

**INTERNAL QUALITY ASSURANCE CELL (IQAC)**  
**Velagapudi Ramakrishna**  
**SIDDHARTHA ENGINEERING COLLEGE**  
**(Autonomous)**  
**Vijayawada – 520 007**



**Annual Quality Assurance Report (AQAR)**  
**(2017 – 2018)**  
**ANNEXURE - 1**

*Submitted to*  
**NATIONAL ASSESSMENT AND ACCREDITATION  
COUNCIL**  
*An Autonomous Institution of the University Grants Commission*

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## Part – A

### 1. Details of the Institution

1.1 Name of Institution : Velagapudi Ramakrishna Siddhartha Engineering College

1.2 Address : Vasantha Nagar, Kanuru,  
Bandar Road,  
Vijayawada,  
Andhra Pradesh, India.

Pin Code : 520 007

Institutional e-mail address : principal@vrsiddhartha.ac.in

Contact No's : 0866 2582333, 2584930

Name of the Head of the Institution : Dr. A. V. Ratna Prasad

Tel. No. with STD Code : 0866 2582333, 2584930

Mobile: +91 9849599497

Name of the IQAC Coordinator : Dr. M.V.S. Raju

Contact No's : +91 9885199560

IQAC e-mail address : iqac@vrsiddhartha.ac.in

1.3 NAAC Track ID (For ex. MHC0GN 18879) : **APCOGN15299**

1.4 NAAC Executive Committee No. & Date : EC/65/A&A/28 dated 25.10.2013

*(For Example EC/32/A&A/143 dated 3-5-2004.  
This EC no. is available in the right corner-  
bottom of your institution's Accreditation Certificate)*

1.5 Website address : [www.vrsiddhartha.ac.in](http://www.vrsiddhartha.ac.in)

Web-link of the AQAR : <http://www.vrsiddhartha.ac.in/academics/images/aqar201718.pdf>

### 1.6 Accreditation Details

S. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 <sup>st</sup> Cycle	A	3.17	2013	5 Years

1.7 Date of Establishment of IQAC: dd/mm/yyyy :

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

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

Date of submission of previous AQAR: 28/12/2017 (dd/mm/yyyy)

### 1.10 Institutional Status

University State  Central  Deemed  Private

Affiliated College Yes  No

Constituent College Yes  No

Autonomous College of UGC Yes  No

Regulatory Agency Approved institution Yes  No   
(Eg. AICTE, BCI, MCI, PCI, NCI)

Type of Institution Coeducation  Men  Women

Urban  Rural  Tribal

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

Grant-in-aid + self financing  Totally self-financing

### 1.11 Type of Faculty/Programme

Arts  Science  Commerce/Law  PEI(Phy. Edu)

TEI(Edu)  Engineering  Health Science  Management

Others (Specify)

1.12 Name of the Affiliating University (for the colleges)

1.13 Special Status conferred by Central/State Government – UGC/CSIR/DST/DBT/ICMR etc.

Autonomy by State/Central Govt./University	UGC – Autonomous status conferred for 10 years (2018-2028). Ref. No.F22-1/2017 (AC). dated 17.04.18		
University with potential for Excellence	<input type="checkbox"/>	UGC-CPE	<input type="checkbox"/>
DST Star Scheme	<input type="checkbox"/>	UGC-CE	<input type="checkbox"/>
UGC-Special Assistance Programme	<input type="checkbox"/>	DST-FIST	<input type="checkbox" value="COE"/>
UGC-Innovative PG Programmes	<input type="checkbox"/>	Any Other (specify)	<input type="checkbox" value="Margadarshan*"/>
UGC-COP Programmes	<input type="checkbox"/>		

\* AICTE funded Project under ‘MARGADARSHAN Scheme’ with a total grant of Rs. 25.0 Lakhs (Ref. No. 58-1/RIFD/Margadarshan/2018-19, dated 13-06-2018)

2. IQAC Composition and Activities

2.1 No. of Teachers	<input type="text" value="10"/>
2.2 No. of Administrative/Technical Staff	<input type="text" value="07"/>
2.3 No. of Students	<input type="text" value="1"/>
2.4 No. of Management representatives	<input type="text" value="02"/>
2.5 No. of Alumni	<input type="text" value="01"/>
2.6 No. of any other stakeholder and Community representatives	<input type="text" value="01"/>
	<input type="text" value="01"/>

2.7 No. of Employers/Industrialists

2.8 No. of other External Experts

-

2.9 Total No. of members

25

2.10 No. of IQAC meetings held

02

2.11 No. of meetings with various stakeholders

05

Faculty

01

Teaching Staff

01

Alumni

01

Others

02

2.12 Has IQAC received any funding from UGC during the year?

Yes

No

If yes, mention the amount

--

2.13 Seminars and Conferences (only quality related)

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

Total No.

03

International

-

National

-

State

-

Institution Level

03

(ii) Themes

- ✓ Training program for newly joined faculty on scientific engineering education practices by Teaching Learning Center – IIT Chennai and NITTTR/ Chennai
- ✓ Training for non-teaching staff on MS-Word and MS-EXCEL
- ✓ Research Methodologies and Patent Filing

2.14 Significant Activities and contributions made by IQAC

- A Committee with faculty members representing all the departments was constituted for the improvement in utilization of library resources.

- Identification and organization of Training programs from more cluster groups for better placements as per the requirements of various companies offering employment.
- Full-Fledged Automation System is in place and operating successfully.
- Directed to file at least two patents from each department in a year by developing innovative quality products/ models.
- Quality Policy is revised and approved by the academic council and Governing body.

2.15 Plan of Action by IQAC/Outcome

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

<b>Plan of action</b>	<b>Achievements</b>
Utilization of Library Resources in an effective manner.	Feedback collected from the students and staff on utilization of library resources and corrective measures taken for effective utilization.
Adoption of Automation system with integrated data base of students and staff.	Advanced Automation System is in place and operating successfully.
Formation of cluster groups and product development rooms for innovative models	Innovation/Product development rooms and incubation centers are established in various departments to fabricate innovative products.
Development of innovative products/ models leads to at least two patents from each department in a year.	Patents were filed from ECE and ME departments.
Revision of Quality Policy to meet the current industry requirements.	Quality Policy is revised and approved by the academic council and Governing body.
Promoting students to National/ International Industry driven competitions.	Constituted a committee with College level coordinator and department level mentors to motivate and guide the students to participate in industry driven competitions.

## Part – B Criterion – I

### 1. Curricular Aspects

#### 1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD				
PG	12	0	12	
UG	07		07	
PG Diploma			----	
Advanced Diploma			----	
Diploma			----	
Certificate			----	
Others			----	
<b>Total</b>	19	0	19	
Interdisciplinary				
Innovative				

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

The curriculum is designed as per the needs of the stakeholders. It facilitates students to attain the expected knowledge, skills and attitude by the time of completion of their graduation. It consists of CBCS, Self learning course (MOOCS), Institutional Core, Program Core, Program Electives, etc. As per VR17 curriculum structure consists of various course categories

- **Choice Based Credit System (CBCS)** : Choice Based Credit System has been implemented from VR14 regulations. The regulations of CBCS are disseminated in VRSEC web site.
- **Self Learning Course (MOOCS)**: The students are expected to learn the courses offered under Self Learning Course on their own. Credits are allotted for the online self learning courses (SWAYAM/NPTEL/edX/others) approved by BOS of respective departments.
- **Institutional Core**: Institutional Core courses give the knowledge, skills and attitude expected in UG engineering graduates of all programs. The courses offered under this category cover the required knowledge in the following areas
  1. **Basic sciences and Mathematics**
  2. **Basic Engineering Sciences**
  3. **Humanities and social sciences**
- **Program Core**: The Program core consists of set of courses considered necessary for the students of the specific program. The courses under this category should satisfy the program specific criteria prescribed by the appropriate professional societies.



- **Program Electives:** The program electives are set of courses offered in the program which covers depth and breadth to further broaden their knowledge. The students may register for appropriate electives offered in the program based on their area of interest.
- **Personality Development:** The courses offered under this category are to improve employability skills of the students. One course in each semester, spreading across four semesters and will be offered from 3<sup>rd</sup> to 6<sup>th</sup> semesters.
- **Mandatory Learning Courses**  
As per the guidelines given by statutory bodies, courses on Environment studies, Professional ethics & Human values, Technology & society and Indian constitution are offered.  
Students who joined in first year must undergo an Induction Program at the beginning of the first semester as prescribed.
- **Student Practice courses:** Student Practice Courses are aimed at improving their professional competency. Students shall participate and complete successfully any one activity from (a) and any one activity from (b) to (f) as given below, before completion of 6<sup>th</sup> semester
  - a. Co-curricular participation: Student should have participated in Technical Quizzes/Student paper contest/Seminars/Conferences etc., approved by the department.
  - b. National Service Scheme (NSS)/National Cadet Cops: Student should have enrolled as a member of NSS/NCC at least for one year.
  - c. Games and Sports: Participation in the university level and above competitions.
  - d. Art and Cultural : Participation in the University level and above competitions.
  - e. Competitions conducted by Professional societies (IEEE,IETE,ASME,IE,CSI etc.,) in the college or conducted by the other colleges
  - f. Publication in conference/Journal
- **Skill based courses :** Students can also opt for skill based courses of 15 hours duration which will be offered by experts from industry/other institutions/in house faculty on specialized topics. They can complete such courses during the semesters 3 to 6 as and when these courses are offered by different departments

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	19
Trimester	-
Annual	-

1.3 Feedback from stakeholders\* (On all aspects)

Alumni	<input checked="" type="checkbox"/>	Parents	<input checked="" type="checkbox"/>	Employers	<input type="checkbox"/>	Students	<input checked="" type="checkbox"/>
Mode of feedback :	Online	<input checked="" type="checkbox"/>	Manual	<input checked="" type="checkbox"/>	Co-operating schools (for PEI)	<input type="checkbox"/>	

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

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

- Yes, the curriculum is updated in A.Y 2017-18 as per the AICTE, Industrial requirements and stakeholder's feedback.
- Under the revised curriculum, the number of credits required for theory has been reduced to 165 from 200 as per AICTE guidelines.
- Students may carry out full time project at industry by availing CBCS facility.
- Competitions conducted by professional societies (IEEE,IETE,ASME,IE,CSI etc.,) in the college or conducted by the other colleges are introduced in student practice courses
- Student publications in conference/journal are introduced in student practice courses in the VR 17 curriculum.
- Students can also opt for skill based courses of 15 hours duration which will be offered by experts from industry/other institutions/in house faculty on specialized topics.
- Engineering Project In Community Services (EPICS) is introduced in VR17 curriculum. Students will go to the society (Villages/ Hospitals/Towns, etc.,) to identify the societal problem and make necessary literature survey for a feasible solution
- Under the revised curriculum, detained and break-in study candidates are not eligible for the award of first class with distinction. However Students who are absent for semester end examination once in his/her duration of B.Tech programme on valid medical grounds/humanitarian grounds will be considered for the award of First class with distinction subject to the recommendations of the committee constituted by the principal.
- In VR17 regulations, three marks in each theory course shall be given based on the percentage of attendance.

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

No

## Criterion – II

### 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty	Total	Asst. Professors	Associate Professors	Professors	Others
	334	255	38	41	0

2.2 No. of permanent faculty with Ph. D 93

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year	Asst. Professors		Associate Professors		Professors		Others		Total	
	R	V	R	V	R	V	R	V	R	V
	03	00	5	0	1	0			9	0

2.4 No. of Guest and Visiting faculty and Temporary faculty 12 --- ---

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	99	35	8
Presented papers	111	43	6
Resource Persons	7	7	-

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

MOODLE.- All departments are using MOODLE for implementation of Learning management system. It is of our one of the best practices adopted in all departments

A project room/Model development room was established in each department to develop innovative models with required facilities. This activity is also made as one of the best practices of our institution.

ICT is being followed by all departments

Flipped classroom teaching is followed by some departments

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

265

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

- |  |
|--|
| <ul style="list-style-type: none"> <li>• Bar coding - Automatic generation of Hall ticket, student specific OMR sheets</li> <li>• Double valuation for PG</li> </ul> |
|--|

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

334
-----

2.10 Average percentage of attendance of students

80
----

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				
		Distinction	I	II	III	Pass %
B. Tech-CE	209	89	73	3	0	78.95
B. Tech-CSE	210	137	58	5	0	95.24
B. Tech-ECE	284	154	91	2	0	86.97
B. Tech-EEE	136	83	38	2	0	90.44
B. Tech-EIE	136	31	52	9	0	67.65
B. Tech-IT	136	72	43	0	0	84.56
B. Tech-ME	209	121	60	7	0	89.95
<b>TOTAL(UG)</b>	<b>1320</b>	<b>687</b>	<b>415</b>	<b>28</b>	<b>0</b>	<b>85.61</b>
<b>MCA</b>	<b>56</b>	<b>26</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>67.86</b>
<b>MBA</b>	<b>58</b>	<b>38</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>96.55</b>
<b>M.Tech(PG)</b>	<b>129</b>	<b>91</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>85.27</b>

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

IQAC Creates policies and procedures to enhance the teaching and learning process, some of the policies are

- Regular review meetings will be conducted to monitor CO attainment with the module and course coordinators
- Program coordinator assesses the CO attainment level of each subject and suggests for

- improvement in the next academic year/semester if necessary.
- Course end survey will be collected on course outcomes , teaching aids and syllabus coverage for every course.
  - Program exit survey will be taken at the end of every batch to evaluate –teaching methodologies, content up gradation etc.
  - The Feedback taken from the alumni and other stake holders who are working in industry is considered to bridge the gap between the industry and institute
  - IQAC constituted a committee with senior faculty for every department to scrutinize internal answer scripts and question papers.
  - IQAC Conducted Faculty Development Programme on student evaluation and question paper setting during April,2018.
  - Student feedback will be taken about the faculty twice in a semester to evaluate the effectiveness of delivery of the course, knowledge sharing and time management etc.
  - IQAC is playing a vital role in conducting the Academic audit programs, FDPs, Industry – institute interaction programs and Certificate courses. It motivates the faculty towards research and filing of patents.

### 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	2
UGC – Faculty Improvement Programme	122
HRD programmes	-
Orientation programmes	3
Faculty exchange programme	-
Staff training conducted by the university	6
Staff training conducted by other institutions	13
Summer / Winter schools, Workshops, etc.	198
Others	80

### 2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	43	-	04	18
Technical Staff	65	-	05	02

## Criterion – III

### 3. Research, Consultancy and Extension

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

- Research and Development policy and initiatives are in place to promote faculty to take up research.
- The Academic Audit has been regularly done by External Experts to identify lapses and to check whether the processes that have been laid are followed or not, so that the departments will be strengthened by overcoming the lapses.
- The R&D Advisor, Dr. Prasada Raju, Scientist ‘G’ (Rtd.), DST visit the campus once in a month to discuss and verify the status of research proposal to be sent to various funding agencies.
- IQAC motivated the faculty towards research activities and start working in the direction of patents and organized a Faculty Training Program on patent filing by Mr.Raghava Sripathi, Examiner of Patents & Designs Intellectual Property Office, Chennai, to create awareness on patents filing among faculty.
- The department of Civil Engineering has organized AICTE Sponsored Two Day 2<sup>nd</sup> International Conference on Smart Sustainable Cities (SSC) on 28<sup>th</sup> & 29<sup>th</sup> December 2017 as a part of research activity.
- Encouraging faculty for presenting papers in international conferences either in India or Abroad.
- Establishing MOUs with institution / organizations for training and Research & Development.
- All the Faculty are advised to take MOOCS course through NPTEL related to their research topics/advanced courses to be taught.

#### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	02	09	---	22
Outlay in Rs. Lakhs	19.34	192.48	---	1177.95

#### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	03	1	---	8
Outlay in Rs. Lakhs	8.21	2.80	---	25. 00 approx

#### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	189	06	---
Non-Peer Review Journals	40	---	---
e-Journals	10	---	---
Conference proceedings	126	---	1

3.5 Details on Impact factor of publications:

Range  Average  h-index  No's. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organizations (Rs in Lakhs)

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned	Received
Major projects	2	DLRL,DRDO, Anurag Labs, AICTE, NRSC	16.90	11.51
Minor Projects	2	UGC, IE	2.80	2.45
Interdisciplinary Projects	--	--	--	----
Industry sponsored	2		106.84	80.06
Projects sponsored by the University/ College	--	--	--	
Major projects University/ College	---	----	----	----
Students research projects (other than compulsory by the University)	---	---	---	---
Any other(Specify)				
Total			126.54	94.02

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

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from

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

3.9 For colleges

Autonomy  CPE  DBT Star Scheme   
INSPIRE  CE  Any Other (specify)

3.10 Revenue generated through consultancy

271.20 Lakhs

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	01	02			03
Sponsoring agencies	AICTE				RAMCOR Syndicate Bank SAGTE

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

31

3.13 No. of collaborations

International

04

National

13

Any other

--

3.14 No. of linkages created during this year

04

3.15 Total budget for research for current year in lakhs:

From funding agency

94.02

From Management of University/College

20.70

Total

114.72

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	5
	Granted	02 (Published)
International	Applied	---
	Granted	---
Commercialized	Applied	---
	Granted	---

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



Total	International	National	State	University	Dist	College
17	09	04	04	---	---	---

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

36

116

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

17

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

JRF  SRF  Project Fellows  Any other

3.21 No. of students Participated in NSS events:

University level  State level   
National level  International level

3.22 No. of students participated in NCC events:

University level  State level   
National level  International level

3.23 No. of Awards won in NSS:

University level  State level   
National level  International level

3.24 No. of Awards won in NCC:

University level  State level   
National level  International level

3.25 No. of Extension activities organized

University forum	<input type="text"/>	College forum	<input type="text" value="02"/>	
NCC	<input type="text" value="18"/>	NSS	<input type="text" value="36"/>	Any other <input type="text"/>

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

NSS and NCC Cadets of the College attended and participated in the following extension activities

**The NSS Unit take part in the following social awareness events**

- International Yoga day
- New voters enrolment drive for youth
- Swachh Bharat by Civil Engineering volunteers.
- Awareness Program on Non usage of Plastic.
- Mud Vinayaka idol distribution for eco-friendly celebration.
- 'Rally for rivers' from Tadigadapa to Kamaiahthopu.
- Swachh village in Chowdavaram, Vijayawada.
- Conducted a procession at Benz circle on the eve of Deepavali for usage of cracker to prevent pollution.
- 5K Run in Amravati Marathon.
- World cancer day 5k walk.

**The NSS unit made the following donations**

- Books in Z P High School, Tadigadapa, Vijayawada.
- 30 pairs of Shoes at Komma Seetaramaiah ZP High School, Benz Circle.,
- Grocery items and sports kits 'Nava Jeevan Baala Bhavan'
- An amount of Rs. 15,001/- to Ladies Hostel security guard for medical expense.
- An amount of Rs. 3550.00 to Smt. Swathi for medical expenses
- 202 geometry boxes to 10<sup>th</sup> class students at ZPH School.

**The service Unit also conducted the following career oriented awareness**

- Carrier guidance to Intermediate students at SRR & CVR College, Vijayawada
- Conducted a quiz program at Vignan Bharat high school.

**The NCC Unit has participated/attended in the following extension activities**

- Tree Plantation Programme on Social Service & Community Development Action Plan at VRSEC, Vijayawada.
- Clean and Green Programme on SWACHHATA PAKHWADA in VRSEC campus.
- Rally on National Cancer Awareness Day from Andhra Loyola College to Mahanadu Junction organized by 8 (A) Naval Unit NCC, Vijayawada.
- Madonna Deaf & Dumb High School, Carmel Nagar, Gunadala for visually challenged children orphanages.
- World Aids Day Rally from Andhra Loyola College to Mahanadu Junction

organized by 17 (A) Bn NCC, Vijayawada.

- Rally from Andhra Loyola College to Mahanadu Junction organized by 8 (A) Air Sqn NCC, Vijayawada on World Pollution Prevention Day.
- Human Rights Day Rally from VRS Engg. College to Kanuru Junction organized by 1 (A) EME COY NCC, Vijayawada.
- Rally on Girl Child Day from St John's E.M. High School, Gunadala to Andhra Loyola College, Vijayawada, organized by 4(A) EME COY NCC UNIT, Vijayawada.
- Tree Plantation Programme on World Environment Day- Social Awareness Programm at ZPH School, Ramavarapadu, Vijayawada, organized by 8(A)Naval Unit NCC, Vijayawada.
- Rally on World Day against Child Labor from VRSEC to Kanuru Village, Vijayawada, organized by 4(A) EME COY NCCUNIT, Vijayawada.
- International Day against Drug Abuse and Illicit Trafficking Rally from Andhra Loyola College to Mahanadu Junction organized by 17 (A) Bn NCC, Vijayawada.

## Criterion – IV

### 4. Infrastructure and Learning Resources

#### 4.1 Details of increase in infrastructure facilities :(inSq-mts)

S. No	Particulars	Available Area(sq.m)
1	Instructional Area (Carpet Area)	26768.98
2	Administrative area (Carpet Area)	5246.5
3	Amenities area (Carpet Area)	10339.9
4	Circulation and other area*	12638.92
<b>Total (Carpet Area)</b>		<b>54994.3</b>
<b>Grand Total</b>		<b>54994.3</b>

#### 4.2 Computerization of administration and library

<ul style="list-style-type: none"> <li>○ Library is fully computerized (OPAC): <b>Yes</b></li> <li>○ Libsys and LSM software for library: <b>Yes</b></li> <li>○ Computerization for search, indexing, issue/return records: <b>Yes</b></li> <li>○ Digital Library <b>Yes</b>,</li> <li>○ Wi-Fi facility for the Library: <b>Yes</b></li> </ul>
--

#### 4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books(Titles)	70402	2,04,90,224	773	4,74,999	71175	2,09,65,223
Reference Books	3804	20,32,500	32	57,500	3836	20,90,000
e-Books	105	8,37,533	Nil	Nil	105	8,37,533
Journals	160	2,81,166	5	5,300	165	2,70,467
e-Journals	4 2016-17	12,64,890	3 2017-18	8,87,125	3	8,87,125
Digital Database	2	NIL	2	NIL	4	NIL
CD & Video	950	47,500	NIL	NIL	950	47,500
Others (text book	23	7,00,000	NIL	NIL	23	7,00,000

volumes)							
----------	--	--	--	--	--	--	--

#### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1761	16	120	2	01	14	09	
Added	116	02	10					
Total	1877	18	130mbps	02	01	14	09	

#### 4.5 Computer, Internet access, training to teachers and students and any other programme for technology

Up-gradation (Networking, E-Governance etc.)

Internet details are <b>130 MBPS / 24 hours / leased line &amp; without any Deficiency</b> Total No. of Computers available: <b>1877</b>
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#### 4.6 Amount spent on maintenance in lakhs (Rs):

i) ICT(Information & Communication Technology)	06.01
ii) Campus Infrastructure and facilities	356.74
iii) Equipments	
iv) Others	918.03
<b>Total:</b>	<b>1280.78</b>

## Criterion – V

### 5. Student Support and Progression

#### 5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- Special classes for GATE and other competitive examinations.
- Soft Skills development programme by T & P Cell.
- Domain knowledge classes
- Idea churning sessions
- NCC/NSS activities
- Sports/ Games/ Competitions/ Student Clubs
- Regular career counseling.
- Regular classes for bridge and add-on courses.
- Personality development programmes by eminent people.
- Guest lectures to update knowledge in the relevant field of engineering.
- Workshops to have hands on experience in the respective branch of engineering.

#### 5.2 Efforts made by the institution for tracking the progression

- Continues evaluation system is in place – Assignments, Sessional Examinations, Home Assignments and Project Reviews are being followed for the regular monitoring.
- Progress of each student from first semester to second semester, which is the key aspect in maintaining the career of a student, is analyzed and counseled.
- Detailed analysis on attendance and marks of every semester for all the students will be carried out and remedial classes will be arranged for the slow learners based on their performance.
- Each faculty/ Proctor will be allotted 20 students under the counseling system.
- Proctor conducts regular meetings with students and issues if any, will be resolved.
- Regular feedback from students and analysis for corrective actions by the Heads.
- Bridge course for lateral entry students in mathematics and other subjects where ever required.

#### 5.3 (a) Total Number of students

UG	PG	Ph.D.	Others
5137	568	Nil	Nil

(b) No. of students outside the state

(c) No. of International students

	No	%
Men	3503	61.4

	No	%
Women	2202	38.6

Last Year						This Year					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
2953	686	223	1825	-	5687	2953	709	235	1808	-	5705

Demand Ratio: 100%

Dropout: 0.56%

#### 5.4 Details of student support mechanism for coaching for competitive examination (if any)

- Regular training classes for GATE and competitive examinations.
- Personality development courses and student practice courses are part of the curriculum.
- Special coaching in fundamentals by senior faculty.
- Intensive and periodic coaching in soft and communication skills by T & P Cell.

No. of students beneficiaries

#### 5.5 No. of students qualified in these examinations

NET	<input type="text" value="-"/>	SET/SLET	<input type="text" value="-"/>	GATE	<input type="text" value="54"/>	CAT	<input type="text" value="15"/>
IAS/IPS	<input type="text" value="-"/>	State PSC	<input type="text" value="-"/>	UPSC	<input type="text" value="-"/>	Others	<input type="text" value="50"/>

#### 5.6 Details of student counseling and career guidance

- Proctor Dairy System is implemented for student counseling and guidance.
- Each faculty is allotted 20 students. Attendance, marks, discipline and other related issued are taken care of by the proctor.
- Head of the department continuously monitors the system.
- Information about slow learners such as attendance and marks is informed to their parents through SMS by the concerned counselor.
- Career guidance is offered for final year students at department level by Training and Placement Cell.
- Refreshing classes will be conducted for final year students to meet Industry requirements.
- Remedial classes are conducted to slow learners identified based on their performance.
- System for career guidance including counseling for higher studies, industry interaction for training/internship/ placement/Entrepreneurship is in place.

No. of students beneficiaries

2650

#### 5.7 Details of campus placement

On campus			Off Campus
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
100	952	701	30

#### 5.8 Details of gender sensitization programmes

- Women health awareness program by Medical College doctors in VRSEC during 18<sup>th</sup> – 20<sup>th</sup> October, 2017.
- Breast cancer and prevention by Roots health foundation during 25<sup>th</sup> October, 2017.
- The philosophy of fasting in the Indian culture / working women during 18<sup>th</sup> November, 2017.
- Fem-flare 2018 Multi-Cultural Fest at KL University during 6<sup>th</sup> January, 2018.
- Taruni tarangaalu, Women’s Educational and cultural activities, PB Siddahrtha College of Arts &Science, Vijayawada during 5<sup>th</sup> -6<sup>th</sup> February. 2018.
- Taruni Tarangaalu (workshop on women empowerment), SRR &CVR Govt Degree College, during 6<sup>th</sup> – 8<sup>th</sup> March, 2018.
- Women’s day celebrations in VRSEC during 8<sup>th</sup> March, 2018.



- Awareness on Biological changes for Girls organized at Govt. School, Penamaluru on the occasion of World Health Day during 1<sup>st</sup> April, 2018.
- Awareness on Biological changes for Girls organized at Govinda Ramulu Eenam Trust, Vijayawada, during 2<sup>nd</sup>-3<sup>rd</sup> April, 2018.

## 5.9 Student Activities

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

State/ University Level  National Level  Int. National Level

No. of students participated in cultural events

State/ University Level  National Level  Int. National Level

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

Sports: State/ University Level  National Level  Int. National Level

Cultural: State/ University Level  National Level  Int. National Level

## 5.10 Scholarships and Financial Support

	Number of students	Amount ( in Lakhs)
Financial support from institution	126	20.65
Financial support from government	3011	1640.52
Financial support from other sources	81	8.10
Number of students who received International/ National recognitions	--	--

### 5.11 Student organized / initiatives

Fairs: State/ University Level  National Level  Int. National Level

Exhibition: State/ Univ. Level  National Level  Int. National Level

5.12 No. of social initiatives undertaken by the students

## Criterion – VI

### 6. Governance, Leadership and Management

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

##### VISION

To nurture excellence in various fields of engineering by imparting timeless core values to the learners and to mould the institution into a center of academic excellence and advanced research.

##### MISSION

To impart high Quality technical education in order to mould the learners into globally competitive technocrats who are professionally deft, intellectually adept and socially responsible. The Institution strives to make the learners inculcate and imbibe pragmatic perception and pro-active nature so as to enable them to acquire a vision for exploration and an insight for advanced enquiry.

#### 6.2 Does the Institution has a management Information System

YES, Institute has its own MIS developed by the faculty to manage general administration, autonomous, examination, student attendance and continuous evaluation marks.

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

##### 6.3.1 Curriculum Development

- Curriculum (VR17) was revised during 2017-2018.
- Self-learning courses – (MOOCS)
- Industry internship and industry offered courses.
- CBCS (Choice Based Credit System) is being followed
- Student publications in conference/journal are introduced in student practice courses in the VR 17 curriculum.
- Competitions conducted by professional societies (IEEE,IETE,ASME,IE,CSI etc.,) in the college or conducted by the other colleges are introduced in student practice courses
- Personality Development courses-soft skills, Mandatory Learning Courses, Student Practice courses, Skill based courses are included.
- Engineering Project In Community Services (EPICS) is introduced in VR17 curriculum.

### 6.3.2 Teaching and Learning

- Massive Open Online Course (MOOCs) adopted in addition to traditional courses.
- Program outcomes for each program are measured through direct and indirect assessments
- Use of Moodle - Online learning resource.
- Every faculty maintains course file with course outcomes, course delivery, and CO-PO mapping.

### 6.3.3 Examination and Evaluation

- 50% internal and 50% external evaluation by University ratified faculty was introduced in 2016-17 onwards.
- Appointing internal and external squads to prevent malpractice during examinations
- Malpractice Enquiry Committee is in place, for corrective actions as per the guidelines.
- Conduct and ethics to be observed in examination halls were displayed at all prominent locations in every department

### 6.3.4 Research and Development

- Regular interaction with Dr. Prasad Raju, Scientist 'G' (Retd.), R&D project advisor in applying the funded projects.
- Encouragement towards publishing papers in quality journals such as Scopus and SCI. An amount of Rs. 2,69,070 was honored for research publications in reputed journals (Scopus, SCI etc) as incentive to 48 faculty to promote R & D.
- Financial support to model development and innovation by students.
- Two Patents are filed.
- A total grant of Rs. 95.56 Lakhs was sanctioned by DST, AICTE, UGC, ISRO
- Few Faculty members were attended to international conference outside the country.

### 6.3.5 Library, ICT and physical infrastructure / instrumentation

- CISCO Lab and Oracle Lab.
- Solar Power Plant is established with a generation capacity of 150 KW Peak.
- More than 75% of Conventional lighting is replaced with LED lighting in the campus including Street Lights.

### 6.3.6 Human Resource Management

- FDP on “Question Paper Setting and Student Evaluation” to faculty by NITTTR, Chennai during 16<sup>th</sup> - 18<sup>th</sup> April, 2018 at V.R. Siddhartha Engineering College, Vijayawada.
- Performance based assessment system (PBAS) and career advancement scheme for Professors, Associate professors and Assistant professors is in place since 2014.

### 6.3.7 Faculty and Staff recruitment

- Offering attractive pay to faculty recruiting from NIT's/ IIT's and with good research background.
- Study leave for carrying out full time Ph.D. at NIT's and IIT's.
- Incentives for quality publications, acquiring funding and foreign travel etc.
- Faculty and staff recruitment is done through open advertisement and by a selection board constituting of management members, principal, deans, respective HODs and outside subject expert.
- Priority is giving in faculty recruitment for candidates from reputed institutions such as IIT, NIT, etc.
- 1:15 faculty to student ratio in UG and 1:12 in PG are maintained

### 6.3.8 Industry Interaction / Collaboration

- MOUs are made with industries by different departments for internships and placements as follows.
  - Siemen's – Skill Development Centre
  - ASCI, Hyderabad
  - IGBC, Hyderabad
  - M/s.Soltek Photo Volteck Pvt.Ltd
- Industry offered courses are introduced in each specialization.
- Practical exposure to faculty and students by inviting industrial experts
- Sri M.B.M. Raju, Head, Operational Excellence, TCS, Hyderabad is industrial expert in the governing body.
- Sri Velagapudi Rajendra, CMD, Cyiens DLM is industrial expert in the governing body.

### 6.3.9 Admission of Students

- Admission of students are made as per norms (Rank obtained in entrance Examination conducted by State government)
- 70% of seats based on entrance exam under government quota.
- 30% of seats on merit basis under management quota.

### 6.4 Welfare schemes for

Teaching	Subsidized health care for teaching and Non-teaching staff at Dr. Pinnamaneni Institute of Medical Sciences and Research Foundation, sponsored by the management.  10% of Engineering consultancy amount is allocated as VRSEC Staff Welfare fund.  Implementation of group insurance scheme.
Non teaching	Implementation of Synd Arogya health insurance scheme
Students	Siddhartha Sahaya Scholarships to the children of non-teaching staff for school/college education on merit cum means basis.  Siddhartha Foundation Scholarship to the meritorious poor students.

6.5 Total corpus/ general fund generated

6.6 Whether annual financial audit has been done. Yes  No

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	ISO	Yes*	Principal
Administrative	Yes	ISO	Yes	Principal

\* Regular Academic Audit has been carried out by involving experts from outside institutions of repute, in all departments

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

For UG Programmes      Yes       No

For PG Programmes      Yes       No

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

- 50% internal and 50% external evaluation by University ratified faculty was introduced from 2016-17.
- Appointing internal and external squads to check malpractice during examinations
- Conduct and ethics to be followed in examination halls were displayed at all prominent locations in every department.

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

- Not Applicable -

6.11 Activities and support from the Alumni Association

- The Annual Alumni meet 2017 was held on 24<sup>th</sup> December, 2017 Dr. S. Srinivasa Kumar, Vice-Chancellor, JNTUA, Anantapur and Prominent Alumni was felicitated,
- Siddhartha Sahaya scholarships of worth Rs. 20.65 lakhs was distributed to 126 students.
- Prof. Prasad Yarlagadda, Professor, Queensland University, Brisbane, Australia, Eminent alumni was felicitated 10<sup>th</sup> August, 2017.
- Sri N. Balasubrahmanyam, IPS, Transportation Commissioner & CEO e-pragati, Govt. of A.P. and Eminent Alumni felicitated during ‘AFOSEC’ on 16<sup>th</sup> February, 2018.

6.12 Activities and support from the Parent – Teacher Association

- Annual informal meetings to identify the issues related to students.
- Regular meetings with parents for improving quality of students.
- Identification of problems and counseling of student.

#### 6.13 Development programmes for support staff

- Implementation of Server Utilization programme during 28<sup>th</sup> to 29<sup>th</sup> April, 2018.
- Introduction to PLC Programming.

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

- Environmental audit is done in April, 2018.
- Drip and Sprinkler System is in place.
- Greenery is maintained with lawns and plantation throughout the campus to make it eco-friendly.
- Food waste and greenery waste is converted into natural organic manure by the compost plant and the same is used for maintaining the greenery.

## Criterion – VII

### 7. Innovations and Best Practices

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

1. Academic audit was carried out by involving experts from outside institution and universities in order to have more focus on the quality of academic activity of the institution
2. Moodle (Modular Objective – Oriented Dynamic Learning Environment)  
Moodle is used for Assignment questions, Discussion Forum, Files Download, Video lectures, Grading, Instant Messages, etc.
3. Technical Models development
  - Students are encouraged to develop prototypes in the respective fields
  - Proposed to encourage the students by funding the development of prototypes to a tune of minimum Rs.10000 to maximum Rs.1,00,000
4. Skill development through Siemens skill development center and IBM.

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

- \* Feedback collected from the students and staff on utilization of library resources and corrective measures taken for effective utilization.
- Automation System is in place and successful.
  - Regular Academic Audit has been carried out by involving experts from outside institutions of repute, in all departments
  - Faculty training on regular basis-young faculty are trained on regular basis every year by TLC, IIT Chennai, NITTTR etc
  - Best practices – MOODLE (A Learning Management System) and Innovative model development are considered as VRSEC best practices. The usage of MOODLE is made mandatory for all departments.
  - Innovation/Product development rooms are established in various departments to fabricate innovative Models.
  - Quality Policy is revised and approved by the academic council and Governing body.



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

- MOODLE (Modular Objective – Oriented Dynamic Learning Environment)
- Technical Models Development

7.4 Contribution to environmental awareness / protection

- Swatchh bharat every fortnight within the college campus and swatch bharat outside the campus.
- Awareness programme on plastic usage.
- Mud Vinayaka idol distribution during Vinayaka Chavithi Festival.
- Tree plantation in Ladies Hostel
- Rally for rivers from Tadigadapa to Kamaiahthopu.

7.5 Whether environmental audit was conducted?

Yes

No

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

Strength	: 1. Qualified and experienced members of the faculty 2. NBA accreditation since 1998
Weakness	: 1. Poor communication skills of students from rural background 2. Lack of industrial sponsored R&D
Opportunity	: 1. Wide scope for collaboration with Indian and foreign research institutes/ universities / organizations 2. Industrial consultancy services can be taken up by all the departments 3. Skill development programmes–Innovation–Incubation–Start-ups
Threat	: 1. Mushrooming of new universities/engineering colleges in the state leading to migration of experienced faculty 2. Emerging of high level technical institutions like IIT's, Nit's, IIIT's effecting meritorious student admissions into the college.

8. Plans of Institution for next year.

- Institutionalization of Quality Circles.
- Plastic free Campus.
- Establishment of Smart Class Rooms
- College website improvement.
- To conduct 'Innovation Day' on the eve of Engineer's day.
- Increase in quality of research publications.
- Recording facility and Lecture Capturing System.
- Distinctiveness of institute with respect to vision
- Online payment of Tuition fee and Examination fee.
- Full automation of college activities and Integration of all available software
- STP (Sewage Treatment Plant) - to treat the liquid waste generated and reuse of the treated waste for plantation and greenery in the campus to maintain zero discharge.
- College is in the direction of replacing the conventional electrical energy with solar energy to meet its full requirement.
- Promoting students to National/ International Industry driven competitions.
- Improvement in Library resources utilization.

Name: .....Dr M.V.S.Raju.....

MVR

Signature of the Coordinator, IQAC  
Professor  
Civil Engineering Department  
V. R. Siddhartha Engineering College  
VIJAYAWADA - 520 007

Name: Dr. A.V. Retna Prasad

AVR

Signature of the Chairperson, IQAC  
PRINCIPAL  
V.R.Siddhartha Engineering College  
AUTONOMOUS  
VIJAYAWADA-520 007.

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

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