

B. V. RAJU INSTITUTE OF TECHNOLOGY

Vishnupur, Narsapur, Medak District, Telangana

Annual Report of Academic Year 2020-21



Venue:

**B.V.RAJU INSTITUTE OF TECHNOLOGY
Vishnupur, Narsapur, Medak District**

ACADEMIC AFFAIRS

Institutional Front:

a. Admissions & Affiliations:

Three new courses in B.Tech. program have been approved by AICTE & JNTUH for 2020-21 in addition to the nine existing courses in B.Tech. program. The three new courses are:

- B.Tech–Computer Science and Business system (CSBS)
 - B.Tech –CSBS is in collaboration with TCS and an MOU has been signed for systematically running the course. TCS is helping the Institute through its curriculum development, faculty training and students internship for this course.
- B.Tech–CSE (AI&ML)
- B.Tech–CSE (DS)

The approved intake status of UG and PG programs for the academic year 2020-21 is given as follows:

Program	Branch	Intake 2020-21
B.Tech.	Biomedical Engineering	30
	Chemical Engineering	60
	Computer Science and Engineering	300
	Information Technology	120
	Electronics and Communication Engg.	240
	Electrical and Electronics Engg.	120
	Mechanical Engineering	120
	Civil Engineering	120
	Pharmaceutical Engineering	60
	CSE(AI&ML)	60
	CSE (Data Science)	60
M.Tech.	Computer Science and Engineering	18
	VLSI Design	18
	Embedded Systems	18
	Chemical Engineering	18
	Electrical Power systems	18
	Power Engineering and Energy Systems	18
	Engineering Design	18
MBA	MBA	60

UG Admissions for 2020-21:

The admission status of UG programs for the academic year 2020-21 is given as follows:

S.No.	Branch	Intake	Filled	Opening Ranks OC Category		Closing Ranks OC Category	
				Male	Female	Male	Female
1	BME	30	13	13454	47645	35536	47645
2	CHE	60	52	12591	18622	19967	25632
3	CSE	300	300	2872	3408	5996	6475
4	IT	120	120	4991	7075	7983	8310
5	ECE	240	237	4180	7101	9685	9828
6	EEE	120	101	9945	13588	15878	16263
7	MECH	120	86	12897	30319	23683	34286
8	CIVIL	120	94	14096	24116	23612	24973
9	PHE	60	43	63534	69923	67617	69923
10	CSE(AI&ML)	60	60	3168	4774	5807	6195
11	CSE(DS)	60	60	4484	6042	6524	6872
12	CSBS	60	60	6045	4853	8232	8249
Total:		1350	1226				

PG Admissions for 2020-21:

PG admissions are in progress and the admission process will be completed shortly.

b. Accreditations:

- **Extension of UGC autonomous status:**
UGC inspection completed successfully in Oct 2020 and Autonomous status has been extended for the five more years i.e. 2020-21 to 2024-25.
- **National Board of Accreditation (NBA):**
Self-Assessment Report (SAR) for re-accreditation of seven courses in B.Tech programmes (CSE, IT, ECE, EEE, CHE, MECH and CIVIL) has been submitted already and the NBA team visit is awaited.
- **National Assessment and Accreditation Council (NAAC):**
BVRIT has been accredited by NAAC with A grade (3.29) in 2017 and is valid up to 2022. Annual Quality Assessment Report (AQAR) for the year 2019-20 has been submitted.

c. Recognitions:

- **AICTE-CII Survey-2020:**

BVRIT has been accorded with PLATINUM Category by AICTE-CII Survey for the year 2020.

- **ARIIA-2020:**

BVRTI has been categorized as “Band A” institution (ranked between 06–25) in category of “Private or Self Financed College” in ATAL Ranking of Institutions on Innovation Achievements (ARIIA) 2020.

- **Institution Innovation Council (IIC):**

BVRIT has established “Institution Innovation Council” a scheme promoted by AICTE, MHRD, Government of India in 2019 to inculcate Design thinking, Ideation, Patenting and Entrepreneurial skills among the engineering students.

- **Unnat Bharath Abhiyan (UBA):**

BVRIT has collaborated with MHRD for bringing the transformational changes in rural development processes by leveraging knowledge institutions to help build the architecture of an Inclusive India. BVRIT has adopted 5 villages named Ramachandrapuram, Chinna Chinthakunta, Reddipalle, Chippalthurthi and Lingapur under UBA and conducted more than 1000 household surveys.

d. MOUs:

BVRIT has executed MOUs with the following organizations during 2020 :

- MoU with TCS for starting B.Tech – CSBS (Computer Science and Business System) course for capacity building.
- MoU with Dhruva Space Pvt. Ltd. to explore opportunities for academic exchange and collaboration to support the establishment of Vishnu space operation centre.
- MoU with National Highways Authority of India to adoption of Road stretch in Kalyan - Nirmal Km 615,000 to Km 668,600.
- MoU with Ramky Enviro Engineer limited for internships and placements.
- MoU with M/s. EV Retron Energies India Pvt. Ltd. to promote and enhance research interest on Lithium-ion battery packs, electrical vehicle design.

- MoU with NASSCOM for skill development and higher employability opportunity.
- MoU with L4G Solutions Private Limited for International course access to the students for online learning, Skill development opportunities for members of the faculties, access to capstone projects by various foreign universities.
- MoU with Great Lakes E-Learning services Pvt. Ltd collaborative learning to the online platform on popular online resources from IIT curriculum.
- MoU with EduSkills for skills development of faculty.
- MoU with Edx for preparing the students and the faculties for industry standard certifications, International course access to the students for online learning and Skill development opportunities for members of the faculties.
- MoU with eAbyas for building the capacity of hosting own LMS, curation of courses for engineering educations and Achieving Complete automation in eLearning.
- MoU with Course Networking on research interest based collaboration for faculties and showcasing of the highest standards of achievements in Teaching Learning & Research.

e. R-20 Regulations & Curriculum:

Few salient features of R20 B.Tech Academic Regulations and Curriculum:

- Total number of Credits: 160
- Flexibility in choosing Professional Electives (Either specialization wise or general)
- More number of Open Elective courses to cater to the multi-disciplinary expertise
- Open Electives/ Professional Electives courses offered through MOOCs up to 20% of total credits
- Introduction of Computational Thinking and Problem Solving, Python Programming, Introduction to AI, Fundamentals of Design Thinking and Life Sciences course for all the students
- Introduction of NSS or NSO or Yoga/ Environmental Science and Rural Sensitization, Indian Constitution/Gender Sensitization, Human Values and Professional Ethics as Mandatory Courses
- Performance Assessment (40:60 CIE:SEE)

- Answer book verification and Challenge valuation
- Improvement for Continuous Internal Evaluation

B.Tech. with Honors or Minors in Engineering

A student will be eligible to get B.Tech. Degree with Honors or Minors in Engineering, if he/she completes additional 20 credits under any ONE of the schemes.

- Honors is for Vertical/ Specialization in his/her OWN Branch for Research orientation.
- Minors is in any OTHER Branch for improving Employability.
- A student can register for either Honors or Minors and not for both.

f. VEDIC - A step towards educational excellence:

As a collaborative platform it supports SVES institutions through teaching, research and technical development programs for faculty & staff, and holistic and technical competencies programs for students.

Student Development Initiatives (Few Listed):

- **Career Aspirations Series:** 1-Day Program for I Year students on Mindset change to college life and Communication Skills
- **Intellectual Learning Series:** 4-Day programs for III Year Students on Career Preparation and Life Skills
- **Self Management Skills (SMS)** - A student program to create a sense of positive enthusiasm and a total of 34 sessions conducted for 2031 students during the pandemic.

Faculty Skill Development Initiatives (Few Listed):

- **Vishnu Online Interactive Colloquium on Education (VOICE):** VOICE is a program for faculty to share best practices during the pandemic. Conducted 13 sessions covering all faculty in SVES group.
- **Faculty Programs on Research** (Research Proposal Mentoring, Research Proposal Writing, Research Paper Writing)
- **Faculty Andragogy Skill Development:** A total of 26 programs are conducted and total of 817 faculties benefited.

g. Activities during Lockdown period:

- Online learning started from last week of March 2020 and continued till today. Apart from the curriculum, faculty and students were provided online learning platform such as Coursera, Edx, Eduskills, NASSCOM Future Skills, IEEE Swebok at free of cost.

- The Institute has started the Online Learning cluster at Sangareddy by providing laptops and internet facility for smooth online learning. Nearly 20 students are coming to this center for their online learning.
- The management has distributed Tablet Computers, Smart phones, Internet Dongles for the identified & needy students to continue their online learning.
- Distribution of grocessories to the people in need.
- Distribution of sanitizers, face masks, gloves to Government Servants.

Students Front:**a. Examination Results:****2016-2020 batch (final result):**

Branch	Admitted		Registered	Passed	Failed	Pass %
	Dir.	LE				
BME	20	8	28	24	4	85.71
CHE	51	11	62	47	15	75.80
CSE	300	31	331	281	50	84.89
IT	120	2	122	102	20	83.60
ECE	240	48	288	264	24	91.66
EEE	120	24	144	130	14	90.27
MECH	115	26	141	117	24	82.97
CIVIL	114	30	144	118	26	81.94
PHE	16	0	16	11	5	68.75
Over all	856	180	1276	1094	182	85.73

b. Placements**Placements Status - Company wise as shown in Annexure****Placements A.Y. 2019-2020:**

- A total of 118 companies conducted the recruitment processes for the students of BVRIT and a total of 940 students secured the job offers.
- A total of 309 students secured the internship opportunities in 69 companies.

Placements A.Y. 2020-2021:

- A total of 46 companies conducted the recruitment processes for the students of BVRIT and a total of 709 students have secured the job offers. The placement drives for this year is still going on and the college is taking all possible care to ensure that the other eligible students will also be placed before completion of the academic year.
- A total of 176 students secured the internship opportunities in 27 companies.

c. Students Achievements

- Mr. Siddo Samith Deshai, II yr. CSE developed official syllabus app for CSE which is named as VishnuAssist
- Mr. Sharan Babu, II Yr. CSE participated in IBM-Nasscom hackathon and secured Top 16, and won BitHacks and BetaHack
- Mr. Sai Nithish, II YR. CSE Published Mobile Application in Play store, AGBI Hackathon, Skin Cancer Detector.
- Mr. Srikar, II Yr. CSE won IBM-Nasscom hackathon Top 16, BitHacks Winner and VIT Technical fest Craft 404 Runner up and Campus Ambassador of Coding Ninjas.
- Mr. Y R Joy Noah built a quadcopter using arduino as a Flight Controller.
- Mr. Sri Vikas Prathanapu, III Yr. CSE CodeChef Campus Chapter Leader & Ambassador
- Ms. Ch. Snehitha, Ms. V. Sumapriya and Ms. M. Sameeksha, and Ms. T. Vaishnavi, III Yr. CSE Received Certificate of Appreciation from CodeChef as "Executive Team Member of CodeChef Campus Chapter & CodeChef Campus Ambassador.
- Mr. Akhil, IV Yr. CSE HackerEarth Campus Ambassador and Internshala Student Partner
- Mr. Amruth Sagar, IV Yr. CSE developed a Zero Level Game.
- Mr. V.Prasanna Nikhil Sathwik published Machine learning Handbook.
- Mr. Arun, IV Yr. Civil participated in GE Precision Health challenge 2020 Bangalore and secured 1st prize worth rupees 1 Lakh.
- Mr. Sai Eswar, IV Yr. Civil participated in HERE Technologies Map Creator content and received Map championship award. In the same program, 9 students received Map expert award.
- Mr. Ranganadh, IV Yr. CHE received 1st prize worth One Lakh at the John F. Welch Technology Centre, Jan 2020.

- Mr. Ranganadh, IV Yr. CHE received 1st prize worth Rs.30,000 for presenting on topic “Alternate Augmented Communication Device” at Anveshna 2020.
- Mr. Akhilesh, IV Yr. CHE received best paper award in international conference RACE-2020.
- Ms.Lakshmi Sai, IV Yr.CHEhas published a book titled “FUERTE: All you need is you” in Amazon on Jun-2020.
- Mr.Ch. Manivardhan Reddy, won 1st Prize in **INQUIZITIVE**, a five -day All India Level Chemical Engineering Quiz competition held from 6th to 10th of July 2020 on the eve of Centenary celebrations of our Hon'ble Founder Chairman Late B V Raju, in association with IICHE student chapter of BVRIT and Department of Chemical Engineering.
- Mr. M. Hemanth, II Yr. CHE won 1st prize in technical quiz in **VISVAK 2K20**, a Technical online event was held on 15th September on the eve of Engineer's Day in India as a part of the celebrations of birth anniversary of Sir Mokshagundam Visvesvaraya.
- Ms. G.Hrithika, III Yr. CHEwon 1st prize in Essay Writing in **VISVAK 2K20**,
- Mr. Anand S Krishna Mahajan, III Yr. CHE won 1st prize in Elocution in **VISVAK 2K20**.
- Ms. Ch . Sathya Priya, III Yr. CHEwon 1st prize in Guess the missing letter in **VISVAK 2K20**.
- Students of Mechanical Engineering and Electrical Engineering Department participated in the SAE BAJA 2021 with the group of 20 Mechanical and 5 Electrical Engineering Students. Stood 18th position in the preliminary round with a team id 21165, cart no: E5
- Twenty-five students of 2nd and 3rd Yr. Mech. have participated E-Baja championship 2020 at Pitampur, Indore, Madhya Pradesh 22ndJan to 26thJan 2020.
- Mech. Students Participated in “Aravali Terrain Vehicle championship” held at Gujarat 15-02-2020 to 19-02-2020 and won the following prizes:
 - Business Plan Winner Award
 - Women Empowerment Award
 - Best initiative award.
- Department of Mechanical engineering Students Participated in SAE TIER –IIand won the following prizes: A First prize in 3D-printing, B.First prize in B-plan, C.First prize in thread cutting, D.Third prize in CFD analysis
- Ms. G.Apoorva, IV Yr. Mech selected for second level in manufactured day celebration in caterpillar.

- Mr. Ch.Nithin Kumar, II Yr. Mech. Got Sky rider certification.
- Ms. Sirichandana, Mr. Shiva Shankar, Ms. Shubam Innani III Yr. Mech. Qualified 1st round in Caterpillar.
- Ms. Meenakshi, II Yr. Mech. Got ISRO, MOOC Certificate.
- Mr. Nithin Kumar, II Yr. Mech. Got Sky Riders academy certificates.
- Mr. Vadla Omkar, IV Yr.Mech. got certificate from Skyfi labs on completion of project differential gear design using autodesk.
- Ms. Meenakshi, II Yr. Mech. got Google digital garage certificate
- III B.Tech ECE students J.Sai Kiran, I. Naveen, Charith Reddy, G. Dilip designed project is selected for next phase of L&T TechGium Contest-2019/20
- III B.Tech ECE students Ch.Harshith Varma, Pranith Reddy, Neeraj Shyam and Sravan Kumar designed project is selected for next phase of L&T TechGium Contest-2019/20
- Ms. T. Reavthi Lakshmi Prasanna and M. Dhanush , PHE were selected for 2nd round of 5 days work shop on “Artificial intelligence in Health Care” organized by VIPER, IPA branch Narsapur to be held at IIT Bombay, on 24th to 28th February 2020.
- Ms. P. Ashwita, PHE Idea was selected for final round in women innovator 2020, which is scheduled to be held in front of PMO in New Delhi.

d. Induction program for first year UG students:

Induction and Orientation has been conducted from 04/12/2020 to 11/12/2020 for the academic year 2020-21

Faculty Front:

a. Faculty Recruitment and Retention:

Recruitment is a continuous process in our Institution as emphasized by the honorable members of the governing body in the previous governing body meetings.

- Based on the requirement, the advertisement for recruitment is given in national level newspapers, placed on the website and applications are called for recruitment of faculty. Interviews are conducted at the institutional level. The selection committee headed by Vice Chairman,

Principal, HOD, and Subject experts as members. The selected faculty will be recruited and will be sent for ratification at JNTUH.

- For Ph.D. holders, with higher level of achievement, an open invitation is placed on the website. The competent Ph.D. holders are recruited round the year.

Faculty position as on A.Y 2020-21:

Total no. of Teaching Faculty members	No. of faculty members with Ph.D	No. of faculty members pursuing Ph.D	Total no. of Non-Teaching Faculty members
331	92	72	98

List of faculty obtained Ph.Ds. from 15.12.2019 - till A.Y 2020-21

S.No.	Dept.	Name of the faculty	University	Month & Year
01	MBA	Dr. P.Nagaraju	JNTUH, Hyd	Jan-2020
02	ECE	Dr.Shaik Shafi	KLU, Guntur	Jan-2020
03	Bs&H	Dr. P.Veeraraghava	EFLU	Feb-2020
04	IT	Dr. K.Dasaradha Ramaiah	JNTUH, Hyd	Feb,2020
05	IT	Dr. K.Durga Prasad	JNTU, Kakinada	Jul-2020
06	IT	Dr. K.Bhima	JNTUH, Hyd	Dec-2020
07	ECE	Dr. D.Harikrishna	JNTUH, Hyd	Dec-2020

b. Faculty Achievements:

Details of Journal papers, Conference papers, FDPs, Seminars, workshops, guest lecturers & invited lectures organized at our college and participated outside - Department wise- during 2020:

Dept.	No.of Journal Papers	No.of conference papers	No.of W/s, Seminars, FDPS, webinars attended	No.of W/s, Seminars, FDPS, webinars conducted	Online verified certifications
ECE	8	2	82	09	80
CSE	7	3	1036	08	640
EEE	3	0	187	10	75
MECH	16	2	198	05	44
CIVIL	4	17	35	08	128
CHE	9	25	499	13	109
BME	0	0	86	05	88
IT	5	2	260	01	174
PHE	4	13	32	00	04
BS&h	12	15	138	00	46
MBA	0	1	79	06	170

RESEARCH & DEVELOPMENT ACTIVITIES:

Journal Publications (SCI/Scopus) and books / book chapters

	2019		2020	
	Conference	Book/Book Chapter	Conference	Book/Book Chapter
BS&H	20	1 book	15	2 books
CHE	15		25	1 Book & 1 Book chapter
CE	9	4 Book Chapter	17	2 Book Chapter
CSE	5	1	3	3 Books, 1 Book Chapter
ECE	6	1 Book Chapter	2	2 Book Chapters
EEE	1			1 Book
IT	9	1 Book	2	2 Book chapters

PHE	7		13	
ME	13	4 Book Chapter	2	4 Book Chapters
MBA	0	0	1	0
Total	85	2 books, 10 Book Chapters	80	5 Books & 10 Book Chapters

Faculty Development Programmes Conducted during 2020-21

S. No.	Program/Workshop
1.	Workshop on Teaching with Matlab in the Modern Classroom
2.	Workshop Gearing Up for Online Teaching - Dr. Subrahmanyam Gorthi, Department of Electrical Engineering, IIT, Tirupathi
3.	Workshop Information Gathering Techniques for Pen Tests
4.	Workshop Prof. McNamara interaction, US India international Dialogue series on national educational policy
5.	Workshop Hybrid classrooms and engagement
6.	Workshop Learning Assessment and Feedback
7.	Workshop on-Formative Assessment Techniques (FAT)
8.	Workshop on-Common Learner Misconception
9.	Workshop on-Learner Misconceptions, Learner Engagement
10.	Workshop on-FAT - Formative Assessment Techniques, B-1, S-2
11.	Workshop Practice of Outcome Based Education
12.	Workshop on-FAT - Formative Assessment Techniques, B-1, S-3
13.	Workshop on-FAT - Formative Assessment Techniques, B-1, S-4
14.	Workshop on-FAT - Formative Assessment Techniques, B-1, S-5
15.	Online FDP on Domestic and international water and waste water treatment
16.	workshop on An emerging paradigm of low power computational Vlsi design
17.	STTP on RADAR Signal processing and IoT Applications
18.	AICTE Sponsored Short-Term Training Programme on "Recent Advances and Entrepreneurship in Green Renewable Energy Technology and Smart Grids" – Series A
19.	AICTE Sponsored Short-Term Training Programme on "Recent Advances and Entrepreneurship in Green Renewable Energy Technology and Smart Grids" – Series B

20.	AICTE Sponsored Short-Term Training Programme on “Recent Advances and Entrepreneurship in Green Renewable Energy Technology and Smart Grids” – Series C
21.	STTP on Latest Advancemnets of Materiala in wireless Applications
22.	STTP on Latest Advancemnets of Materiala in wireless Applications
23.	STTP on Latest Advancemnets of Materiala in wireless Applications
24.	STTP on Latest Advancemnets of Materiala in wireless Applications
25.	AICTE Sponsored one week Online Short Term Training Programme on "IoT based Green Energy Systems"
26.	STTP on DESIGN OF EXPERIMENTS IN ENGINEERING
27.	STTP on DESIGN OF EXPERIMENTS IN ENGINEERING
28.	STTP on DESIGN OF EXPERIMENTS IN ENGINEERING
29.	AICTE Sponsored Short-Term Training Programme on “Recent Advances and Entrepreneurship in Green Renewable Energy Technology and Smart Grids” – Series D
30.	AICTE Sponsored Faculty Development Programme on “Electric Vehicle (EV) Components, Technologies, Challenges and Future Development” – Series A
31.	AICTE Sponsored Faculty Development Programme on “Electric Vehicle (EV) Components, Technologies, Challenges and Future Development” – Series B
32.	National Webinar on "Cyber Security: Guidelines and Opportunities" on in association with CSI Student chapter
33.	Integrating Research Portfolio into CN

Sponsored Projects and consultancy activities during 2020

Ongoing Sponsored Projects

S.No	Project Title	Principal Investigator	Department	Grant Support Agency	Budget Sanctioned (Rs in Lakhs)	Project Duration
01	Design and development of a wearable device for motion assistance in paraplegic patients	PI- Dr.K.Prabhakar Rao , CO-PI- Dr.I.A.Pasha CO-PI-Mr.B.Anil Kumar	ECE	DST	57,772,75 /-	3 years (29-03-2020-29-03-2023)

02	Design and Development of On-chip NaadiParikshan Autonomous Healthcare Monitoring System Using Wireless Sensor Networks	Dr.Sanjay Dubey	ECE	DST	63.82 (To be Released)	3 years (2018 - 2021)
03	Development of Open Source Brain Computer Interface Toolbox and Large Scale Public Database of EEG Data for BCI Research	Dr.Sanjay Dubey	ECE	DST	59.1 (To be Released)	3 years (2018 - 2021)
04	Identification and Demonstration of Cost-	Dr.Vijay Kumar	Civil Engg	DST	96.35	3 Years (Jan 2018 - Jan

	Effective Technologies to Maximize Habitat Energy Self Sufficiency					2021)
05	Synthesis of Graphene from Agricultural Waste as Green substitute and its Application in Remediation of Heavy metals in Waste water.	Co-PI: G. Prabhakar PI: Dr V. Madhavi BVRITH	BS&H	TEQIP-III	2,50,000/-	2 years
06	Wearable Circular Polarized Antennas for Military Personal Application	Dr.Sanjeeva Reddy	ECE	DST	44.9	3 years (Nov 2016 - Nov 2020)
07	A Companion type assistive system for Elderly People using VLSI based Service Robot	Dr.Chinnaiah	ECE	DST	49.4	3 years (March 2017 - March 2020)
08	Design and Develop a Priority based converter for Micro grid	Dr K Rayudu	EEE	JNTUH/TEQIP-III	3 lakhs	2019-20
09	Synthesis of Graphene from Agricultural Waste as Green substitute and its Application in Remediation of Heavy metals in Waste water.	Co-PI: G. Prabhakar PI: Dr V. Madhavi BVRITH	BS&H	TEQIP-III	2,50,000/-	2 years
10	Nano Composite Polymer blend electrolytes-Applications to Solid	PI: Dr. E. Laxmi Narsaiah Co-PI: Dr. K. Vijay Kumar, JNTUHCES	BS&H	TEQIP-III	2,50,000/-	2 years

	state batteries.					
11	Fund for improvement of S&T infrastructure (FIST)	Dr. G. B. Radhika HOD, Chemical Engg.	Chemical Engg	DST	50	5 years (Nov 2015 - Nov 2020)
12	Rural Women Technology Park at Vishnupur Village, Narsapur Mandal, Medak Dist, Telangana State	Dr.Laxminarsaiah,	BS&H	DST	93.4	3 years (Jan 2017 - Jan 2020)

STTP (Short Term Training Programs) fund received from AICTE during 2019-20

<u>S.No</u>	<u>File No</u>	<u>Name of the scheme</u>	<u>Funding Agency</u>	<u>Title of the Proposal /project</u>	<u>Name of the PI and Co-PI</u>	<u>Duration of the project (in years)</u>	<u>Date of Starting</u>	<u>Date of Ending</u>	<u>Total Sanctioned Amount (in Rs.)</u>
1	34-65/166/RIFD/STTP/Policy-1/2018-19	STTP	AICTE	Recent developments and Entrepreneurship in sustainable green energy technologies and smart grids	Dr S Saravanan, Professor, EEE	6 months	2020	2020	3,97,333/-
2	34-67 / 66/FDC/FDP /p-1. dated on 30.06.2020	FDP	AICTE	Electric Vehicle (EV) Components, Technologies , Challenges and Future Development .	Dr M Prameela, Professor, EEE	6 months	2020	2020	4,84,500/-
3	Ref. No. 34-65/167/RIFD/STTP/Policy-1/2018-19 Dated 12.12.2019	STTP	AICTE	Internet of Things (IoT) based Green Energy Systems	Dr. R. Pitchai	7 months	2020	2020	1,69,666/-
4	34-65/212/FDC/STTP/Policy-1/2019-20	STTP	AICTE	Design of Experiments in	Dr. A. Varun, Associate	6 Months	2020	2021	4,74,833

				Engineering	e Professo r, Mechani cal Engineer ing Departm ent				
5	34-65 / 57/RIFD/FDP/Policy-1/2017-2018 Dated 10-05-2019	FDP	AICTE	Application of CFD in Process Industries	DR G B Radhika Dr. B V S Praveen Dr G Srinivas	6 month s	2019	2019	4,25,00/ -

Projects applied for funding

S.No	Project Title	Principal Investigator	Department	Grant Support Agency
1	Ultrasound-assisted synthesis of visible light active metal-organic frameworks (MOFs) for sono-photocatalytic degradation of azo dyes	Dr.B.Bhaskar	Chemical Engg	SERB - TARE 2020
2	Portable hand operated domestic water purification device based on hand pump jet cavitation and ceramic filter	Dr.B.Bhaskar	Chemical Engg	IIT-Roorkee, DIC, Research to Product (R2P) Scheme (2020-2021)
3	Design and development of a physical disinfection system for end use food products	Dr.B.Bhaskar	Chemical Engg	BIRAC-PACE
4	Design and development of a surface floated type disinfection cum aeration system for aquaculture industry based on hydrodynamic cavitation	Dr.B.Bhaskar	Chemical Engg	BIRAC-PACE
5	Intensification of Textile Dye Wastewater Treatment Using Cavitation Technique and Visible Light Active Metal Organic Framework Photo-catalysts	Dr.B.Bhaskar	Chemical Engg	AICTE-RPS
6	Development Of Prototype Hydrogen Generator For Fuel Cell Applications Using Ethanol-water	Dr.M.Mallaiah	Chemical Engg	SERB
7	Effective energy generation and reduction of CO2 emissions from biogas production in municipal solid waste treatment plant	Dr.G.Srinivas	Chemical Engg	DST-waste mangement
8	Development of Low cost eco friendly Adhesive from Waste Expanded Polystyrene Sustainable Management Approach	Dr.Appala Naidu	Chemical Engg	DST-waste mangement
9	Anti Fouling of Nanofiltration membranes applied to pharmaceutical and food industrial	Dr.B.Venkata swamy	BSH	DST-waste mangement

	effluent			
10	Converting Bio-degradable waste into organic fertilizer and track by applying Machine learning and Blockchain Techniques	Dr, K.DasradhaRamaiah	IT	DST-waste management
11	Brain tumor segmentation and prediction Using novel Deep Learning algorithm with densely integrated CRF (Conditional Random Field) for 3D Magnetic Resonance Images (MRI)	Dr. R. Pitchai	CSE	AICTE-RPS
12	AICTE - International Conference	Dr. R. Pitchai	CSE	AICTE
13	An Embedded Assistive Monitoring system for pranayama to survive from COVID Pandemic	PI: Chinnaiah M C, Sanjay Dubey, Nagaraju	ECE	DST
14	An Assistive System for Monitoring the Rhythmic Vedic Chanting and Pranayama	PI: Chinnaiah M C, Sanjay Dubey, I A Pasha, Kausalya Nandan, Nagaraju	ECE	DST
15	Design of Smart and Green Urban Solid Waste Management System for Sustainable Environment	PI: T.Vasudeva Reddy, CO PI: M.C.Chinnaiah, K. Purna Chand B.Venkataswamy	ECE	DST
16	DEVELOPMENT AND FABRICATION OF SIZE MINIATURIZED CIRCULAR	PIs: Dr. B R Sanjeevareddy, Dr. I.A.Pasha	ECE	ISRO-AO
17	Yoga based children psychology analysis and hardware implementation	PI: T.Vasudeva Reddy, CO PI: Shaik shafi	ECE	DST
18	Alternative Augmented communication device for cerebral palsy using gyroscope and mobile application	PI:M.Bhanu Prakash	ECE	DST-TIDE
19	Development of IoT Based Electromagnetic Non-Contact Viatl Sign Monitoring System for COVID19 Pandemic Patients	PI:Dr.B.R.Sanjeev Reddy Co-PI:Dr.I.A.Pasha, R.Anirudh Reddy, Mr.SanjayNekkanti, Dr.Guru Subramanyam	ECE	USISTEF-Covid19 Ignition Grants
20	Development of an Assistive System for Physician to early detection of mental health illness residing in rural and urban community	PIs: Dr. Apurva Kumari , Dr. Chinnaiah M C	ECE	DST

21	Monitoring and Analysis of Mother and Fetal Behaviors: Scientific Responses and Perspectives towards Vedic Chanting	PI: Dr. Apurva Kumari, CO-PIs: Dr. Chinnaiah M C ,Mrs. Vandana Ch	ECE	DBT
22	A Companion based Tether Robot for Elder People Personal Mobility Assistive System in Indoor Environment	PI: Dr. M.C.Chinnaiah, CO PI: Dr. I. A. Pasha Dr. Sanjay Dubey Dr Shaik Shafi	ECE	DST-TIDE
23	Design & Development of Assistive System for Protective Measurement of Elderly People to Avoid Accidents in Wash room	PI-Dr. Chinnaiah M C , CO-PIs: Dr.Sanjay Dubey, Dr.D.Harikrishna Dr. Apurva Kumari	ECE	DST-DDP
24	Investigation of Convective Heat Transfer Characteristics of Metal/Metal oxide-Fiber-Water Hybrid Nanofluid and comparing the performance characteristics with Metal and Metal oxide Nanofluids	PI: Dr. V. Murali Krishna Co-PI: Dr. M. Sandeep Kumar	Mechanical Enigneering	AICTE – RPS
25	Performance Evaluation of DGS based CP multi band antennas for SDR application	PI: Dr Sanjeev reddy, Co-PI: Mrs Jayshree Das	ECE	AICTE – RPS
26	Design of Na, K, Ag -ion Solid state batteries using Nano composite Polymer Electrolytes	PI: Dr Rayudu Co-PI: Lakshmi Narsaiah	BSH & EEE	AICTE-RPS

Ongoing Consultancy Projects

S.No	Project Title	Principal Investigator	Department	Consultancy Client	Budget Sanctioned (Rs in Lakhs)	Project Duration
1	Feasibility study	Dr. M.Mallaiah	Chemical	Sun Pharma	3.83	1 year
2	Automatic Ceramic Tile Sorting Systems	Dr. V. Murali Krishna, Dr. A. Varun, Dr. Suresh Dara, Dr. Apurva Kumari	Mechanical, ECE, CSE	Anjani Holding & One Convergence	5	2 years

Patents

	2019			2020		
	Patents filed	Patent Published	Patent Granted	Patents filed	Patent Published	Patent Granted
BS&H	0	0	0	0	0	0
BME	1	1				
CHE	1	0		5	3	
CE		0			1	
CSE	3	3	-	17	11	2
ECE	2	0	0	7	0	0
EEE		2			6	
IT	2	2	0	5	5	0
PHE				5	5	
ME	2	2	0	5	5	1
MBA	0	0	0	0	0	0
Total	11	10	0	44	36	3

Infrastructural Development

- All class rooms have been equipped with infrastructural setup including cameras, systems and internet for conducting online classes in addition to the already available ICT devices.
- Construction of 20 bedded Centennial health Centre completed with a plinth area of 5000 sft.
- Construction of Academic block is in progress with a plinth area 60,000 sft.
- B. V. Raju Park work: Pathways work in progress.
- Installation of Sanitization machines, thermal screening and scanning facilities, UV Light based luggage disinfection system, sanitizer plant, fog machines, etc.

Proposed Infrastructure developmental projects:

Proposed Projects	Area
Guest house	6000 sft
New kitchen for hostels	12000 sft
New library block	20000 sft
Super market	3000 sft
Additional Student spaces at B. V. Raju park	3000 sft
B. V. Raju Auditorium	20000 sft

LIBRARY, COMPUTERS & NETWORK INFORMATION

Library:

The college has a full-fledged central library with books and journals to meet the students and faculty requirements.

	Added during 2020	Available as on date
Total Titles	344	12065
Total Volumes	1409	75416
National and International Journals (Print version)	5	213
Magazines	13	54
Online Journals (e-Journals)	49	9714

- Established the DTH 32 Swayam Prabha education channels.
- Newly Introduced Amazon Kindle e-book readers for effective e-learning for students
- Provided 1067 free e-books to the Students and Faculty members for respective branches through HOD's

- Provided Remote access to the online e-journals i.e. IEEE, Springer, ASCE, Science Direct Elsevier, J-Gate, etc.
- Conducted J-Gate webinar for our SVES Groups of Libraries and Library Coordinators, students and faculty members.
- Conducted Grammarly Webinar for our SVES Groups of Libraries and Library Coordinators and BVRITN Campus faculty members.

Computers: Total no. of Computers available: 1949.

CC cameras: 161 CC cameras installed in the campus for surveillance.

Internet: Bandwidth enhanced from 400 Mbps to 454 Mbps (300+40+114 Mbps) during this year.

Proposal for new courses, strength enhancement in existing courses, & strengthening existing courses:

a) Proposal for New courses :

- B.Tech. CSE (Cyber Security)
- B.Tech. Mech (Robotics)

b) Strength enhancement in existing courses:

- B.Tech. CSE (DS) – 60 to 120
- B.Tech. CSE (AI&ML) 60 to 120

c) Strengthening existing courses :

- **Strengthening B.Tech. Pharmaceutical Engineering:**
It is an interdisciplinary course and the curriculum is a blend of pharmaceutical sciences and Chemical Engineering courses. At present only MPC students are eligible. AICTE has approved the eligibility of Bi.Pc stream students to study the B.Tech Biotechnology. The BOS of PHE considered the above aspect and recommended that the present curriculum is suitable for both M.Pc and Bi.Pc stream students at intermediate. The academic council members also endorsed this view and requested the Principal to pursue this matter with AICTE. Hence the item is placed before the governing body.
- **Strengthening B.Tech. (Data Science) curriculum**

Collaboration with Novartis for B.Tech. CSE (Data Science) curriculum development

- **Strengthening B.Tech. (AI&ML) curriculum**

Collaboration with Bennett University and Inkers Technology for B.Tech. CSE(AI&ML) curriculum development

B V Raju Institute of Technology
Budget Summary of Financial Year 2019-20

Particulars	Budgeted in 2019-20	Actual expenses in 2019-20
Infrastructure Built-Up	5,00,00,000	4,36,12,582
Laboratory equipment	1,75,00,000	1,68,03,640
Teaching and Non-Teaching Staff Salaries	27,00,00,000	26,39,67,614
Software	25,00,000	21,51,600
Library	40,00,000	43,60,737
Laboratory Consumables	40,00,000	39,11,051
Maintenance and spares	36,50,000	37,42,383
Research and Development	40,00,000	39,28,632
Training and Travel	1,04,00,000	1,02,03,753
Electricity Charges	2,05,00,000	2,03,69,307
Printing and Stationary	45,00,000	45,01,056
Seminars and Workshops	40,00,000	40,23,519
Students Welfare	20,00,000	18,42,750
Advertisement Expenses	35,00,000	32,31,583
Students Function Expenses	45,00,000	46,32,267
Governing Body Expenses	50,000	53,890
Internet Expenses	22,00,000	21,56,720
Staff and Students Insurance	15,00,000	15,81,581
Remunerations to Visiting Faculty	24,50,000	23,09,300
Sports and Games	13,50,000	12,92,531
Hospitality Charges	54,50,000	53,96,147
Gifts and Prizes to students	30,00,000	29,58,848
Interest on Loans	4,00,00,000	3,87,96,207
Car Hire Charges	33,00,000	32,38,259
Security Charges	85,00,000	83,47,840
Housekeeping Charges	1,40,00,000	1,37,48,646
Other Administration Expenses	11,00,02,000	10,74,41,327
Total	59,68,52,000	57,86,03,770

