# Electronics & Communication Engg.

Part A Back To Content Page

#### I. Institutional Information

## I.1 Name and address of the institution and affiliating university

(Instruction: The name, address of the institution, and the name of the university, which has given affiliation to this institution, are to be listed here.)

## Name and Address of the Institution:

Gokaraju Rangaraju Institute of Engineering and Technology

Bachupally, Kukatpally, Hyderabad - 500 090

Telangana

Ph: 040-65864440, 65864441 e-mail: info@griet.ac.in website: www.griet.ac.in

### Name and Address of the Affiliating University:

Jawaharlal Nehru Technological University Hyderabad (JNTUH)

Kukatpally, Hyderabad – 500 085

Telangana

Ph: 040-23158661 to 23158664

website: www.jntuh.ac.in

I.2 Name, designation, telephone number, and e-mail address of the contact person for the NBA

(Instruction: The name of the contact person, with other details, has to be listed here.)

Name: Dr Jandhyala N Murthy

Designation: Principal

Mobile No: +91-9391184994 , +91-9652313434

Email id: <a href="mailto:principal@griet.ac.in">principal@griet.ac.in</a>
Ph: 040-65864440, 65864441

I.3 History of the institution (including the date of introduction and number of seats of various programmes of study along with the NBA accreditation, if any) in a tabular form

(Instruction: History of the institution and its chronological development along with the past accreditation records need to be listed here.)

Level	Programme	FullTime/ PartTime/ Sandwich	Year of Starting	Intake Sanctioned	Year of enhancement	Sanctioned enhancement	Accreditation Status A/NA/AF	NBA Accreditation Visits
UG	Electrical and Electronics Engineering (EEE)	FullTime	1997	40	2001,2007	20,60	A	Granted Provisional Accreditation for two years for the period 2014-16
UG	Mechanical Engineering (ME)	FullTime	1997	hU	2002, 2006, 2013,2015	30 , 30, 60,-60	A	Granted Provisional Accreditation for two years for the period 2014-16
UG	Electronics & Communication Engineering (ECE)	FullTime	1997	40	2000, 2001, 2006, 2011, 2013,2015	20, 30, 30, 60, 60,60	A	Granted Provisional Accreditation for two years for the period 2014-16
	Computer Science and Engineering (CSE)	FullTime	1997	40	1999, 2000, 2006, 2012, 2013,2015	20, 30, 30, 60, 60,120	A	Granted Provisional Accreditation for two years for the period 2014-16

UG	Information Technology (IT)	FullTime	1999	40	2000, 2006,2015,2016	20, 60,-60,60	A	Granted Provisional Accreditation for two years for the period 2014-16
UG	Civil Engineering (CE)	FullTime	2008	60	2009	60	AF	NBA experts visited during May15,16,17 waiting for results
UG	Bio Medical Engineering	FullTime	2002	30	2015	-30	NA	
UG	Bio Technology	FullTime	2002	30	2008,2012,2015	60,-30,-60	NA	
PG	M.Tech-Design for Manufacturing(DFM)	FullTime	2004	18			AF	NBA experts visited during May15,16,17 waiting for results
PG	M.Tech-Power Electronics(PE)	FullTime	2006	18			AF	NBA experts visited during May15,16,17 waiting for results
PG	M.Tech-VLSI	FullTime	2006	18			NA	
PG	M.Tech-Embedded Systems(ES)	FullTime	2007	18			NA	
PG	M.Tech-Computer Science Engineering(CSE)	FullTime	2007	18	2013	6	NA	
PG	M.Tech-Software Engineering(SE)	FullTime	2007	18			NA	
PG	M.Tech - Thermal Engineering(TE)	FullTime	2013	18			NA	
PG	M.Tech-Power Systems(PS)	FullTime	2014	18			AF	NBA experts visited during May15,16,17 waiting for results
PG	M.Tech-Structural Engineering(St E)	FullTime	2014	18			NA	
PG	MBA	FullTime	2006	60	2011,2015	60,-60	NA	

## I.4 Ownership status

(Instruction: Ownership status of the institute has to be listed here.) society (Govt./NGO/private)

# I.5 Mission and Vision of the Institution

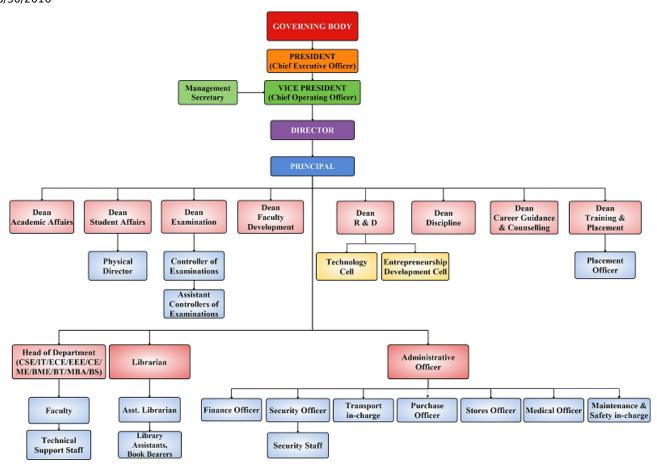
(The institution needs to specify its Mission and Vision).

Vision of the Institution: To be among the best of the institutions for engineers and technologists with attitudes, skills and knowledge and to become an epicenter of creative solutions.

Mission of the Institution: To achieve and impart quality education with an emphasis on practical skills and social relevance.

## I.6 Organisational Structure

Organisational chart showing the hierarchy of academics and administration is to be included



#### I.7 Financial status

(Instruction: Financial status of the institute has to be mentioned here.)

private self-financed

## I.8 Nature of the trust/society:

Also list other institutions/colleges run by the trust/society

(Instruction: Way of functioning and activities of the trust/society have to be listed here.)

**Gokaraju Rangaraju Educational Society (GRES)** is a charitable educational society promoting quality education in Andhra Pradesh founded and promoted by **Dr. Gokaraju Gangaraju**, **Chairman of Laila Group of Industries, manufacturers of sugar, paper and pharma products.** 

GRES draws its inspiration from the leadership and vision of late **Sri Gokaraju Rangaraju**, Founder President of S R K R Engineering College, DNR College, Bhimavaram, Chairman of Board of Trustees, Tirumala Tirupati Devasthanams, Member of A.P. Legislative Assembly, a distinguished crusader in the field of education, who focused his efforts on the promotion of quality education.

The main objective of GRES is to promote technological, medical and management educational institutions for the overall benefit of the state in particular, and the country in general.

The society established **Gokaraju Rangaraju Institute of Engineering and Technology** in 1997 and **Gokaraju Rangaraju College of Pharmacy** in 2003. GRIET has the distinction of being one among the Top 10 Ranking and reckoning Institute of choice and preference for the aspiring students. Both these institutions established innovative standards in their respective fields.

Name	<b>Year of Establishment</b>	Location
Gokaraju Rangaraju College of Pharmacy	1997	Hyderabad

## I.9 External sources of funds

(Instruction: The different sources of the external funds over the last three financial years are to be listed here.)

Name of the external source	2015-2016	2014-2015	2013-2014	2012-2013
	0	0	0	0

#### I.10 Internally acquired funds

(Instruction: The different sources of the internal funds over the last three financial years are to be listed here.)

Name of the internal source	2015-2016	2014-2015	2013-2014	2012-2013
Students Fee	34,87,36,000	30,55,69,800	26,80,53,960	23,24,42,000
Special fee, Transport, library fee, Interest on FDR, Miscellaneous	5,76,27,000	7,22,23,870	7,18,59,390	5,95,60,000

#### I.11 Scholarships or any other financial assistance provided to students

(Instruction: If any scholarship or financial assistance is provided to the students then the details of such assistance over the last three financial years has to be listed here. Also mention needs to be made of the basis for the award of such scholarship).

Type of scholarship	2015-2016	2014-2015		
State Government Scholarship (Welfare Schemes for SC, ST, BC, EBC, Disabled, Minority)	11,30,33,500	10,11,00,700	8,91,65,500	7,64,87,300
Central Government Scholarships (GATE for PG Studies)	52,48,000	82,56,500	75,84,000	52,80,000
MHRD (BC,SC,ST,EBC,BC-E, Disabled, Welfare)	2,10,000	1,50,000	1,20,000	1,00,000
Rank based scholarship by our Institute	1,95,000	3,25,000	1,90,000	3,40,000
PM Scholarship	1,20,000			

#### I.12 Basis/criterion for admission to the institution

(Instruction: The basis/criterion for student intake has to be listed here.)

Admissions are made through the Guidelines given by State Government from time to time. Currently admissions for 70% of the sanctioned intake, commonly known as Category "A" by the Government are made through a State-Level Entrance conducted by Govt. of Telangana. named 'EAMCET' and 'ECET' for B.Tech studies, 'PGECET' and 'GATE' for M.Tech studies, 'ICET' for MBA and 30% admissions under the Category "B" will be made by the Management, following the procedure laid down through the G.Os issued by the Govt. of Telangana.

#### I.13 Total number of students

(Instruction: Total number of engineering students, both boys and girls, has to be listed here. The data may be categorised in a tabular form under graduate or post graduate engineering, or other programme, if applicable.)

	2015-2016	2014-2015	2013-2014	2012-2013
Total no. of boys(UG,PG or other programme if applicable)	3379	2982	2850	2631
Total no. of girls(UG,PG or other programme if applicable)	1585	1625	1514	1379
Total no. of students	4964	4607	4364	4010

#### I.14.1 Total number of employees in Regular Staff

(Instruction: Staff strength, both teaching and non-teaching, over the last three academic years has to be listed here.)

Items	2015-2016 Min	2015-2016 Max	2014-2015 Min	2014-2015 Max	2013-2014 Min	2013-2014 Max	2012-2013 Min	2012-2013 Max
Male Teaching staff in engineering	135	151	126	130	112	115	125	132
Female Teaching staff in engineering	154	167	140	152	131	133	113	119
Male Teaching staff in science & humanities	22	28	21	23	19	21	20	23
Female Teaching staff in science & humanities	24	32	20	24	20	22	18	18
Male Non-teaching staff	57	73	53	57	52	56	45	49
Female Non-teaching staff	24	25	23	24	22	24	22	24

#### I.14.2 Total number of employees in Contract Staff

Items	2015-2016	2015-2016	2014-2015	2014-2015	2013-2014	2013-2014	2012-2013	2012-2013
Items	Min	Max	Min	Max	Min	Max	Min	Max
Male Teaching staff in engineering	0	0	0	0	0	0	0	0
Female Teaching staff in	0	0	0	0	0	0	0	0
engineering	U	0	U	0	U	U	U	U
Male Teaching staff in science &	0	0	0	0	0	n	0	0
humanities	0	U	ا	0	U	U	0	U
Female Teaching staff in science	0	0	0	0	0	0	0	0
& humanities	0	U	lo l	U	O	U	U	U
Male Non-teaching staff	128	137	121	127	112	118	105	112
Female Non-teaching staff	115	118	89	98	80	88	75	82

#### II. Departmental Information

#### II.1 Name and address of the department

#### **Department of Electronics and Communication Engineering**

Gokaraju Rangaraju Institute of Engineering and Technology

Bachupally, Kukatpally, Hyderabad-500 090

Telangana

II.2 Name, designation, telephone number, and e-mail address of the contact person for the NBA

## Dr. Jandhyala N Murthy

**Principal** 

Phone: 040 - 65864440, 65864441 (O), 040 - 27675542 (R)

Mobile: 9391184994 e-mail: principal@griet.ac.in

II.3 History of the department including date of introduction and number of seats of various programmes of study along with the NBA accreditation ,if any

Gokaraju Rangaraju Institute of Engineering and Technology was established in 1997 with a vision and great expectations. Electronis and Communication Engineering department commenced offering UG programme BTech in 1997 with an initial intake of 40 students, which was enhanced to 60 students annualy from the year 2000, to 120 in the year 2009, and to 180 in the year . In the year 2011, the Institute became autonomous and current intake of ECE department is 300. The department is also offering two PG programmes (VLSI,ES) with an intake of 18 each. The department has been recognized by JNTUH as Research Center. The Department has requisite number of faculty members, striving to incorporate excellence in theory, practice and research. Undergraduate studies in mechanical engineering at GRIET start with the innovative, integrated and well designed curriculum structure which gives students a solid foundation in core disciplines like electronics, communication systems, together with essential areas of mathematics and physical sciences. Throughout the curriculum, design courses, laboratory courses, and project courses allow students to acquire a taste for the complex task of designing, analyzing, and building a device.

Level	Programme of Study		Year	Intake increased to	In Year	Accreditation Status A/NA	Accreditation	Year of obtaining Accreditation
B.Tech	Electronics and Communication Engineering	40	1997	60,90,120,180,240,300	2000,2006,2011,2013.2015	A	<b>A</b>	2006,2009, 2013

# II.4 Mission and Vision of the Department

(The department is required to specify its Mission and Vision).

## **Vision of the Department**

The Electronics and Communication Department strives to be recognized globally through quality education for well-qualified engineers, who are innovative in research, ethically strong, entrepreneurial with good managerial skills and successful in advanced fields of their professional carrier.

### Mission of the Department

The Electronics and Communication Engineering Department is committed:

- To create, knowledgeable and skilled person with strong fundamentals, through rigorous curriculum that develops
  the ability to solve problems individually and in teams.
- To create professional leaders to society with research attitudes in the core areas of Electronics and Communication with collaborations to impact quality of academics, Industry and social needs.
- To create competent man power with deep awareness on ethics, skills, and leadership qualities to our profession and society.
- II.5 List of the programmes/ departments which share human resources and/or the facilities of this programmes/ departments (in %)

(Instruction: The institution needs to mention the different programmes being run in the department which share the human resources and facilities with this department/programme being accredited.)

Department	Level	Programme	Sharing of Human Resources (%)
Mechanical Engineering	UG	B.Tech	5.88
Computer Science Engineering	UG	B.Tech	5.88
<b>Electrical and Electronics Engineering</b>	UG	B.Tech	4.41
Information Technology	UG	B.Tech	4.41

#### II.6 Total number of students

	Level	Programme	2015-2016	2014-2015	2013-2014	2012-2013
Total no. of boys	UG+PG	B.Tech+ M.Tech	765	686	593	495
Total no. of girls	UG+PG	B.Tech+ M.Tech	376	338	292	248
Total no. of students	UG+PG	B.Tech+ M.Tech	1141	1024	885	743

# II.7 Minimum and maximum number of staff on roll during the current and three previous academic years (1st July to 30th June) in the department

Items	2015-2016 Min	2015-2016 Max	2014-2015 Min	2014-2015 Max	2013-2014 Min	2013-2014 Max	2012-2013 Min	2012-2013 Max
Teaching staff in the department	62	68	54	56	45	51	40	48
Non-teaching staff	08	08	07	07	07	07	07	07
Total	70	76	61	63	52	58	47	55

II.8 Summary of budget for the CFY and the actual expenditure incurred in the CFYm1, CFYm2 and CFYm3 (for the Department)

(Instruction: Please fill details for items like Laboratory equipment, Software, Laboratory consumables, Maintenance and spares, Training and Travel, Miscellaneous expenses for academic activities and Total.)

Items	Budgeted in CFY 2015-2016	Actual expenses (till) in CFY 2015-2016	Budgeted in CFYm1 2014-2015	Actual Expenses in CFYm1 2014- 2015	Budgeted in CFYm2 2013-2014	Actual Expenses in CFYm2 2013- 2014	Budgeted in CFYm3 2012-2013	Actual Expenses in CFYm3 2012- 2013
Laboratory Equipment	33,00,000	31,000	33,00,000	16,43,000	23,00,000	17,49,000	5,00,000	60,000
Software	7,50,000	6,18,000	7,00,000	10,26,000	3,00,000	1,34,000	2,00,000	1,31,000
Laboratory consumables	6,00,000	1,92,000	4,50,000	2,42,000	3,00,000	1,50,000	3,00,000	3,05,000
Maintenance and spares	42,00,000	42,62,000	37,00,000	39,78,000	20,00,000	12,05,000	4,50,000	3,28,000
Training and Travel	11,00,000	9,68,000	6,50,000	2,51,000	4,00,000	1,88,000	1,00,000	50,000
Miscellaneous expenses for academic activities	10,00,000	18,15,000	9,00,000	10,13,000	9,00,000	6,83,000	1,00,000	54,000
R&D	4,90,000	0.00	4,90,000	0.00	3,00,000	3,000	10,00,000	6,02,000
Total	1,14,40,000	78,86,000	1,01,90,000	81,53,000	65,00,000	41,12,000	26,50,000	15,30,000

# **III. Programme Specific Information**

## III.1 Name of the Programme

(List name of the programme, as it appears on the graduate's certificate and transcript, and abbreviation used for the programme.)

**Under Graduate** 

**Bachelor of Technology(B.Tech)** 

**Electronics and Communication Engineering** 

# III.2 Title of the Degree

(List name of the degree title, as it appears on the graduate's certificate and transcript, and abbreviation used for the degree.)

**Bachelor of Technology(B.Tech)** 

**Electronics and Communication Engineering** 

III.3 Name, designation, telephone number, and e-mail address of the Programme coordinator for the NBA

# Dr. T.C.Sarma

Professor & HOD

Department of Electronics and Communication Engineering

Mobile: 9849219175

E-mail:principal@griet.ac.in, info@griet.ac.in

# III.4 History of the programme along with the NBA accreditation, if any

Programme of study	Started with No Of Seats	In Year	Intake increased to	In Year	Accreditation Status (A/NA)
UG	40	1997	60, 90, 120,180,240, 300	2000, 2001, 2006, 2011,2013,2015	A

# III.5 Deficiencies, weaknesses/concerns from previous accreditations

S.No	Criteria	Observations made by NBA (During the last accreditation visit)	Action taken by the
1. Vision,	Mission & PEOs		
1.1.	Formulation	Process for defining Vision and Mission of the department in not appropriate	based on the feedback from the stake holders and displayed in appropriate places and on website
1.2.	Dissemination	Consistency of PEOs with Missions not properly justified.	as per the feedback from stake holders.
1.3.	Assessment	Assessment and attainment of PEOs are not properly documented	PEOs are properly documented with the help of graphical tolls and creating new forms
2. Course	outcome and Program (	Outcomes	
2.1	Formulation	COs are not clearly defined	All COs are redefined based on the feedback of the stake holders
2.2	Mapping	Graduate attributes are not properly mapped with POs	manner after numerous classifications
2.3	Assessment	Relevant tools for assessing Pos needs to be identified	Identified the Assessment graphical tools for assessing the POs
2.4	Attainment	Process for assessing the attainment of each POs is not appropriate	Assessment of the POs attainment process is redefined based on the stakeholders feedback
3. Curricu	lum development		
3.1.	Process to identify the gap	of defining the curriculum gapes is neither defined nor adopted.	From the stakeholders and BOS feedbacks, curriculum is defined and identified the gaps in the syllabus content. Syllabus beyond the syllabus and address in appropriate places, Workshops, seminars and industrial visits are arranges frequently to fill the Curriculum gaps  To fill the gaps and to cover
			the content beyond the syllabus of the courses, conducting bridge courses and finishing school process in the department.

	3.2.	Action taken	 Conducting extra class to
1			academically week students
1			in the department.
1			Workshops, Internships are
1			conducted regularly for the
1			benefit of academically
L			week students

# III.6 Total number of students in the programme

	Level	Programme	2015-2016	2014-2015	2013-2014	2012-2013
Total no. of boys:	UG(II, III, IV)	B.Tech	531	483	386	329
Total no. of girls:	UG(II, III, IV)	B.Tech	261	237	190	166
Total no. of students:	UG(II, III, IV)	B.Tech	792	720	576	495

# III.7 Minimum and maximum number of staff for the current and three previous academic years (1st July to 30th June) in the programme

Items	2015-2016 Min	2015-2016 Max	2014-2015 Min	2014-2015 Max	2013-2014 Min	2013-2014 Max	2012-2013 Min	2012-2013 Max
Teaching staff with the program	53	59	48	50	39	45	28	33
Non-teaching staff	08	08	07	07	07	07	07	07

# III.8 Summary of budget for the CFY and the actual expenditure incurred in the CFYm1, CFYm2 and CFYm3 (exclusively for this programme in the department)

(Instruction: Please fill details for items like Laboratory equipment, Software, Laboratory consumables, Maintenance and spares, Travel, Miscellaneous expenses for academic activities and Total.)

spares, rraver, wirst	I		I			Λ -41		A -41
Items	Budgeted in CFY 2015-2016	Actual expenses (till) in CFY 2015-2016		Actual Expenses in CFYm1 2014- 2015	Budgeted in CFYm2 2013-2014	Actual Expenses in CFYm2 2013- 2014	Budgeted in CFYm3 2012-2013	Actual Expenses in CFYm3 2012- 2013
Laboratory Equipment	30,00,000	31,000	30,00,000	13,91,000	20,00,000	14,89,000	450000	53000
Software	7,00,000	570,000	6,00,000	9,55,000	2,00,000	1,14,000	180000	116000
Laboratory consumables	5,00,000	1,79,000	4,50,000	2,26,000	3,00,000	1,28,000	280000	270000
Maintenance and spares	4000000	39,64,000	37,00,000	37,00,000	20,00,000	10,25,000	400000	290000
Training and Travel	10,00,000	9,01,000	6,50,000	2,34,000	4,00,000	1,60,000	90000	44000
Miscellaneous expenses for academic activities	9,00,000	16,88,000	9,00,000	9,43,000	9,00,000	5,81,000	100000	48000
R&D	3,00,000	0.00	3,00,000	0.00	2,00,000	0.00	900000	553000
Total	1,04,00,000	73,33,000	99,00,000	74,49,000	60,00,000	34,97,000	2400000	1374000