> <tr> <th>2018-19</th> <th>2017-18</th> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> </tr> </thead> <tbody> <tr> <td>13</td> <td>13</td> <td>13</td> <td>13</td> <td>16</td> </tr> </tbody> </table>	2018-19	2017-18	2016-17	2015-16	2014-15	13	12	11	11	14	2018-19	2017-18	2016-17	2015-16	2014-15	13	13	13	13	16
2018-19	2017-18	2016-17	2015-16	2014-15																	
13	12	11	11	14																	
2018-19	2017-18	2016-17	2015-16	2014-15																	
13	13	13	13	16																	