## VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY



# Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) 2014-15





### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An autonomous Institute of University Grants Commission

P.O. Box NO. 1075, Opp. NLSIU, Nagarbhavi, Bangalore – 560072 India

### The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)

### Part – A

### I. Details of the Institution

	·-
1.1 Name of the Institution	VNR VIGNANA JYOTHI INSTITUTE OF ENGINEERING & TECHNOLOGY
1.2 Address Line 1	Vignana Jyothi Nagar, Bachupally
Address Line 2	Nizampet (S.O.)
City/Town	Hyderabad
State	Telangana
Pin Code	500 090
Institution e-mail address	postbox@vnrvjiet.in principal@vnrvjiet.ac.in
Contact Nos.	040 – 23042758/59 Fax: 040-23042760
Name of the Head of the Institutio	Dr. C. Kiranmai
Tel. No. with STD Code:	040 - 23041516
Mobile:	9391008138

Name of the IO	QAC Co-ordin	nator:	Dr. Poonam Upadhyay					
Mobile:		[	+91 9885	280251		]		
IQAC e-mail address:			iqac@vnr	vjiet.in				
This EC r		mittee No. &A/143 da e in the rigi	& Date: ted 3-5-200 ht corner- b	EC/62/A&A	/094 dated Jan.	5 <sup>th</sup> 2013		
1.5 Website a	address:		www.vnr	vjiet.ac.in				
W	eb-link of th	ne AQAR:	http://v	www.vnrvjiet.ac.i	n/Ref/AQAR201	4-15.pdf		
1.6 Accredita		ttp://www.	ladykeane	college.edu.in/A	AQAR2012-13	doc		
Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period			
1	1 <sup>st</sup> Cycle	A	3.21	2013	5 Years			
2	2 <sup>nd</sup> Cycle							
3	3 <sup>rd</sup> Cycle							
4	4 <sup>th</sup> Cycle							
	tablishment o	010 + G		DD/MM/YYYY	18/02/2013			

2014-15

Revised Guidelines of IQAC and submission of AQAR

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 2010-11submitted to NAAC on 12-10-2011)
i. AQAR AQAR 2012-13 submitted to NAAC on 23-12-2013 (DD/MM/YYYY)
ii. AQAR <u>AQAR 2013-14 Submitter to NAAC on 18-09-2014</u> (DD/MM/YYYY) iii. AQAR (DD/MM/YYYY)
iv. AQAR (DD/MM/YYYY)
(&2/11/212)
1.10 Institutional Status
University State Central Deemed Private
Affiliated College Yes V No
Constituent College Yes No 🗸
Autonomous college of UGC Yes ✓ No □
Regulatory Agency approved Institution Yes V No
(eg. AICTE, BCI, MCI, PCI, NCI) - AICTE
Type of Institution Co-education Men Women
Urban ✓ Rural Tribal
Financial Status Grant-in-aid ☐ UGC 2(f) ✓ UGC 12B ✓
Grant-in-aid + Self Financing ☐ Totally Self-financing ✓
1.11 Type of Faculty/Programme
Arts Science Commerce Law PEI (Phys Edu)
TEI (Edu) Engineering  Health Science Management
Others (Specify)

#### B.Tech:

- 1. Civil Engineering
- 2. Electrical and Electronics Engineering
- 3. Mechanical Engineering
- 4. Electrical and Communication Engineering
- **5.** Information Technology
- **6.** Electrical and Instrumentation Engineering
- 7. Computer Science and Engineering
- 8. Automobile Engineering

#### M. Tech:

- 1. Geo Technical Engineering
- 2. Highway Engineering
- 3. Structural Engineering
- **4.** Power Electronics
- **5.** Power Systems
- **6.** Automation
- 7. Advanced Manufacturing Systems
- **8.** CAD/ CAM
- 9. VLSI System Design
- **10.** Embedded Systems
- 11. Computer Network Information Systems
- 12. Instrumentation
- 13. Software Engineering
- **14.** Computer Science and Engineering

1.12 Name of the Affiliating University (for the Colleg	ges)  Jawaharlal Nehru Technological University Hyderabad (JNTUH)
1.13 Special status conferred by Central/ State Government Autonomy by State/Central Govt. / University	nment UGC  Central Government
University with Potential for Excellence  DST Star Scheme  UGC-Special Assistance Programme	UGC-CPE UGC-CE DST-FIST ✓
UGC-Innovative PG programmes  UGC-COP Programmes	Any other (Specify)  1. UGC Minor Research Project 2. TEQIP – MHRD Project 3. AICTE – Research Promotional

### 2. IQAC Composition and Activities

2.1 No. of Teachers	16
2.2 No. of Administrative/Technical staff	9
2.3 No. of students	3
2.4 No. of Management representatives	3
2.5 No. of Alumni	2
2. 6 No. of any other stakeholder and	1
community representatives	
2.7 No. of Employers/ Industrialists	2
2.8 No. of other External Experts	1
2.9 Total No. of members	37
2.10 No. of IQAC meetings held	2
2.11 No. of meetings with various stakeholders:  Non-Teaching Staff Students Alum	No. 3 Faculty 1
2.12 Has IQAC received any funding from UGC do  If yes, mention the amount	
2.13 Seminars and Conferences (only quality relate	ed)
(i) No. of Seminars/Conferences/ Workshops	/Symposia organized by the IQAC
Total Nos. 3 International	National State 1 Institution Level 2
(ii) Themes  1. Awareness of Quality Aspe 2. Quality Teaching & Learnin 3. POGIL, Learning by Doing	ng Process

### 2.14 Significant Activities and contributions made by IQAC

- Quality functional chart, based on NAAC quality criteria was prepared and implemented.
- Seminars for Faculty and Non-Teaching Staff were conducted to create awareness about the quality aspects.
- Quality Indexes for Departments and institute are generated and implemented
- Quality Index for attendance of the Students, faculty and Result.
- Quality Index for Placements, Faculty Quality and Lab Management is prepared.
- Result Analysis is done and improvement measures are suggested.

### 2.15 Plan of Action by IQAC/Outcome

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

Plan of Action	Achievements
<ul> <li>Preparation of Quality Indices for Six</li> <li>Factors of the Institute and Departments</li> <li>1. Research and Quality</li> <li>2. Personnel Reputation</li> <li>3. High Quality of Teaching</li> <li>4. Placements</li> <li>5. Innovation and Patents</li> <li>6. Vibrant Mix and Cultural Diversity</li> </ul>	<ul> <li>The quality indices are periodically calculated &amp; monitored.</li> <li>Considerable amount of improvement was noticed in the publications, Quality of teaching &amp; Placements.</li> <li>The index made a great impact in improving the attendance.</li> </ul>

2.15 Whether the AQAR w	vas placed in st	atutory body	Yes 🗸 N	No
Management	Syndi	icate 🗸	Any other body	

Provide the details of the action taken

IQAC is producing Daily Reports on Quality parameters and action is being taken based on the deficiency.

The performance of the departments based on the quality parameters enabled to measure the rating of the department. This enabled mentoring the department based on their strengths & weakness.

### Part – B

### Criterion - I

### I. Curricular Aspects

### 1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes	
PhD	Research Centre for EEE, ECE, CE				
PG	14	2			
UG	8	0	A 11 Duo ono ma	l	
PG Diploma			All Programs are Self-	19*	
Advanced Diploma			Financed	19.	
Diploma	4	0	Tillanced		
Certificate					
Others					
Total	26	02			
Interdisciplinary					
Innovative					

### \* Certificate courses which are career oriented being offered in the Institute.

SNO	Department	Name of the Course
1	CE	Advanced Training in Surveying Practices using Total Station
2	CE	Primavera
3	EEE	Oracle: Module-1
4	CCC	Solar Photo Voltaic Technologies and Embedded system Applications
5		CATIA V5 Prima
6	ME	CNC Machine Programming (for R12)
7	IVIL	Automation
8		CNC Machine Programming (for R13)
9	ECE	Design and Development in Lab View
10	ECE	ASIC Design flow using Industry standard EDA tools (for M.Tech)
11		IBM CE – Enterprise Application Development (J2EE) using RAD
12		IBM CE –Enterprise Application Development in cloud environment
12	CSE	(J2EE) using IBM Smart Cloud
13		IBM CE- Essentials of Bid Data with Hadoop using IBM InfoSphere
15		BigInsights
14	EIE	PLC and SCADA Programming
15	LIL	Lab View
16	IT	Advanced Java Programming
17	AME	Cre-O(Pro-E)
18	AIVIE	ANSYS
19	H&S	Business English

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options – **Elective Option** (ii) Pattern of programmes:

Pattern	Number of programmes
Semester	22 (8 UG & 14 PG)
Trimester	
Annual	

1.3 Feedback from stakeholders* (On all aspects)	Alumni	✓	Parents	✓	Employers	Students	✓	
Mode of feedback :	Online	✓	Manual	<b>✓</b>	Co-operating sch	ools (for PE	(I)	-

- 1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.
  - Yes.
  - The Curriculum changes are based on participation & suggestions from Stakeholders.
  - These changes are discussed by the faculty concerned at the Department Academic Committee headed by respective HOD.
  - The accepted changes are presented to Board of Studies. The constitution BOS includes members from the faculty, two academic persons from affiliated universities, two members from industry, one member from alumni. After BOS approve the changes they are presented to institute academia council and after this the changes are bought into force.
  - New elective subjects are introduced in consultation with industry professionals.
  - Certificate courses are introduced to support the curriculum.
- 1.5 Any new Department/Centre introduced during the year. If yes, give details.

### Yes.

- Centre of Excellence for "Disaster Mitigation" in the Department of Civil Engineering
- Centre of Excellence Renewable Energy Systems in the Department of Electrical and Electronics Engineering
- Centre of Excellence for Data Sciences in the Department of Computer Science Engineering.

### Criterion - II

### 2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Prof.	Assoc. Prof.	Professors	Others
290	212	51	27	-

_	<b>2.3</b> T	C	C 1,	'.1 DI D
Z.	.Z INO.	of permanent	Taculty	with Ph.D.

46	
70	

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

Asst.		Associa	te	Profes	sors	Others		Total	
Professo	ors	Professo	ors						
R	V	R	V	R	V	R	V	R	V
67	-	08	-	07	-	-	-	82	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

17

11

3

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	38	28	37
Presented papers	29	18	6
Resource Persons	1	1	1

- 2.6 Innovative processes adopted by the institution in Teaching and Learning:
  - EPR with VJ Spectral Pyramid (TM)
  - VNR Lab Protocol (TM)
  - Career Vision Approach (TM)
  - POGIL
  - Show & Tell
  - Learn by Doing
  - Lesson Plan
  - Student Faculty Research interaction
  - Art of Teaching
  - Chalk & Talk Role play
  - Quizzing, Video film, visuals
  - Mind maps problem solving game
  - Group projects/presentation,
  - MOOCS
  - WIT& WILL

2.7	during this academic year	180		
2.8	Examination/ Evaluation Reforms initiated by		40	Bar Coding
	the Institution (for example: Open Book Example: Op		_	
2.9	No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculary		76 ent works	
2.10	Average percentage of attendance of students	80	0 %	

### 2.11 Course/Programme wise distribution of pass percentage:

### B.Tech. - I Semester:

Title of the	Year of	Total no. of			Division		
		Total no. of	Distinction	I	II	III	Pass
Programme	I Semester	students appeared	%	%	%	%	%
CE	I	120	40.54	33.78	22.97	2.70	61.67
	II	141	41.38	46.55	8.62	3.45	82.27
	III	145	28.42	66.32	4.21	1.05	65.52
	IV	135	13.49	65.87	20.63	0	93.33
EEE	ļ	120	64.65	32.32	3.03	0	82.50
	II	143	53.13	37.50	8.33	1.04	67.13
	III	71	55.93	40.68	3.39	0	83.10
	IV	70	19.67	39.34	31.15	9.84	87.14
ME	ļ	120	52.56	35.90	11.54	0	65.00
	II	144	51.38	43.12	5.5	0	75.69
	III	143	81.45	16.13	2.42	0	86.71
	IV	137	56.56	42.62	0.82	0	89.05
ECE	I	238	81.41	18.59	0	0	83.61
	II	212	80.25	16.67	3.09	0	76.42
	III	144	83.82	13.24	2.94	0	94.44
	IV	139	86.78	11.57	1.65	0	87.05
IT	ļ	60	56.00	40.00	4.00	0	83.33
	II	60	82.00	16.00	2.00	0	83.33
	III	63	66.67	23.53	9.80	0	80.95
	IV	64	32.65	32.65	32.65	2.04	76.56
EIE	I	120	60.27	38.36	1.37	0	60.83
	II	135	73.56	24.14	2.30	0	64.44
	III	112	62.82	26.92	10.26	0	69.64
_	IV	141	36.09	51.13	9.77	3.01	94.33
CSE	I	241	68.95	28.42	2.63	0	78.84
	II	211	85.71	8.47	5.82	0	89.57
_	III	145	71.43	20.3	8.27	0	91.72
	IV	144	63.71	26.61	9.68	0	86.11
AME	I	55	33.33	60.00	6.67	0	27.27
	II	69	50.00	35.71	14.29	0	60.87
	III	66	54.17	25.00	20.83	0	36.36
	IV	58	30.43	50.00	19.57	0	79.31

### **B.Tech. - II Semester:**

Title of the	Vacuat	Total no. of			Division		
Title of the	Year of	Total no. of	Distinction	ı	II	Ш	Pass
Programme	II Semester	students appeared	%	%	%	%	%
CE	I	119	48.31	37.08	14.61	0	74.79
	II	141	52.29	34.86	12.84	0	77.30
	Ш	145	29.09	40.00	30.91	0	75.86
	IV	135	16.28	64.34	19.38	0	95.56
EEE	I	119	44.33	44.33	11.34	0	81.51
	II	143	65.12	32.56	2.33	0	90.21
	III	71	45.59	51.47	2.94	0	95.77
	IV	70	73.02	25.40	1.59	0	90.00
ME	I	120	82.47	17.53	0	0	80.83
	II	143	56.49	32.82	8.40	2.29	91.61
	III	144	85.95	13.22	0.83	0	84.03
	IV	137	5.97	82.09	11.94	0	97.81
ECE	I	240	74.62	20.81	4.57	0	82.08
	II	208	82.23	15.74	2.03	0	94.71
	III	145	66.42	22.63	10.95	0	94.48
	IV	140	97.06	2.94	0	0	97.14
IT	I	60	68.18	22.73	9.09	0	73.33
	II	61	67.92	26.42	5.66	0	86.89
	III	63	75.00	19.23	5.77	0	82.54
	IV	60	83.93	16.07	0	0	93.33
EIE	I	121	50.77	33.85	15.38	0	53.72
	II	137	63.73	30.39	5.88	0	74.45
	III	113	62.20	31.71	6.10	0	72.57
	IV	141	81.82	18.18	0	0	93.62
CSE	I	238	78.49	20.43	0.54	0.54	78.15
	II	211	86.81	9.34	3.30	0.55	86.26
_	III	143	91.6	7.63	0.76	0	91.61
	IV	144	66.43	30.00	3.57	0	97.22
AME	I	54	34.62	53.85	11.54	0	48.15
	II	67	44.44	36.11	19.44	0	53.73
	III	70	58.70	39.13	2.17	0	65.71
	IV	58	66.00	32.00	2.00	0	86.21

### M.Tech. - I Semester:

Title of the	Year of	Total no. of		D	ivision		
		students	Distinction	ı	II	III	Pass
Programme	I Semester	appeared	%	%	%	%	%
Structural Engg.	I	17	66.67	26.67	0	6.67	88.24
Highway Engg.	I	10	25.00	25.00	50.00	0	40.00
Geotech. Engg.	I	13	45.45	27.27	27.27	0	84.62
Power Electronics	I	18	40.00	60.00	0	0	55.56
Power Systems	I	10	33.33	66.67	0	0	60.00
Adv. Manufacturing Systems	I	10	44.44	55.56	0	0	90.00
Automation	I	8	80.00	20.00	0	0	62.50
CAD/CAM	I	9	75.00	25.00	0	0	44.44
Embedded Sys	I	16	75.00	25.00	0	0	50.00
VLSI Sys Design	I	17	71.43	28.57	0	0	82.35
CNIS	I	14	85.71	14.29	0	0	100.00
Instrumentation	I	10	100.00	0.00	0	0	80.00
Software Engg	I	13	55.56	44.44	0	0	69.23
Computer Science & Engg.	I	14	63.64	36.36	0	0	78.57

- 2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:
  - IQAC has prepared a roadmap of quality Teaching and Learning. IQAC continually monitors and evaluates Teaching –Learning by:-
  - Evaluating and analysing results and suggesting measures for improvement.
  - Analysing the feedback given by students and other stake holders.
  - Monitoring the students' and staff attendance on daily / monthly basis.
  - Conducting quality related seminars.
  - Generating quality indices on diverse teaching-learning parameters in order to specify lag and lead indicators that help further improvement and corrections.
  - Conducting regular internal meetings with the Management, Principal, Heads of the Departments for continuous inputs.

### 2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	7
UGC – Faculty Improvement Programme	11
HRD programmes	6
Orientation programmes	13
Faculty exchange programme	0
Staff training conducted by the university	4
Staff training conducted by other institutions	9
Summer / Winter schools, Workshops, etc.	118
Others	18

#### 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 & Supporting Staff	89		2	
Technical Staff	54	5	3	3

### Criterion - III

### 3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
  - Constant upgradation of Library resources.
  - Encouragement to Faculty members to publish research papers in journals and attend conferences etc.
  - The research aptitude is inculcated among staff and students through various academic and funded project works.
  - Eminent scientists/academicians/technocrats are invited to motivate faculty and students.
  - Workshop / seminars / conferences are organised to promote research.
  - Financial aids, incentives are given as encouragement for research.

### 3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	01	14	03	02
Outlay in Rs. Lakhs	17.00	134.6	26.68	155.00

### 3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number		16		
Outlay in Rs. Lakhs		52.28		

### 3.4 Details on research publications

	International	National	Others
Peer Review Journals	eer Review Journals 67		-
Non-Peer Review Journals	17	-	-
e-Journals	2	-	-
Conference proceedings	41	32	-

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J		Details	on Impa	ci iacio	זע נט ו	ione.	auons.

Range $0.5-8.6$ Average 2.68 h-index 8.6 Nos. in SCOPUS	
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3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration	Name of the	Total grant	Received
Nature of the Project	Year	funding Agency	sanctioned	
Major projects	2/3 Years	DRDO / AICTE/ITRA	107.8	68.25
Minor Projects	2 Years	UGC	51.37	40.05
Interdisciplinary Projects				
Industry sponsored	2/3 Years	Ananth Technologies/ X_Design/ Mira Consulting Inc./ Drive Lozics	29.04	20.29
Projects sponsored by the University/ College	-	-	-	-
Students research projects (other than compulsory by the University)	-	-	-	-
Any other(Specify)				-
Total			188.21	128.59

3.7 No. of books published	i) With ISB	N No.	1	Chapte	ers in Edited Books	S	
3.8 No. of University Depa	ii) Without I						
	UGC-SAP DPE		CAS	DBT So	DST-FIST 5	Dept.	
3.9 For colleges	Autonomy [INSPIRE [	Nil Nil	CPE CE	Nil Nil	DBT Star Sche Any Other (spec		]
3.10 Revenue generated th	rough consulta	nncy	9.18 La	akhs			

### 3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	-	-	-	-	-
Sponsoring agencies	-	-	-	-	-

3.12 No. of faculty served as experts, chairpersons or resource persons 15
3.13 No. of collaborations : International 2 National 18 Any other
3.14 No. of linkages created during this year 4
3.15 Total budget for research for current year in lakhs :
From funding agency Rs. 188.21 From Management of University/College Rs. 10.46
Total Rs. 198.67

3.16 No. of patents received this Year

Type of Patent		Number
National	Applied	3
National	Granted	=
International	Applied	=
International	Granted	=
Commercialised	Applied	-
Commerciansed	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	
01	01						

3.18 No. of faculty from the Institution who are Ph. D. Guides	15
and students registered under them	62

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

JRF 0	SRF 0	Project Fellov	ws 0 An	y other	
3.21 No. of students Partici	pated in NSS ev	ents:			
U	niversity level		State level	70	
N	Vational level		International	level	
3.22 No. of students partic	ipated in NCC e	vents:			
IJ	Iniversity level		State level		
1	National level		International	level	
3.23 No. of Awards won in	NSS:		_		
U	niversity level		State level		
N	ational level		International	level	
	NCC:  niversity level  ational level		State level International	level	
3.25 No. of Extension activ	ities organized				
University forum		College forum	01		
NCC		NSS	08 Any	other	
3.26 Major Activities durin Responsibility	g the year in the	sphere of extension	on activities and	Institutional Social	
1. CHEYUTHA (23 <sup>rd</sup> August and 20 <sup>th</sup> September, 2014)  Main objective is to bring awareness among Government school students of Mallampet and					

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

### 2. DISTRIBUTION OF CLAY GANESH IDOLS (28th August, 2014)

The main objective is to create awareness among the students of the ill effects of water pollution caused by Plaster of Paris Ganesh idols.

NSS unit VNR VJIET have distributed around 200 clay Ganesh idols to the students at a nominal cost of Rs.20/- in collaboration with HMDA.

Bachupally about the importance of practical education

### 3. BLOOD DONATION CAMP (22<sup>nd</sup> October, 2014)

It was organized in association with NTR Trust to help the thalassemia and sickle cell patients. Around 248 blood sample units were collected.

### 4. Salute (January 25<sup>th</sup>, 2015)

NSS has taken an initiative in the college where a common platform was created for all the clubs and student chapters to project their part in nation's development and to showcase the on-going issues in the nation which caught their attention

### 5. Appreciation drive(January26<sup>th</sup>, 2015)

Objective is to appreciate citizens for being responsible & people rendering selfless service.

### 6. Saaradhi – Engineers Leading the Society (2<sup>nd</sup>-4<sup>th</sup> march, 2015)

The event was organized by NSS unit VNR VJIET in collaboration with VNRSF and Motivational club of our collage in order to provide engineering solutions to the most common problems in our society using our engineering knowledge.

### 7. Volunteers as Scribes (11-12 March, 2015)

55 students from II& III B.Tech NSS Volunteers of VNR VJIET wrote intermediate examinations on behalf of blind students as scribes. The subjects were I year and II year Intermediate, Sanskrit at Vikas Junior College, Shamshabad.

### 8. Swatch Bharath abhiyan (April, 2015)

Inspired by our Prime Minister Sri. Narendra Modi's Swatch Bharath campaign NSS unit VNR VJIET has also organized various events in keep our surroundings clean in the month of April, 2015.

### **Criterion - IV**

### 4. Infrastructure and Learning Resources

### 4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	21.13 Acres		Donation from Patrons of the Society	21.13 Acres
Class rooms	111		Donation from	111
	(72 Classes+ 39		Patrons of the Society	
	Tutorial Rooms)		Tuition Fee	
Laboratories	117	5	•	122
Seminar Halls	10		•	10
No. of important equipments purchased (≥ 1-0 lakh) during the current year.	11	05	Institute	15
Value of the equipment purchased during the year (Rs. in Lakhs)	140.88239	52.74	• Institute	193.62
Others				

### 4.2 Computerization of administration and library

- Campus Automation Management System
- Complete WIFI in Campus
- Website for public access
- Electronic resource management
- E journals
- Content management
- Computers and printers

### 4.3 Library services:

	Existing		Newly	Newly added		Total	
	No.	Value	No.	Value	No.	Value	
Text Books	69,669	1,56,04,133	1799	9,50,000	9.50.000	71468	16554133
Reference Books	11858	1,00,01,100	991	7,20,000	12849	10001100	
e-Books	1520					Downloads	
Journals	231	6,44,246	26	105243	257	7,49,489	
e-Journals	5	13,71,930	3 New	2,93,736+	8	17,44,461	
	Packages		Packages	78795			
			+ Renewal				
			of 5				
			Packages				
Digital Database							
CD & Video	2372		34		2406		
Others (specify)							

### 4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Depart- ments	Others
Existing	1400	20	100 MBPS	1 (Browsing Facility in all Computer Labs)	1	3	9	1 (Library)
Added	0	0						
Total	1400	20	100 MBPS	1	1	3	9	1

- 4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)
  - 1400 Computers
  - Wi-Fi Campus with 100mbps
  - Guest Lectures
  - Faculty Development Programs
  - Webinars
  - Workshops both for faculty & Students
  - Industry interaction through visits/ workshops/ seminars.
  - N/W forensics workshop & Cyber forensics workshop

4.6 Amount spent on maintenance in lakhs:

i) ICT	88.66
ii) Campus Infrastructure and facilities	267.18
iii) Equipments	Rs. 97.33
iv) Others	Rs. 26.16
Total:	Rs. 479.33

### Criterion - V

### 5. Student Support and Progression

- 5.1 Contribution of IQAC in enhancing awareness about Student Support Services
  - Regular update in College web-site for circulating necessary information.
  - Information sent from library about the new inclusion of new addition of books, journals and periodicals
  - The Placement cell Career Counselling and Guidance
  - Career Vision Promotion Centre.
  - Attendance monitoring and corrective suggestions
  - Relationship management Cell.
  - Regular interaction with students in meetings and classrooms.
  - Corrective measures based on students' feedback.
- 5.2 Efforts made by the institution for tracking the progression
  - Student progression is recorded in their MTP Book
  - Result analysis and improvement is tracked; remedial classes are arranged accordingly
  - Review of Seminars/Presentations of Projects at 'Show & Tell' Platform
  - Daily Attendance tracking through Campus Automation System and alerting the students, parents through SMS.
  - Apart from MID Exams, Assignments and End exams, continuous inhouse assessment through tests, assignments, Group Discussions,
     Presentations etc and continuous feedback.

5.3 (a) To	stal Num	nhar a	fatudanta	, II	<u> </u>	DC.	DI. D		L		
3.3 (a) 10	nai ivui	noer o	Students	39		PG 384	Ph. D. 0		hers 0		
(b) No	o. of stu	dents	outside th						<u> </u>		
(c) No	o. of int	ernatio	onal stude	ents		0					
	Men	No 2804	64.22	Women	No 1562	35.78					
		20	013-14					20	14-15		
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1815	460	175	1512	5	3967	2088	501	198	1570	9	4366
TI	Demand ratio 1:4 Dropout % : <b>0</b> 5.4 Details of student support mechanism for coaching for competitive examinations (If any)  The Advance English Communication Skills Lab at 3 <sup>rd</sup> year and the Finishing School prepare / train the students for competitive exams along with their support to the placement cell.										
	No	o. of sti	udents be	eneficiaries	515	·					
5.5 No. o NET	f studen	its qua		hese examir	nations	GATE	44	CA	T 8		

State PSC UPSC Others

IAS/IPS etc

149

5.6 Details of student counselling	gand career guidance
------------------------------------	----------------------

- Mentors are available
- Mentor to student ratio 1:20
- Each mentor take care of the academics & welfare of the student assigned.
- Parents of these students are updated about the performance by their respective mentors by meetings and communicated through SMS and Mails.
- Mentoring weekly
- Certificate courses are conducted for various career advancement.

No. of students benefitted 1	194

5.7 Details of campus placement (data from placement has to be verified).

	Off Campus		
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
68	612	495	

### 5.8 Details of gender sensitization programmes

- Gender sensitization is taken into account in right from admission to equity action plan so as to ensure a balanced ratio between male-female.
- Institutional Women Cell is instrumental in dealing with issues if any
- The equity factor is evident at objective of the institution in treating everyone equally

#### 5.9 Students Activities

9 Students Activities
5.9.1 No. of students participated in Sports, Games and other events
State/ University level 507 National level 173 International level
No. of students participated in cultural events
State/ University level 156 National level 18 International level
5.9.2 No. of medals /awards won by students in Sports, Games and other events
Sports: State/University level 167 National level 167 International level
Cultural: State/University level 40 National level International level

### 5.10 Scholarships and Financial Support

	Number of students	Amount (Rs.)
Financial support from institution	33	45,40,050
Financial support from government	(874+1688) 2562	(1,30,22,600+10,87,01,000) 12,17,23,600
Financial support from other sources		
Number of students who received International/ National recognitions		

5.11	Student organised / initiatives
Fairs	: State/ University level National level 6 International level
Exhib	oition: State/ University level National level 1 International level
5.12	No. of social initiatives undertaken by the students

- 5.13 Major grievances of students (if any) redressed:
  - 1. To improve the drinking water facilities
  - 2. Not to display the marks in the notice board

#### Criterion - VI

### 6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

#### **VISION**

To be a World Class University providing value-based education, conducting interdisciplinary research in cutting edge technologies leading to sustainable socio-economic development of the nation.

#### **MISSION**

- To produce technically competent and socially responsible engineers, managers and entrepreneurs, who will be future ready.
- To involve students and faculty in innovative research projects linked with industry, academic and research institutions in India and abroad.
- To use modern pedagogy for improving the teaching-learning process
- 6.2 Does the Institution has a management Information System

Campus Automation Management system (CAMS) is in place. The following modules are used and all the activities are automated through the CAMS software

- 1. Academics
- 2. Examinations
- 3. Finance & Accounts
- 4. Human Resources
- 5. Purchase & Stores
- 6. Web Portal & Alumni
- 7. Administration
- 8. E- Learning
- 9. Training & Placement
- 6.3 Quality improvement strategies adopted by the institution for each of the following:

### 6.3.1 Curriculum Development

Every Department has BOS that suggests changes for improvement and up gradation of the curriculum after discussions. The suggestions are implemented after it is ratified by the Academic Council.

After the Autonomy status of the institute, The syllabi were revised twice , with the objective of -

- 1. Making the curricula at par with the industry requirement
- 2. Making it sustainable in the international scenario.

It is mandatory to map every course objective with the course outcome. A course end survey is performed at the end of every course and necessary measures are taken. The results of mid exams are mapped with Course Outcomes and the achievement levels are indexed.

#### 6.3.2 Teaching and Learning

Active Learning methods are implemented to bring innovation within classrooms. Continuous seminars/ lectures / workshops are arranged for the faculty to enable them to create a learner centric environment.

The new approaches include:-

- POGIL
- Mind Map / Concept Map
- Learning by Doing (LBD)
- Videos / Visuals
- Group Discussion
- Students' Presentations
- Flipped Classroom
- Projects by Students
- Role Play
- Inquiry based learning

Extensive efforts towards Lab Management in order to bring in quality improvement.

#### 6.3.3 Examination and Evaluation

Reforms in examination & Evaluation

- Assignment Tests are introduced
- Question paper pattern is changed in order to test the students in their overall understanding of the subject.
- Continuous assessment is done through tests, Assignments, Mini Projects, Project Demonstration.
- Objective questions for 1, 2 and 3 marks are introduced both in Mid and Final examinations.

#### 6.3.4 Research and Development

Research and Development is continually promoted through –

- Research & Consultancy Cell
- Encouraging the faculty through lectures / seminars / workshops
- Creation of 'Show and Tell'
- Faculty members are encouraged and supported to publish papers and present papers in conferences through reimbursement, funding and awards
- Incentives are given for good publications and project proposals.
- 'My Big Idea' competition is conducted every month. Best idea is given cash prizes.

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

- increase in number of computers in the library
- Affordance of digital information
- Constant up gradation of number of books and journals.
- Availability of e- database
- E-learning sources
- ICT and Smart Classroom
- Institute Automation CAMS
- New computers in Multi-Media Lab

#### 6.3.6 Human Resource Management

- Payroll is as per norms
- Time and Attendance are monitored on daily basis
- Performance record is maintained
- Performance appraisal is conducted
- Faculty and Staff recruitment are always based on merit.
- Seminar / training are conducted to train the newly recruited faculty
- Micro teaching is done for the new comers
- Several in house workshops are held to train the faculty and staff to enable them to update their knowledge.
- IQAC creates awareness among faculty regarding quality
- Grievance cell is present to address several issues that both faculty, staff or students may face.

#### 6.3.7 Faculty and Staff recruitment

- Faculty and staff are recruited as per UGC guidelines, chiefly based on merit
- Faculty from different universities and also from various National and international institutions are recruited to improve quality of education
- Faculty are recruited through interviews by properly constituted selection Committee.
- Diversity is maintained while recruiting Faculty and Staff.
- Faculty recruitment is as per the accepted guidelines of the student teacher ratio
- Ratification of Faculty by University Selection Committee

### 6.3.8 Industry Interaction / Collaboration

The following approaches of the Institute involves uninterrupted Industry Interaction –

- 'Shadow Engineering'
- 'Engineer in Mirror'
- 'Career Vision'
- Projects
- Guest Lectures
- Placement Training
- IQAC Committee Members

#### 6.3.9 Admission of Students

Students are admitted on the basis of merit through state wide entrance examination EAMCET conducted by State Government.

6.4 Welfare schemes for

Teaching	Yes
Non teaching	Yes
Students	Yes

- Teaching and non teaching career advancement scheme, study leaves, medical leave, maternity leave, ON-Duty leave, awards, incentives, conference registration and travel support
- Students fee reimbursement, scholarships, awards, trophies, gold medals, cash prizes.

6.5 Total corpus fund generated	6.5	Total	corpus	fund	generated
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Rs. 25,32,98,480 /-	

6.6 Whether annual financial audit has been done

Yes	✓	No	

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

Audit Type	External		Internal		
	Yes/No	Agency	Yes/No	Authority	
Academic			Yes	Academic Audit Cell	
Administrative					

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

For UG Programmes	Yes	✓	No	
	_			
For PG Programmes	Yes	✓	No	

- 6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?
  - Bar coding is used in the answer scripts.
  - Recounting & Revaluation facility is provided to the student.
  - CGPA system is used for the award of division.
  - Supplementary exams are conducted within Two weeks of result announcement.
- 6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?
  - To promote the academic freedom in autonomous college by encouraging lab linked theory courses in the curriculum.
  - To provide more options for elective courses
  - To provide options to take value added courses for better employability.
  - To bring in a change by introducing Choice based Curriculum
- 6.11 Activities and support from the Alumni Association
  - Alumni association is sponsoring grants for technical and non-technical events.
  - Support the placement cell with various training and industry inputs.
  - An online portal of the alumni is created who collaborates with the institution for various activities.
  - Guest- lectures for students by Alumni as part of career vision approach.
  - Alumni are frequently involved in mentoring the students, conducting mock interviews, providing industrial and professional tips etc.
- 6.12 Activities and support from the Parent Teacher Association
  - Parents are regularly invited to discuss the need / problem / progress of their wards
  - Relationship Management Cell is created chiefly to strengthen the parent teacher relation.
- 6.13 Development programmes for support staff
  - 1 Training / workshop/seminars / FDP are conducted
  - 2 Academic / study leaves are granted to encourage higher education
  - 3 Financial support is given for acquiring higher qualification

- 6.14 Initiatives taken by the institution to make the campus eco-friendly
  - Plantation programmes are organised
  - Use of sprinklers to water the plants

### **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.

#### **Best Practices**

- 1 MTP Programmes For First-Rate Placements
- 2 Education Process Re-Engineering with VJ Spectral Pyramid (TM)
- 3 Shadow Engineering
- 4 Institute Calendar
- 5 VNR Lab Protocol(TM)
- 6 Career Vision Approach(TM)
- 7 Engineer in Mirror
- 8 Show and Tell
- 9 Teaching through Learning by Doing methods
- 7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year
  - IQAC has developed quality indices to monitor and improve attendance, results, placement, classroom and lab quality etc.
  - The Curricula / Syllabi of courses are oriented to ensure outcome.
  - Extensive training programs for Faculty members for enhancing Pedagogical approaches are conducted
  - Departments have imbibed quality research culture
  - Active learning methods are implemented.
  - The curricula is revised and improved towards a learner centric approach.
  - Faculty are encouraged to submit project proposals
- 7.3 Give two Best Practices of the institution (please see the format in the NAAC Self-study Manuals)
  - 1) Career Vision Approach
  - 2) Show & Tell

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

Annexure i and ii is enclosed

7.4 Contribution to environmental awareness / protection

VNRVJIET seeks to provide an education combining with social cultural and environmental awareness with the understanding that promotes wisdom, spiritual growth and contribution to the common good.

VNRVJIET demonstrate its strong commitment to environmental responsibility through these commitments:

- ✓ Strive within the limits of practical considerations to conserve energy and resources, reduce waste, purchase environmentally friendly products, and minimize adverse impact on the surrounding environment.
- ✓ Recognize and promote efforts to increase a deep, aesthetic, spiritually based awareness of our connection to the environment among the students of this institute
- ✓ Every year plantation program is conducted in the campus.

7.5	Whether	environmental	audit	was	conducted	?
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Yes	 No	✓

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

SWOT Analysis is being done.

#### Strength -

- Excellent student-faculty ratio & Average experience of faculty is 8-9 years.
- Masters and PhD degree holders (>90%).
- Well-equipped Library & Laboratory.
- Innovations in Teaching Learning
- Excellence in planning and implementation

#### Weakness -

• Inadequate number of lab faculty.

#### Opportunities -

- Launching new UG & PG programs every year.
- Student hostels and faculty quarters on Campus.

#### Threats -

• Competition from international players.

### 8. Plans of institution for next year

The Plan for improvement in the next year covers the following areas --

- Student Placements
- Publications
- Patents
- Major and Minor Research Projects
- International Conferences

Name <u>Dr. Poonam Upadhyay</u>	Name Dr. C. Kiranmai	-
Sd/-	Sd/-	
Signature of the Coordinator, IQAC	Signature of the Chairperson, Ig	QAC

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### **Abbreviations:**

CAS - Career Advanced Scheme

CAT - Common Admission Test

CBCS - Choice Based Credit System

CE - Centre for Excellence

COP - Career Oriented Programme

CPE - College with Potential for Excellence

DPE - Department with Potential for Excellence

GATE - Graduate Aptitude Test

NET - National Eligibility Test

PEI - Physical Education Institution

SAP - Special Assistance Programme

SF - Self Financing

SLET - State Level Eligibility Test

TEI - Teacher Education Institution

UPE - University with Potential Excellence

UPSC - Union Public Service Commission

\*\*\*\*\*\*



Excellence in Engineering Education from students' perspective is that students learn in the class rooms and on their own by listening, visualizing, experimenting, experiencing, and going through practical training. The philosophy of education is to work with "END IN MIND". Hence the teaching learning process of VNR VJIET is structured as 'Career Vision Approach' - a student visualizing the nature of work that he/ she will be involved in after completion of the graduate program and the physical environment around their work. Four years prior to their graduation during the first week of registration an Induction program is conducted for the students to provide support for a successful transition and to create a career vision approach. Three years prior to their graduation, the students are sent as resident Shadow Engineers to experience the industrial environment. Two years prior to graduation, students have an opportunity to work on projects to feel like Engineers. And finally During the year of graduation, students are trained to cultivate a sense of accomplishment and are introduced to higher studies and careers.

### **SHOW N TELL**

A new facility is created by name 'Show and Tell' as a platform for the students to exhibit and explain projects in a square in an open area.

- The concept involves showcasing and presenting innovative ideas and projects that are developed by students in different labs to motivate other students. This concept tries to create a space where innovative ideas are shared and shaped creating a concrete possibility for research.
- The Show and Tell square provides an opportunity to give a demonstration along with micro-talks structured into 10-20 minutes.
- The goal is to present the key points and differentials of the project during a timeframe that captures the attention of the audience.
- It is mandatory for all the final year (B.Tech/M.Tech) students to exhibit their projects on the Show & Tell platform before attending their viva-voce examination.