

# VARDHAMAN COLLEGE OF ENGINEERING, HYDERABAD

# Autonomous institute, affiliated to JNTUH

#### **Mandatory Disclosure**

#### 1. Name of the Institution

#### **Vardhaman College of Engineering**

Kacharam, Shamshabad – 501 218, Hyderabad, Telangana, India

**Telephone:** 08413 – 253335, 253201 **Principal Mobile:** +91-8688901556 **Email:** principaloffice@vardhaman.org

#### 2. Name and address of the Trust/ Society/ Company and the Trustees

#### **Vardhaman Educational Society**

Kacharam, Shamshabad - 501 218, Hyderabad, Telangana, India

**Telephone:** 08413 - 253335, 253201

Mobile: +91-9000517939 **Email:** info@vardhaman.org

#### 3. Name and Address of the Vice Chancellor/Principal/Director

#### Dr. JVR Ravindra

**PRINCIPAL** 

Kacharam, Shamshabad - 501 218, Hyderabad, Telangana, India

**Telephone:** 08413 – 253335, 253201

Mobile: +91-9502653333

Email: principal@vardhaman.org

#### 4. Name of the affiliating University

#### Jawaharlal Nehru Technological University, Hyderabad

#### 5. Governance

#### 5.1 Members of the Board and their brief background

The Following are the members of Governing Body of Vardhaman College of Engineering:

- 1. Dr. T. Vijender Reddy, Chairman, Vardhaman College of Engineering An Orthopedic Surgeon specialized in joint replacements
- 2. Sri. M. Rajasekhar Reddy, Vice-Chairman, Vardhaman College of Engineering an Educationist by profession
- 3. Sri. T. Upender Reddy, Secretary, Vardhaman College of Engineering a Mechanical Engineer and Educationist

- 4. Sri. E. Prabhakar Reddy, Treasurer, Vardhaman College of Engineering a Businessman
- 5. Dr. K. Lakshminarayana, UGC Nominee Regt. IAS and Director, AP State Skill Development Corporation
- 6. Sri. M. Balaji, State Govt. Nominee Principal, Govt. Polytechnic, Gadwal, Mahaboob Nagar Dist.
- 7. Dr. K. M. Lakshmana Rao, University Nominee Professor & Director of BICS, Civil Engineering, JNTUH College of Engineering Hyderabad
- 8. Sri. E. S. Chakravarthy, Industrialist Global Head, RMG, TCS, Bengaluru
- 9. Dr. K. Mallikharjuna Babu, Educationist Vice Chancellor, REVA University, Bengaluru
- 10. Smt. Madhvi Chandra, Educationist Director, Gitanjali Group of Schools
- 11. Dr. H. S. Jain, Faculty of the College Professor of EEE
- 12. Dr. J. V. R. Ravindra, Principal (Ex-Officio)

The Details of Governing Body and Members are available at: <a href="https://vardhaman.org/governing-body-2/">https://vardhaman.org/governing-body-2/</a>

### 5.2 Members of Academic Advisory Body

The Following are the members of Academic Advisory Body of Vardhaman College of Engineering:

- 1. **Dr. J. V. R. Ravindra,** Principal & Professor of ECE, Vardhaman College of Engineering
- 2. **Dr. K. Mallikharjuna Babu,** Vice Chancellor, REVA University, Bengaluru
- 3. **Dr. P. Nageswara Rao,** Dean (IQAC) and Professor of ECE, Vardhaman College of Engineering
- 4. **Prof. K. Rajanikanth**, Former Principal MS Ramaiah Institute of Technology & Former Dean (Engineering), Visvesvaraya Technological University
- 5. **Dr. G. V. Krishna Reddy,** Professor of CE, Vardhaman College of Engineering

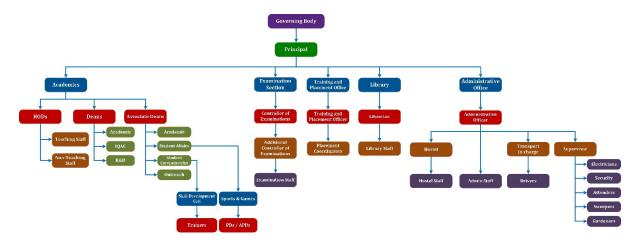
#### 5.3 Frequently of the Board Meeting and Academic Advisory Body

The Governing Body meets at least twice in an Academic Year.

Academic Advisory Body meets at least once in an Academic Year.

#### 5.4 Organizational chart and processes

Organisation Chart is shown at: <a href="https://vardhaman.org/mandatory-disclosure/">https://vardhaman.org/mandatory-disclosure/</a>



**Organisational Chart** 

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

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

The directions / suggestions of the governing body are effectively carried to the next levels by the Principal as shown in the organisation chart. Also, HODs, Deans, other In-charges present their proposals, recommendations, progress to the GB through the Principal for the information and necessary approvals from the GB.

# 5.5 Nature and Extent of involvement of Faculty and students in academic affairs/improvements

Regular meetings with Faculty, Students and other stakeholders are conducted to collect the feedback and suggestions on the existing academic matters. Valid Feedback and/or suggestion will be considered for amendments and/or modifications.

#### 5.6 Mechanism/Norms and Procedure for democratic/good Governance

The management believes good governance is essential to run an effective system for the growth and development of an institution and enhancing its outcomes. The objective of this focus on decentralization of the governance and delegating responsibilities to various senior functionaries and heads of the departments. This objective promotes inclusiveness and participatory management style of functioning. As an integral part of the governance, the management delegated power (both administrative and academic activities) to the Principal and academic heads for smooth running of the institutional activities. The decentralization also helps the decision making with proper authority and financial power. Thus, decentralization has shown a significant impact on the policy making, planning, and management with reference to engineering education. The college includes all the stakeholders while framing various guidelines to fortify the systematic functioning of the college. At the same time, decentralization should be seen as a means of improving the efficiency of the system and its quality. There are several committees, both statutory and other, are in place to administer and effectively govern the institute.

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

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

#### 5.7 Student Feedback on Institutional Governance/ Faculty performance

Student Feedback is collected on the following,

- i) Feedback on faculty
- ii) Feedback on institutional governance and facilities
- iii) Feedback on Teaching learning

#### i) FEEDBACK ON FACULTY

Feedback on all courses will be collected through online from the students twice in a semester. The first feedback will be collected at the middle of the semester i.e., before first midterm examinations and the second will be collected at the end of the semester. During the first feedback a questionnaire consisting of 5 parameters is adopted and a 10 parameter questionnaire along with feedback on course outcomes is taken at the second feedback.

Each parameter is measured based on the rating assigned to it i.e., 5 for Excellent, 4 for Very Good, 3 for Good, 2 for Fair and 1 for Poor. Each parameter average is measured by calculating the average number of students given against each rating. Final feedback of a faculty is measured considering the average rating given against each parameter.

#### Five Parameters used to collect the Feedback at the mid of the semester:

- a. Has the Instructor clearly stated the Learning Outcomes of the course?
- b. Was the class controlled and discipline maintained?
- c. How effective are the communication skills of the Faculty?
- d. Was the Instructor enthusiastic about teaching the class and invited questions and comments from students?
- e. Has the Instructor related course material to real life situations?

#### Ten parameters used to collect the feedback at the end of the semester:

- a. Was the class controlled and discipline maintained?
- b. How effective were the communication skills?
- c. Provides up-to-date information on the topic(s)?
- d. Did the faculty use real world examples and cases?
- e. Was the class interactive and doubts were clarified?
- f. How was the presentation style of the faculty?
- g. Encourages students to solve complex problems in the class?
- h. Makes objective and impartial evaluation of assessments?
- i. Sincerity and commitment towards academic work?
- j. Approachable after class hours for discussion and advice?

#### **Student Participation Percentage:**

On an average 80% of the students will be participating in the feedback process.

#### Feedback analysis Process and Corrective Measures:

The collected feedback will be analyzed based on the rating given against each parameter of evaluation. Based on the final average of the feedback, corrective measures are taken by:

- 1. Interacting HOD with the faculty to identify the reasons for not performing well.
- 2. Providing further guidance in the subject by available senior faculty / other faculty who taught the same subject.
- 3. Deputing faculty to FDPs if required.

Faculty who get better feedback will be rewarded by giving more weightage in faculty annual self-appraisal for the consideration of the increment

#### ii) FEEDBACK ON FACILITIES

A standard procedure is adopted by VCE for collecting feedback on facilities. The feedback on facilities like classrooms, laboratories, infrastructure, library, sports etc. are collected from students. Collected feedback is analyzed for identifying corrective actions to be taken. On an average 80% of the students will be participating in the feedback process.

#### Parameters for collecting feedback on facilities:

- 1. Internet facility in the campus.
- 2. Access to the students and Wi-Fi connectivity.
- 3. Quality of computer labs in the department /college.
- 4. Quality and functioning of equipment in the department laboratories.
- 5. Helpfulness of labs personnel.
- 6. Overall staff responsiveness in the laboratories.
- 7. Quality of classrooms in terms of visibility of the board / adequacy of fans and lights in the class/ventilation.
- 8. Use of technology in delivering the content.
- 9. Transport facility to students.
- 10. Quality of food in the college canteen.
- 11. Amenities in the hostel.
- 12. Drinking water facility in the college.
- 13. Cleanliness and Adequacy of toilets.
- 14. Games and sports facility.
- 15. Extra and co-curricular activities.
- 16. System of internal examination assessment and impartiality in awarding marks.
- 17. Ambiance of the college.
- 18. Quality of Training provided for placements.

#### iii) FEEDBACK OF TEACHING LEARNING PROCESS

- 1. How well the teacher prepares for the class?
- 2. How well the teachers communicate?
- 3. How much of the syllabus is being covered by the end of the semester?
- 4. Was your performance in assignments and tests discussed with you by the concerned teacher?
- 5. VCE takes active interest in promoting internship, student exchange, field visit opportunities for students.
- 6. The teaching and mentoring process in your institution facilitates you in cognitive, social and emotional growth.
- 7. Teachers are able to identify your weaknesses and help you to overcome them.

- 8. The institution makes effort to engage students in the monitoring, review and continuous quality improvement of the teaching learning process.
- 9. The VCE faculty use student centric methods, such as experiential learning, participative learning and problem solving methodologies for enhancing learning experiences.
- 10. Teachers encourage you to participate in extracurricular activities like games, sports, professional society activities.
- 11. What percentage of teachers use ICT tools such as LCD projector, Multimedia, etc. while teaching.

The overall quality of teaching-learning process at Vardhaman College of Engineering is very good.

#### 5.8 Grievance Redressal mechanism for faculty, staff and students

The college has grievances and redressal cell for the faculty, staff and students to address issues pertaining to facilities, teaching learning process, discrimination or any other related. There are separate cells for these wings which are headed by the principal, a senior faculty as convener and other senior faculty being the members.

These Grievance Redressal committees are formed to look in to the complaints received from the aggrieved. A Compliant Boxes are provided at Office of Principal and in the departments for students and faculty to lodge their complaints separately. The convener of the committee will consolidate the complaints received from all the students, faculty and staff. This will be presented before the committee which meets regularly depending upon the need. The committee recommends corrective measures to be taken and recorded in the register. Provision is also given to send the complaints to <a href="mailto:grievances@vardhaman.org">grievances@vardhaman.org</a>.

#### 5.9 Establishment of Anti Ragging Committee

The institute has established Anti-Ragging Committee as per the guidelines of the Apex Bodies. The committee is recently reconstituted and approved by the Governing Body in its 20<sup>th</sup> Meeting held on 14-03-2020.

#### 5.10 Establishment of Online Grievance Redressal Mechanism

The institute has Online Grievance Redressal facility through Vardhaman Student Portal (Student Corner). Any aggravated student can report issues through the portal at <a href="http://studentscorner.vardhaman.org/">http://studentscorner.vardhaman.org/</a>

# 5.11 Establishment of Grievance Redressal Committee in the Institution and Appointment of OMBUDSMAN by the University

The institute has established Grievances and Redressal Committee as per the guidelines of the Apex Bodies. The committee is recently reconstituted and approved by the Governing Body in its  $20^{th}$  Meeting held on 14-03-2020.

The affiliating university has appointed Dr. Jagannath Jetty, Professor of Geology (Retired), Osmania University as OMBUDSPERSON vide its Cir.No. UAAC/Student Grievance Redressal Committee/2020/1 dated 10-09-2020.

#### **5.12 Establishment of Internal Complaint Committee (ICC)**

The institute has established Internal Complaint Committee (ICC) as per the guidelines of the Apex Bodies. The committee is recently reconstituted and approved by the Governing Body in its 20<sup>th</sup> Meeting held on 14-03-2020.

#### 5.13 Establishment of Committee for SC/ST

The institute has established SC/ST Committee as per the guidelines of the Apex Bodies. The committee is recently reconstituted and approved by the Governing Body in its 20<sup>th</sup> Meeting held on 14-03-2020.

#### **5.14 Internal Quality Assurance Cell**

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

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

**Setting the quality Bench Marks:** The IQAC has initiated a standard for setting a performance at two levels viz the Faculty level and the Department Level. First bench mark set for the faculty are based on the number of papers published in International Journals of repute like IEEE,

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

The institute has established IQAC Committee as per the guidelines of the Apex Bodies. The committee is recently reconstituted and approved by the Governing Body in its 20<sup>th</sup> Meeting held on 14-03-2020.

#### 6. Programmes

#### 6.1 Name of Programmes approved by AICTE

SNo	Program	Level	Course	
1.			COMPUTER SCIENCE AND ENGINEERING	
2.			COMPUTER SCIENCE AND ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)	
3.		IMPER	INFORMATION TECHNOLOGY	
4.		UNDER GRADUATE	ELECTRONICS AND COMMUNICATION ENGINEERING	
5.	ENGINEERING	AND	ELECTRICAL AND ELECTRONICS ENGINEERING	
6.			MECHANICAL ENGINEERING	
7.	TECHNOLOGY		CIVIL ENGINEERING	
8.			COMPUTER SCIENCE AND ENGINEERING	
9.			DIGITAL ELECTRONICS AND COMMUNICATION SYSTEMS	
10.		POST GRADUATE	POWER ELECTRONICS AND ELECTRICAL DRIVES	
11.		GIGIDONIL	ENGINEERING DESIGN	
12.			STRUCTURAL ENGINEERING	
13.	MANAGEMENT	POST GRADUATE	MBA	

#### 6.2 Name of Programmes Accredited by NBA

SNo	Program	Level	Course
1.			COMPUTER SCIENCE AND ENGINEERING
2.	ENGINEERING AND TECHNOLOGY	ID UNDER	INFORMATION TECHNOLOGY
3.			ELECTRONICS AND COMMUNICATION ENGINEERING
4.			ELECTRICAL AND ELECTRONICS ENGINEERING
5.			MECHANICAL ENGINEERING

#### 6.3 Status of Accreditation of the Courses

- Total number of Courses
- No. of Courses for which applied for Accreditation
- Status of Accreditation Preliminary/ Applied for SAR and results awaited/ Applied for SAR and visits completed/ Results of the visits awaited/ Rejected/ Approved for ..... Courses

Total number of Courses	No. of Courses for which applied for Accreditation	Status of Accreditation – Preliminary/ Applied for SAR and results awaited/ Applied for SAR and visits completed/ Results of the visits awaited/ Rejected/ Approved for Courses
13	5	Approved for 05 Courses

#### 6.4 For each Programme the following details are to be given:

- Name
- Number of seats
- Duration
- Cut off marks/rank of admission during the last three years
- Fee
- Placement Facilities
- Campus placement in last three years with minimum salary, maximum salary and average salary

Course	UG - B. Tech - Computer Science and Engineering				
Number of seats	240	240			
Duration	4 Years				
Cut off marks/rank of admission during the last three years	2019-2020: 50584 2018-2019: 50029 2017-2018: 60949				
Fee	Rs. 1,25,000				
Placement Facilities	Yes				
Compus placement in last		2019-2020	2018-2019	2017-2018	
Campus placement in last three years with minimum	Number of Placements	312	216	154	

salary, maximum salary and average salary	Minimum Salary	Rs. 2,28,000	Rs. 1,80,000	Rs. 1,20,000
	Maximum Salary	Rs. 30,00,000	Rs. 14,00,000	Rs. 16,00,000
	Average Salary	Rs. 5,01,197	Rs. 3,65,788	Rs. 4,08,611

Course	UG - B. Tech - 1	UG - B. Tech – Information Technology			
Number of seats	180 (From the	AY 2020-2021)			
Duration	4 Years				
Cut off marks/rank of admission during the last three years	2019-2020: 70913 2018-2019: 81198 2017-2018: 90139				
Fee	Rs. 1,25,000				
Placement Facilities	Yes				
		2019-2020	2018-2019	2017-2018	
Campus placement in last	Number of Placements	128	80	62	
three years with minimum salary, maximum salary	Minimum Salary	Rs. 2,28,000	Rs. 1,80,000	Rs. 1,20,000	
and average salary	Maximum Salary	Rs. 8,00,000	Rs. 14,00,000	Rs. 7,50,000	
	Average Salary	Rs. 4,12,013	Rs. 4,09,537	Rs. 3,74,930	

Course	UG - B. Tech – Electronics and Communication Engineering			
Number of seats	240 (From the	AY 2020-2021)		
Duration	4 Years			
Cut off marks/rank of admission during the last three years	2019-2020: 56748 2018-2019: 56515 2017-2018: 68285			
Fee	Rs. 1,25,000			
Placement Facilities	Yes			
		2019-2020	2018-2019	2017-2018
Campus placement in last	Number of Placements	221	200	103
three years with minimum salary, maximum salary	Minimum Salary	Rs. 2,28,000	Rs. 1,80,000	Rs. 1,20,000
and average salary	Maximum Salary	Rs. 7,00,000	Rs. 21,00,000	Rs. 16,00,000
	Average Salary	Rs. 4,15,361	Rs. 4,31,211	Rs. 4,29,433

Course	UG - B. Tech - 1	UG - B. Tech – Electrical and Electronics and Engineering				
Number of seats	60 (From the A	60 (From the AY 2020-2021)				
Duration	4 Years					
Cut off marks/rank of admission during the last three years	2019-2020: 71804 2018-2019: 69896 2017-2018: 69812					
Fee	Rs. 1,25,000					
Placement Facilities	Yes					
		2019-2020	2018-2019	2017-2018		
Campus placement in last	Number of Placements	43	39	21		
three years with minimum salary, maximum salary	Minimum Salary	Rs. 2,28,000	Rs. 2,29,000	Rs. 1,20,000		
and average salary	Maximum Salary	Rs. 5,00,000	Rs. 8,00,000	Rs. 5,00,000		
	Average Salary	Rs. 3,37,258	Rs. 3,71,909	Rs. 3,14,778		

Course	UG - B. Tech - 1	UG - B. Tech – Mechanical Engineering				
Number of seats	60 (From the A	60 (From the AY 2020-2021)				
Duration	4 Years					
Cut off marks/rank of admission during the last three years	2019-2020: 96059 2018-2019: 98526 2017-2018: 99183					
Fee	Rs. 1,25,000					
Placement Facilities	Yes					
		2019-2020	2018-2019	2017-2018		
Campus placement in last	Number of Placements	14	17	39		
three years with minimum salary, maximum salary	Minimum Salary	Rs. 2,28,000	Rs. 2,40,000	Rs. 1,50,000		
and average salary	Maximum Salary	Rs. 7,00,000	Rs. 8,00,000	Rs. 3,50,000		
	Average Salary	Rs. 4,31,000	Rs. 4,22,111	Rs. 1,84,565		

Course	UG - B. Tech – Civil Engineering
Number of seats	60
Duration	4 Years
Cut off marks/rank of admission during the last three years	2019-2020: 77282 2018-2019: 53676

	2017-2018: 63882					
Fee	Rs. 1,25,000	Rs. 1,25,000				
Placement Facilities	Yes					
		2019-2020	2018-2019	2017-2018		
Campus placement in last	Number of Placements	3	3	9		
three years with minimum salary, maximum salary	Minimum Salary	Rs. 3,00,000	Rs. 2,16,000	Rs. 1,20,000		
and average salary	Maximum Salary	Rs. 3,00,000	Rs. 2,16,000	Rs. 1,50,000		
	Average Salary	Rs. 3,00,000	Rs. 2,16,000	Rs. 1,31,667		

Course	PG - M. Tech – Computer Science and Engineering				
Number of seats	18				
Duration	2 Years				
Cut off marks/rank of admission during the last three years	2019-2020: 1747 2018-2019: 2392 2017-2018: 3007				
Fee	Rs. 57,000				
Placement Facilities	Yes				
		2019-2020	2018-2019	2017-2018	
Campus placement in last	Number of Placements				
three years with minimum salary, maximum salary	Minimum Salary				
and average salary	Maximum Salary				
	Average Salary				

Course	PG - M. Tech – Digital Electronics and Communication System				
Number of seats	18	18			
Duration	2 Years				
Cut off marks/rank of admission during the last three years	2019-2020: 1321 2018-2019: 2800 2017-2018: 3161				
Fee	Rs. 57,000				
Placement Facilities	Yes				
		2019-2020	2018-2019	2017-2018	

	Number of Placements		
Campus placement in last three years with minimum	Minimum Salary		
salary, maximum salary and average salary	Maximum Salary		
	Average Salary		

Course	PG - M. Tech -	PG - M. Tech – Embedded Systems			
Number of seats	18	18			
Duration	2 Years				
Cut off marks/rank of admission during the last three years	2019-2020: 1374 2018-2019: 1968 2017-2018: 3960				
Fee	Rs. 57,000				
Placement Facilities	Yes				
		2019-2020	2018-2019	2017-2018	
Campus placement in last	Number of Placements				
three years with minimum salary, maximum salary	Minimum Salary				
and average salary	Maximum Salary				
	Average Salary				

Course	PG - M. Tech – Power Electronics and Electrical Drives				
Number of seats	18				
Duration	2 Years	2 Years			
Cut off marks/rank of admission during the last three years	2019-2020: 1680 2018-2019: 932 2017-2018: 3024				
Fee	Rs. 57,000				
Placement Facilities	Yes				
		2019-2020	2018-2019	2017-2018	
Campus placement in last three years with minimum	Number of Placements				
salary, maximum salary and average salary	Minimum Salary				
	Maximum Salary				

Average		
Salary		

Course	PG - M. Tech -	PG - M. Tech – Engineering Design			
Number of seats	18	18			
Duration	2 Years	2 Years			
Cut off marks/rank of admission during the last three years	2019-2020: 1769 2018-2019: 1589 2017-2018: 4435				
Fee	Rs. 57,000				
Placement Facilities	Yes				
		2019-2020	2018-2019	2017-2018	
Campus placement in last	Number of Placements				
three years with minimum salary, maximum salary	Minimum Salary				
and average salary	Maximum Salary				
	Average Salary				

Course	PG - M. Tech – Structural Engineering				
Number of seats	18	18			
Duration	2 Years	2 Years			
Cut off marks/rank of admission during the last three years	2019-2020: 1268 2018-2019: 382 2017-2018:				
Fee	Rs. 57,000				
Placement Facilities	Yes				
		2019-2020	2018-2019	2017-2018	
Campus placement in last	Number of Placements				
three years with minimum salary, maximum salary	Minimum Salary				
and average salary	Maximum Salary				
	Average Salary				

Course	PG - MBA – Master of Business Administration
Number of seats	18

Duration	2 Years	2 Years			
Cut off marks/rank of	2019-2020: 24				
admission during the last	2018-2019: 39	440			
three years	2017-2018: 57	911			
Fee	Rs. 43,400				
Placement Facilities	Yes	Yes			
Campus placement in last three years with minimum salary, maximum salary and average salary		2019-2020	2018-2019	2017-2018	
	Number of Placements	6	24	31	
	Minimum Salary	Rs. 3,00,000	Rs. 1,44,000	Rs. 1,35,348	
	Maximum Salary	Rs. 4,00,000	Rs. 8,00,000	Rs. 11,00,000	
	Average Salary	Rs. 3,50,000	Rs. 2,88,860	Rs. 2,67,369	

6.5 Name and duration of Programme(s) having Twinning and Collaboration with Foreign University(s) and being run in the same Campus along with status of their AICTE approval. If there is Foreign Collaboration, give the following details:

#### **Details of the Foreign University**

- Name of the University
- Address
- Website
- Accreditation status of the University in its Home Country
- Ranking of the University in the Home Country
- Whether the degree offered is equivalent to an Indian Degree? If yes, the name of the agency which has approved equivalence. If no, implications for students in terms of pursuit of higher studies in India and abroad and job both within and outside the country
- Nature of Collaboration
- Conditions of Collaboration
- Complete details of payment a student has to make to get the full benefit of Collaboration

Vardhaman is not offering any Programme(s) having Twinning and Collaboration with Foreign University(s).

#### 6.6 For each Programme Collaborated provide the following:

- Programme Focus
- Number of seats
- Admission Procedure
- Fee
- Placement Facility
- Placement Records for last three years with minimum salary, maximum salary and average salary

# 6.7 Whether the Collaboration Programme is approved by AICTE? If not whether the Domestic/Foreign University has applied to AICTE for approval

Not Applicable

#### 7. Faculty

#### 7.1 Branch wise list Faculty members

Branch wise list of Faculty members is available at the following links:

Department of CSE: <a href="https://vardhaman.org/faculty-profile-cs/">https://vardhaman.org/faculty-profile-cs/</a>

Department of CSE(AI&ML): <a href="https://vardhaman.org/cseartificial-intelligence-and-machine-">https://vardhaman.org/cseartificial-intelligence-and-machine-</a>

learning-2/

Department of IT: <a href="https://vardhaman.org/faculty-information-technology/">https://vardhaman.org/faculty-information-technology/</a>

Department of ECE: <a href="https://vardhaman.org/faculty-electronics-and-communication/">https://vardhaman.org/faculty-electronics-and-communication/</a>

Department of EEE: https://vardhaman.org/electrical-and-electronics-engineering/

 $Department \ of \ ME: \underline{https://vardhaman.org/faculty-mechanical-engineering/}$ 

Department of CE: <a href="https://vardhaman.org/faculty-civil-engineering/">https://vardhaman.org/faculty-civil-engineering/</a>
Department of MBA: <a href="https://vardhaman.org/faculty-freshman-engineering/">https://vardhaman.org/faculty-freshman-engineering/</a>

#### 7.2 Permanent Faculty

The details of Permanent Faculty are available at the following links:

Department of CSE: <a href="https://vardhaman.org/faculty-profile-cs/">https://vardhaman.org/faculty-profile-cs/</a>

Department of CSE(AI&ML): <a href="https://vardhaman.org/cseartificial-intelligence-and-machine-">https://vardhaman.org/cseartificial-intelligence-and-machine-</a>

learning-2/

Department of IT: <a href="https://vardhaman.org/faculty-information-technology/">https://vardhaman.org/faculty-information-technology/</a>

 $Department \ of \ ECE: \ \underline{https://vardhaman.org/faculty-electronics-and-communication/}$ 

Department of EEE: <a href="https://vardhaman.org/electrical-and-electronics-engineering/">https://vardhaman.org/electrical-and-electronics-engineering/</a>

Department of ME: <a href="https://vardhaman.org/faculty-mechanical-engineering/">https://vardhaman.org/faculty-mechanical-engineering/</a>

Department of CE: <a href="https://vardhaman.org/faculty-civil-engineering/">https://vardhaman.org/faculty-civil-engineering/</a>
Department of MBA: <a href="https://vardhaman.org/faculty-professors-mba/">https://vardhaman.org/faculty-professors-mba/</a>

Department of FE: <a href="https://vardhaman.org/faculty-freshman-engineering/">https://vardhaman.org/faculty-freshman-engineering/</a>

#### 7.3 Adjunct Faculty

The details of Adjunct Faculty are available at the following links:

Department of IT: <a href="https://vardhaman.org/faculty-information-technology/">https://vardhaman.org/faculty-information-technology/</a>

#### 7.4 Permanent Faculty: Student Ratio

Permanent Faculty Student Ratio is 1:15

# 7.5 Number of Faculty employed and left during the last three years

Academic Year	Total Number of Faculty Employed	Number of Faculty Joined	Number of Faculty Left
2019-2020	315	35	47
2018-2019	334	30	52
2017-2018	375	71	62

# 8. Profile of Vice Chancellor/ Director/ Principal/ Faculty For each Faculty give a page covering with Passport size photograph

# **Profile of the Principal:**

Name	Dr. JVR Ravindra			
Date of Birth	10-08-1977	No.		
Unique id	1-774978012			
Education Qualifications	B.E., M.E., Ph.D.			
Work Experience	Teaching	Research	Industry	others
Work Experience	14 Years	7 Years		
Area of Specialization	VLSI			
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level  Research guidance	Design, Electromagnetic Theory & Transmission Lines, Digital Logic Design, Electronic Devices and Circuits  No. of papers published in National/ International Master Ph.D.			
Research guidance	Journals/ Conferen 65		<i>7</i> ()	ded - 01 rvising - 06
Projects Carried out	<ol> <li>All India Councing Design, Develop Algorithms for Win Environment 4,10,000/-</li> <li>Department of Science Improvement of Educational Institution Robotics Lab. Rs:</li> <li>Cognitive Science Science and Tesmartening and Minoc Wireless Sendetection. Rs: 41,</li> <li>WOSA- DST, Despower Analysis and Cryptosystem, Rs</li> <li>TIDE-DST "Designation Therapy Device Problems" Rs. 53,</li> </ol>	oment and ireless Sens Monitoring ience and Toff S&T Intuions (FIS 50,00,000/e Research chnology Monitoring this Network Network Network 18,600/- 1	d Analysis for Networks: and Disaste echnology (D afrastructure T), to establis Initiative, De (CSRIDST): the Environmerks for Disaste evelopment of e Power Analy /- opment of a L	Applications or Relief. Rs:  ST): Fund for in Higher sh Humanoid epartment of SAMSEDent using Adster Survivor f Differential ysis resistant ow Cost Foot

Patents	02
Technology Transfer	
Research Publications	Published 20 International Journal Papers Presented 45 Conference Papers
No. of Books published with details	01

#### **Profile of the Faculty:**

Profile of each faculty member is available at department wise at the following links:

Department of CSE: <a href="https://vardhaman.org/faculty-profile-cs/">https://vardhaman.org/faculty-profile-cs/</a>

Department of CSE(AI&ML): <a href="https://vardhaman.org/cseartificial-intelligence-and-machine-learning">https://vardhaman.org/cseartificial-intelligence-and-machine-learning</a> 2/

learning-2/

Department of IT: <a href="https://vardhaman.org/faculty-information-technology/">https://vardhaman.org/faculty-information-technology/</a>

Department of ECE: <a href="https://vardhaman.org/faculty-electronics-and-communication/">https://vardhaman.org/faculty-electronics-and-communication/</a>
Department of EEE: <a href="https://vardhaman.org/electrical-and-electronics-engineering/">https://vardhaman.org/electrical-and-electronics-engineering/</a>

Department of ME: <a href="https://vardhaman.org/faculty-mechanical-engineering/">https://vardhaman.org/faculty-mechanical-engineering/</a>

Department of CE: <a href="https://vardhaman.org/faculty-civil-engineering/">https://vardhaman.org/faculty-civil-engineering/</a>
Department of MBA: <a href="https://vardhaman.org/faculty-freshman-engineering/">https://vardhaman.org/faculty-freshman-engineering/</a>

#### 9. Fee

### 9.1 Details of Fee, as approved by State Fee Committee, for the Institution

The details of Fee, as approved by TAFRC (State Fee Committee), for the Institution is available at: <a href="https://vardhaman.org/fee-structure/">https://vardhaman.org/fee-structure/</a>

#### 9.2 Time schedule for payment of Fee for the entire Programme

01st July of every year

#### 9.3 No. of Fee waivers granted with amount and name of students

#### 9.4 Number of scholarship offered by the Institution, duration and amount

2018-2019:03

2017-2018: 04

#### 9.5 Criteria for Fee waivers/scholarship

Academic Performance and Economically weaker sections

#### 9.6 Estimated cost of Boarding and Lodging in Hostels

Estimated Cost of Boarding and Lodging in Boys Hostel per annum - Rs. 1,05,000

Estimated Cost of Boarding and Lodging in Girls Hostel per annum – Rs. 1,00,000

#### 10. Admission

# 10.1 Number of seats sanctioned with the year of approval

SNo	Course	Year of Approval	2019- 2020	2018- 2019	2017- 2018
1.	UG - B.Tech COMPUTER SCIENCE AND ENGINEERING	1999	240	240	240
2.	UG - B.Tech INFORMATION TECHNOLOGY	1999	120	120	120
3.	UG - B.Tech ELECTRONICS AND COMMUNICATION ENGINEERING	1999	240	240	240
4.	UG - B.Tech ELECTRICAL AND ELECTRONICS ENGINEERING	2002	120	120	120
5.	UG - B.Tech MECHANICAL ENGINEERING	2005	120	120	120
6.	UG - B.Tech CIVIL ENGINEERING	2009	60	60	60
7.	PG - M.Tech COMPUTER SCIENCE AND ENGINEERING	2008	18	18	18
8.	PG - M.Tech DIGITAL ELECTRONICS AND COMMUNICATION SYSTEMS	2009	18	18	18
9.	PG - M.Tech EMBEDDED SYSTEMS	2012	18	18	18
10.	PG - M.Tech POWER ELECTRONICS AND ELECTRICAL DRIVES	2008	18	18	18
11.	PG - M.Tech ENGINEERING DESIGN	2012	18	18	18
12.	PG - M.Tech STRUCTURAL ENGINEERING	2013	18	18	
13.	PG – MBA – MASTER OF BUSINESS ADMINISTRATION	2006	60	60	60

# 10.2 Number of Students admitted under various categories each year in the last three years

SNo	Course	Total Number of Students Admitted under Various categories			
		2019-2020	2018-2019	2017-2018	
14.	UG - B.Tech COMPUTER SCIENCE AND ENGINEERING	240	240	240	
15.	UG - B.Tech INFORMATION TECHNOLOGY	120	120	120	
16.	UG - B.Tech ELECTRONICS AND COMMUNICATION ENGINEERING	240	240	240	
17.	UG - B.Tech ELECTRICAL AND ELECTRONICS ENGINEERING	97	119	119	
18.	UG - B.Tech MECHANICAL ENGINEERING	93	115	120	

SNo	Course	Total Number of Students Admitted under Various categories			
		2019-2020	2018-2019	2017-2018	
19.	UG - B.Tech CIVIL ENGINEERING	54	60	59	
20.	PG - M.Tech COMPUTER SCIENCE AND ENGINEERING	02	07	14	
21.	PG - M.Tech DIGITAL ELECTRONICS AND COMMUNICATION SYSTEMS	06	09	10	
22.	PG - M.Tech EMBEDDED SYSTEMS	08	10	14	
23.	PG - M.Tech POWER ELECTRONICS AND ELECTRICAL DRIVES	10	07	09	
24.	PG - M.Tech ENGINEERING DESIGN	07	10	13	
25.	PG - M.Tech STRUCTURAL ENGINEERING	15	18		
26.	PG – MBA – MASTER OF BUSINESS ADMINISTRATION	60	60	60	

# 10.3 Number of applications received during last two years for admission under Management Quota and number admitted

Year	Number of Applications Received	Number Admitted
2018-2019	336	321
2019-2020	270	250

#### 11. Admission Procedure

# 11.1 Mention the admission test being followed, name and address of the Test Agency and its URL (website)

**B.Tech.** - <a href="https://tseamcet.nic.in/default.aspx">https://tseamcet.nic.in/default.aspx</a>

M.Tech. - <a href="https://pgecet.tsche.ac.in/TSPGECET/PGECET HomePage.aspx">https://pgecet.tsche.ac.in/TSPGECET/PGECET HomePage.aspx</a>

MBA - <a href="https://icet.tsche.ac.in/TSICET/TSICET HomePage.aspx">https://icet.tsche.ac.in/TSICET/TSICET HomePage.aspx</a>

# 11.2 Number of seats allotted to different Test Qualified candidate separately (AIEEE/ CET (State conducted test/ University tests/ CMAT/ GPAT)/ Association conducted test)

#### 11.3 Calendar for admission against Management/vacant seats:

- **11.3.1** Last date of request for applications: 30-07-2019
- **11.3.2** Last date of submission of applications: 03-07-2019
- **11.3.3** Dates for announcing final results: 10-07-2019
- **11.3.4** Release of admission list (main list and waiting list shall be announced on the same day): 20-07-2019
- **11.3.5** Date for acceptance by the candidate (time given shall in no case be less than 15

days): 05-08-2019

- **11.3.6** Last date for closing of admission: 06-08-2019
- **11.3.7** Starting of the Academic session: 02-08-2019
- **11.3.8** The waiting list shall be activated only on the expiry of date of main list
- 11.3.9 The policy of refund of the Fee, in case of withdrawal, shall be clearly notified

#### 12. Criteria and Weightages for Admission

- **12.1** Describe each criterion with its respective weightages i.e. Admission Test, marks in qualifying examination etc.
- **12.2** Mention the minimum Level of acceptance, if any
- **12.3** Mention the cut-off Levels of percentage and percentile score of the candidates in the admission test for the last three years
- **12.4** Display marks scored in Test etc. and in aggregate for all candidates who were admitted

B. Tech. - as notified by the Convener, TS EAMCET <a href="https://tseamcet.nic.in/default.aspx">https://tseamcet.nic.in/default.aspx</a>

M. Tech. - as notified by the Convener, TS PGECET <a href="https://pgecet.tsche.ac.in/TSPGECET/PGECET HomePage.aspx">https://pgecet.tsche.ac.in/TSPGECET/PGECET HomePage.aspx</a>

MBA - as notified by the Convener, ICET <a href="https://icet.tsche.ac.in/TSICET/TSICET HomePage.aspx">https://icet.tsche.ac.in/TSICET/TSICET HomePage.aspx</a>

#### 13. List of Applicants

**13.1** List of candidate whose applications have been received along with percentile/percentage score for each of the qualifying examination in separate categories for open seats. List of candidate who have applied along with percentage and percentile score for Management quota seats

The details are available at: <a href="https://vardhaman.org/wp-content/uploads/2020/11/VMEG-Merit-List-10.07.2019.pdf">https://vardhaman.org/wp-content/uploads/2020/11/VMEG-Merit-List-10.07.2019.pdf</a>

#### 14. Results of Admission Under Management seats/Vacant seats

- **14.1** Composition of selection team for admission under Management Quota with the brief profile of members (This information be made available in the public domain after the admission process is over)
- **14.2** Score of the individual candidate admitted arranged in order or merit
- **14.3** List of candidate who have been offered admission
- **14.4** Waiting list of the candidate in order of merit to be operative from the last date of joining of the first list candidate
- **14.5** List of the candidate who joined within the date, vacancy position in each category before operation of waiting list

The details are available at: <a href="https://vardhaman.org/wp-content/uploads/2020/11/VMEG-Score-of-individual-candidate.pdf">https://vardhaman.org/wp-content/uploads/2020/11/VMEG-Score-of-individual-candidate.pdf</a>

#### 15. Information of Infrastructure and Other Resources Available

# 15.1 Number of Class Rooms and size of each

The institution has 55 class rooms. The details and size of each room are shown in the below table.

SNo.	Room No.	Details	Carpet area (in sq m)
1	1110	CSE CLASS ROOM-1	76.44
2	1111	CSE CLASS ROOM-2	76.44
3	1112	CSE CLASS ROOM-3	76.44
4	1113	CSE CLASS ROOM-4	76.44
5	1311	CSE CLASS ROOM-5	76.44
6	1312	CSE CLASS ROOM-6	76.44
7	1313	CSE CLASS ROOM-7	76.44
8	1314	CSE CLASS ROOM-8	76.44
9	1315	CSE CLASS ROOM-9	76.44
10	5101	CSE CLASS ROOM-10	66.30
11	5102	CSE CLASS ROOM-11	87.55
12	5202	CSE CLASS ROOM-12	66.30
13	1210	IT CLASS ROOM-1	76.44
14	1211	IT CLASS ROOM-2	76.44
15	1212	IT CLASS ROOM-3	76.44
16	1213	IT CLASS ROOM-4	76.44
17	5103	IT CLASS ROOM-5	66.30
18	5205	IT CLASS ROOM-6	66.30
19	5112	IT CLASS ROOM-7	67.15
20	3005	ECE CLASS ROOM-1	81.60
21	3006	ECE CLASS ROOM-2	81.60
22	3011	ECE CLASS ROOM-3	80.75
23	3012	ECE CLASS ROOM-4	80.75
24	3016	ECE CLASS ROOM-5	81.60
25	3206	ECE CLASS ROOM-6	80.75
26	3207	ECE CLASS ROOM-7	81.60
27	3214	ECE CLASS ROOM-8	79.90
28	3215	ECE CLASS ROOM-9	79.90
29	5009	ECE CLASS ROOM-10	79.50
30	5010	ECE CLASS ROOM-11	79.50
31	5013	ECE CLASS ROOM-12	66.30
32	3107	EEE CLASS ROOM-1	81.60
33	3108	EEE CLASS ROOM-2	81.60
34	3114	EEE CLASS ROOM-3	79.90
35	3115	EEE CLASS ROOM-4	79.90
36	5001	EEE CLASS ROOM-5	66.30

SNo.	Room No.	Details	Carpet area (in sq m)
37	1012	ME CLASS ROOM-1	76.44
38	2011	ME CLASS ROOM-2	67.50
39	2201	ME CLASS ROOM-3	85.50
40	2207	ME CLASS ROOM-4	85.50
41	5111	ME CLASS ROOM-5	66.30
42	2105	CE CLASS ROOM-1	67.50
43	2106	CE CLASS ROOM-2	67.50
44	5004	CE CLASS ROOM-3	66.30
45	5003	AI CLASS ROOM-1	66.30
46	1107A	PG-CSE-CSE-CLASS ROOM-1	57.70
47	1010	PG-CSE-CSE CLASS ROOM-2	76.44
48	3218	PG-ECE-DECS CLASS ROOM	98.88
49	3220	PG-ECE-DECS CLASS ROOM-3	81.60
50	3124	PG-EEE-PEED CLASSROOM	66.95
51	2204	PG-ME-ED CLASS ROOM	45.00
52	1215	PG-ME-ED-CLASS ROOM-2	37.24
53	2205	PG-CE-STE CLASS ROOM	45.00
54	3211	MBA CLASS ROOM-1	66.95
55	3212	MBA CLASS ROOM-2	66.95

# 15.2 Number of Tutorial rooms and size of each

The institution has 14 tutorial rooms. The details and size of each room are shown in the below table.

SNo.	Room No.	Details	Carpet area (in sq m)
1	1114	CSE TUTORIAL ROOM-1	76.44
2	1316	CSE TUTORIAL ROOM-2	76.44
3	5204	CSE TUTORIAL ROOM-3	66.30
4	1011	IT TUTORIAL ROOM-1	76.44
5	1214	IT TUTORIAL ROOM-2	76.44
6	3017	ECE TUTORIAL ROOM-1	81.60
7	3221	ECE TUTORIAL ROOM-2	81.60
8	5014	ECE TUTORIAL ROOM-3	66.30
9	3119	EEE TUTORIAL ROOM-1	81.60
10	3120	EEE TUTORIAL ROOM-2	81.60
11	2202	ME TUTORIAL ROOM-1	67.50
12	2203	ME TUTORIAL ROOM-2	67.50
13	2107	CE TUTORIAL ROOM-1	82.50

SNo.	Room No.	Details	Carpet area (in sq m)
14	3019	MBA TUTORIAL ROOM-1	96.82

# 15.3 Number of Laboratories and size of each

The institution has 85 Laboratories. The details and size of each room are shown in the below table.

SNo.	Room No.	Details	Carpet area (in sq m)
1	1002	CSE LAB-1	159.58
2	1003	CSE LAB-2	156.55
3	1101A	CSE LAB-3	79.79
4	1101B	CSE LAB-4	79.79
5	1102A	CSE LAB-5	79.79
6	1102B	CSE LAB-6	79.79
7	1103	CSE LAB-7	77.77
8	1104	CSE LAB-8	77.77
9	1202	CSE LAB-9	120.19
10	1208A	CSE LAB-10	90.75
11	1208B	CSE LAB-11	73.50
12	1208C	CSE LAB-12	78.75
13	1201A	IT LAB-1	79.79
14	1201B	IT LAB-2	79.79
15	1203	IT LAB-3	79.79
16	1204A	IT LAB-4	79.79
17	1204B	IT LAB-5	79.79
18	1004	IT LAB-6	77.77
19	3001	ECE LAB-1	133.90
20	3002	ECE LAB-2	142.14
21	3003	ECE LAB-3	133.90
22	3013A	ECE LAB-4	98.88
23	3013B	ECE LAB-5	67.98
24	3014A	ECE LAB-6	98.88
25	3101	ECE LAB-7	95.79
26	3102	ECE LAB-8	100.94
27	3105A	ECE LAB-9	82.88
28	3105B	ECE LAB-10	66.95
29	3105C	ECE LAB-11	66.95
30	3201	ECE LAB-12	100.94
31	3202	ECE LAB-13	100.94
32	3203	ECE LAB-14	116.87

SNo.	Room No.	Details	Carpet area (in sq m)
33	3204	ECE LAB-15	99.91
34	3009	EEE LAB-1	67.98
35	3010	EEE LAB-2	99.91
36	3111A	EEE LAB-3	100.94
37	3111B	EEE LAB-4	108.15
38	3116A	EEE LAB-5	99.91
39	3116B	EEE LAB-6	66.95
40	3116C	EEE LAB-7	112.27
41	3122	EEE LAB-8	68.31
42	2001	ME LAB-1	85.50
43	2010	ME LAB-2	67.50
44	2102	ME LAB-3	74.70
45	2103	ME LAB-4	74.70
46	2A1A	ME LAB-5	121.55
47	2A1B	ME LAB-6	74.80
48	2A2	ME LAB-7	157.50
49	2A4	ME LAB-8	189.00
50	2002	CE LAB-1	67.50
51	2003	CE LAB-2	67.50
52	2B2A	CE LAB-3	98.70
53	2B3A	CE LAB-4	82.50
54	2B3B	CE LAB-5	75.00
55	2B4A	CE LAB-6	76.32
56	5005	1st Yr EG CAD	81.62
57	5006	1st Yr MATHEMATICS LAB-1	81.62
58	3020	1st Yr MATHEMATICS LAB-2	146.26
59	3021B	1st Yr MATHEMATICS LAB-3	69.01
60	5007	1st Yr COMPUTER PROGRAMMING LAB-1	81.62
61	5008	1st Yr COMPUTER PROGRAMMING LAB-2	81.62
62	5215	1st Yr COMPUTER PROGRAMMING LAB-3	133.45
63	5104	1st Yr ELCS LAB-1	110.24
64	5105	1st Yr ELCS LAB-2	81.62
65	5A01	1st Yr APPLIED PHYSICS LAB-1	97.18
66	5011	1st Yr APPLIED PHYSICS LAB-2	96.60
67	5A02	1st Yr APPLIED CHEMISTRY LAB-1	97.18
68	2B4B	1st Yr APPLIED CHEMISTRY LAB-2	74.88
69	3123A	1st Yr BEE LAB-1	67.25
70	3123B	1st Yr BEE LAB-2	110.61
71	5106	LANGUAGE LABORATORY	163.24
72	3007	ADDITIONAL WORKSHOP-1 (EEE)	291.49

SNo.	Room No.	Details	Carpet area (in sq m)
73	2A3	ADDITIONAL WORKSHOP-2 (ME)	200.55
74	4101	ADDITIONAL WORKSHOP-3	287.92
75	5A03	WORK SHOP – 1	206.57
76	2B1	WORK SHOP – 2	237.3
77	1208D	PG-CSE-CSE LAB	67.50
78	3014B	PG-ECE-DECS LAB	75.19
79	3021A	PG-ECE-ES LAB	66.95
80	3209	PG-EEE-PEED LAB-1	66.95
81	3125	PG-EEE-PEED LAB-2	80.34
82	2012	PG-ME-ED LAB	85.50
83	2B2B	PG-CE-STE LAB	98.70
84	1304	CSE RESEARCH LAB- (Extra)	77.77
85	3117	RESEARCH LAB	131.84

# 15.4 Number of Drawing Halls with capacity of each

The institution has 2 Drawing Halls. The details and size of each hall is shown in the below table.

SNo.	Room No.	Details	Carpet area (in sq m)
1	5210	DRAWING HALL – 1	205.64
2	3225	DRAWING HALL – 2	263.98

# 15.5 Number of Computer Centres with capacity of each

The institution has 3 Computer Centres. The details and size of each Computer Centre is shown in the below table.

SNo.	Room No.	Details	Carpet area (in sq m)
1	1001	COMPUTER CENTRE – 1	159.58
2	3224	COMPUTER CENTRE – 2	166.86
3	3216	MBA COMPUTER CENTRE	165.83

# 15.6 Central Examination Facility, Number of rooms and capacity of each

The institute has central examination facility with 6 rooms. The details and size of each room is shown in the below table.

SNo.	Room No.	Details	Carpet area (in sq m)
1	1308A	QUESTION PAPER PROCESSING ROOM	20
2	1308B	STRONG ROOM	30
3	1308C	EVALUATION HALL	200
4	1308D	CONTROLLER OF EXAMINATION OFFICE	40
5	1308E	ADDL. CONTROLLER OF EXAMINATION OFFICE	40
6	1308F	DISTRIBUTION AND COLLECTION ROOM	79.5

#### 15.7 Barrier Free Built Environment for disabled and elderly persons

It has been felt that differently-abled persons need special arrangements in the VCE College premises for their mobility and independent functioning. VCE has architectural barrier free environment that disabled persons find easy for their day-to-day functioning. The college addresses the accessibility relevant issues as per the stipulations of the Persons with Disabilities Act 1995. All the existing infrastructure in the college is disabled-friendly and VCE ensures that the future construction will also be based on the principle of inclusion. The institute has special facilities such as Wheel chairs, Walkers, Lifts, Ramps, Hand Rails, Special Toilets, and other necessary changes to meet the needs of differently-abled persons.

**1. Physical Facilities:** The classes for differently abled students are conducted on the ground floor for their convenience. Mobility devices like Wheel Chairs and Walker are made available in major buildings.



### Block-1 Ground Floor Room No: 1006 First Aid and Sick Room



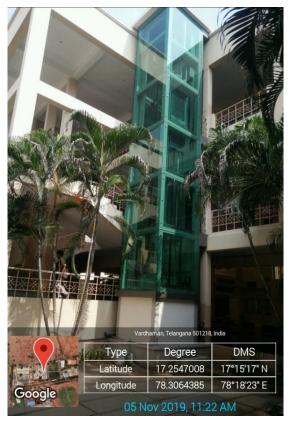


**Block-3 Ground Floor** 

**Block-5 Ground Floor** 

**2. Provision for lift:** Lifts are provided in Block-1, Block-3, Block-5 and for Library.





Block-1 Lift for G + 3 Floors

**Block-3 Lift for G + 2 Floors** 





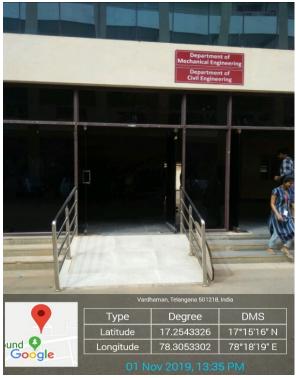
**Block-5 Lift for G + 2 Floors** 

**Block-6 Library Lift for G + 2 Floors** 

**3. Ramp / Rails:** Apart from stair access and lifts, VCE Buildings are constructed with Ramps and Hand Rails as sloped pathways used to provide access to outside buildings. Ramps provide an alternative to stairs for wheelchair users, people with mobility issues and people with prams, bicycles and other wheeled items. Adequate space is allocated for persons using mobility devices, as well as those walking with the assistance of other persons



**Block-1 Ramp and Hand Rails** 



Vardhaman, Telangana 501218, India

Type Degree DMS

Latitude 17.2547114 17°15'17" N

Longitude 78.3064136 78°18'23' E

05 Nov 2019, 11:27 AM

**Block-2 Ramp and Hand Rails** 

**Block-3 Ramp and Hand Rails** 

#### 4. Braille Software:

To assist visually challenged students NVDA software is installed in computers and speaker is provided. But so far no visually challenged students have joined in the college.

**5. Rest Rooms:** Rest rooms are provided with clean and hygienic conditions in every building block. The rooms are constructed in the ground floor for the convenience of the students.



#### 6. Scribes for examination:

VCE provides scribes for differently abled students if required during examinations. as per the INTUH and AICTE rules of examinations.

**JNTUH:** Proceeding No. JNTUH/EB/11148/2/ Concessions extended to the Physically Challenged Students/2018

**AICTE:** F.No.AICTE/e-Gov/230/2015-16- Disable friendly examination centre for candidates with disabilities – Order of Court of Chief Commissioner for Persons with Disabilities

#### 7. Any other Facilities:

- i. First Aid and Sick Room is made available in the ground floor of Block-1 room No. 1006 with stretcher and bed along with doctor.
- ii. Ambulance facility is made available in the campus in case of any emergency.
- iii. VCE provides guidance and counselling to differently abled individuals and assist them to gain successful employment in the public as well as private sectors.
- iv. VCE conducts awareness programmes for faculty about the approaches to teaching, evaluation procedures, etc, which they should address in the case of differently-abled students.
- v. College buses are arranged with extra door step to support physically challenged persons.

#### **15.8 Occupancy Certificate**

The Occupancy Certificate is available at: <a href="https://vardhaman.org/wp-content/uploads/2020/11/OCCUPANCY-CERTIFICATE.pdf">https://vardhaman.org/wp-content/uploads/2020/11/OCCUPANCY-CERTIFICATE.pdf</a>

#### 15.9 Fire and Safety Certificate

The Fire and Safety Certificate is available at: <a href="https://vardhaman.org/wp-content/uploads/2020/11/18-Fire-Safety-Certificate-from-Fire-Safety-Department.pdf">https://vardhaman.org/wp-content/uploads/2020/11/18-Fire-Safety-Certificate-from-Fire-Safety-Department.pdf</a>

#### 15.10 Hostel Facilities

The institute has separate Boys Hostel and Girls hostel facility. The Boys hostel has 78 Rooms with 3 student per room accommodation, 8 Rooms with 4 student per room accommodation with a total area of 1550 Sqm. The Girls hostel has 79 Rooms with 3 student per room accommodation, 3 Rooms with 4 student per room accommodation with a total area of 1440 Sqm.

#### These hostels are having the following facilities:

- Internet Facility
- Cafeteria Facility
- RO Purified Drinking Water
- Laundry

- 24X7 Security, CCTV Surveillance,
- Solar Fencing and In-House Warden
- A sanitary napkin vending machine and an incinerator are available to maintain health and hygiene
- Round the clock ambulance service
- Inward and the outward movements are registered and allowed only with the prior information from the parents
- For fitness of girls along with boys there is a separate high-quality equipment of games, sports, and gym is provided
- Anti-Ragging Vigilance
- Medical & other Facilities at Hostel
- Resident Doctor
- 24X7 ambulance facility.
- MoU with nearest multispecialty emergency hospital.

#### **15.11 Library**

#### 15.11.1 Number of Library books/ Titles/ Journals available (program-wise)

Programm e/Course	No. of Titles	No. of Volumes	No. of National Journals	No. of International Journals	No. of e-Journals/ Online Journals	No. of e-Book Titles	No. of e-Book Volumes
B.Tech Engineering	9218	52169	93	8	225	17,68,320	
M.Tech Engineering	1143	8631	37	24	177	9,61,403	27,29,723
Total	10,361	60,800	130	32	402	27,29,723	
MBA	707	6019	06	06	8224	8,11,588	8,11,588
Grand total	11,068	66,819	136	38	8626	35,41,311	35,41,311

#### 15.11.2 List of online National/International Journals subscribed

SNo.	Details	Number of e-Journals	Link for List of online National/ International Journals subscribed
1	IEEE ASPP	188	https://vardhaman.org/wp-content/uploads/2020/11/01- List-of-e-journals-susbribed-by-the-Llbrary-for-2020.pdf
2	IEEE POP	146	https://vardhaman.org/wp-content/uploads/2020/11/02- List-of-e-journals-susbribed-by-the-Llbrary-for-2020.pdf
3	ASME	31	https://vardhaman.org/wp-content/uploads/2020/11/03- List-of-e-journals-susbribed-by-the-Llbrary-for-2020.pdf
4	ASCE	37	https://vardhaman.org/wp-content/uploads/2020/11/04- List-of-e-journals-susbribed-by-the-Llbrary-for-2020.pdf
5	ESS SS&H	8224	https://vardhaman.org/wp-content/uploads/2020/11/05- List-of-e-journals-susbribed-by-the-Llbrary-for-2020.pdf

#### 15.11.3 E- Library facilities

The Central Library provides digital content to the user community (students & faculty) for updating their pedagogy and learning beyond curriculum through the library webpage (<a href="https://vardhaman.org/central-library/">https://vardhaman.org/central-library/</a>) which access of OPAC (Online Public Access Catalogue), World e-Book Library (e-Books), NPTEL & SWAYAM web & video courses, SWAYAM Prabha (32 DTH Channel for Education), National Digital Library of India (NDL), memberships of DELNET, N-List and British Council Library, and other Open Educational Resources (OERs).

#### 15.12 Laboratory and Workshop

- List of Major Equipment/Facilities in each Laboratory/ Workshop
- List of Experimental Setup in each Laboratory/ Workshop

The details of List of Major Equipment/Facilities in each Laboratory/ Workshop and List of Experimental Setup in each Laboratory/ Workshop are available at: https://vardhaman.org/wp-content/uploads/2020/11/Lab-Equipment.pdf

#### **15.13 Computing Facilities**

#### 15.13.1 Internet Bandwidth

The institute has internet connection with a bandwidth of 450 Mbps.

#### 15.13.2 Number and configuration of System

The institute has a total number of 1723 Computers. The distribution of computers along their configuration is shown at: <a href="https://vardhaman.org/wp-content/uploads/2020/11/Computers-and-Configuration-and-Distribution.pdf">https://vardhaman.org/wp-content/uploads/2020/11/Computers-and-Configuration-and-Distribution.pdf</a>

#### 15.13.3 Total number of system connected by LAN

All 1723 computers of the institute are connected by LAN.

#### 15.13.4 Total number of systems connected by WAN

A total of 1500 systems are connected by WAN

#### 15.13.5 Major software packages available

The institute has 9 System Software and 40 Application Software. The list of System Software and Application Software are available at: <a href="https://vardhaman.org/wp-content/uploads/2020/11/List-of-SW.pdf">https://vardhaman.org/wp-content/uploads/2020/11/List-of-SW.pdf</a>

#### 15.14 Special purpose facilities available -

Lecture Video Recording Studio Room, 1500 Seating Auditorium with Silver Screen and Cinema Projector and multimedia systems, Video conferencing rooms with A-View software.

#### 15.15 Innovation Cell

Centre for Innovation and Entrepreneurship (CIE) at Vardhaman College of Engineering is established to promote and support technology-based entrepreneurship spirit among the graduated and graduating students of Vardhaman. CIE. VARDHAMAN COLLEGE OF ENGINEERING wishes to facilitate the creation of ideas and inventions that benefit society.

In Incubation program at CIE, we support Innovation and Entrepreneurship aspirants with funding opportunities, mentoring support, nurturing ideas and help these aspirants to start their unique startups and entrepreneurship journey. Our virtual incubator is accessible to all the aspirants and can operate from anywhere in India. In CIE we support Early-stage startups, Mid to large-sized companies with developed ideas by identifying the challenges they are facing and provide proper guidance to get started or scale-up the initiative. Our world-class Mentorship team help our Incubated startups to brainstorm, pitch and reach the desired Goals with increased productivity and impact.

In CIE Vardhaman College of Engineering, we organise a series of Entrepreneurship Development Workshops and Entrepreneurship Awareness Camps to Identify and guide early-stage ideas and startups with required skills, network and support. We have partnered with WADHWANI Foundation to help our incubated entrepreneurs to network with startups and leaders who are creating an impact in the fields. We received immense guidance, funds and support from DST - NIMAT, MSME, Entrepreneurship Development Institute of India, IUCEE to help our incubated startups to acquire skills and scale-up their ventures.

We have recently partnered with T - Hub and implementing their flagship program (T-Tribe) where we support idea-stage startups, build skills and help entrepreneurship aspirants to get knowledge from basics. Till date, we have many startups who won National and International awards for the Socio Economical Impact they have created under the training and guidance from our Incubation centre.

All these success stories help us to stay motivated and help more entrepreneurship aspirants to start their own startup journey.

#### 15.16 Social Media Cell

Vardhaman College of Engineering is active on various Social Media Platforms like Facebook, Twitter and Instagram. The institute can be reached on social media on the following links.

Facebook: <a href="https://www.facebook.com/vardhamanofficial/">https://www.facebook.com/vardhamanofficial/</a>

Twitter: <a href="https://twitter.com/Vardhaman Coll">https://twitter.com/Vardhaman Coll</a>

Linkedin: <a href="https://www.linkedin.com/in/vardhaman-engineering-college-15ab16159/">https://www.linkedin.com/in/vardhaman-engineering-college-15ab16159/</a>

# 15.17 Compliance of the National Academic Depository (NAD), applicable to PGCM/ PGDM Institutions and University Departments

Not Applicable

#### 15.18 List of facilities available

#### 15.18.1 Games and Sports Facilities

#### **Indoor Games and Sports facilities available:**

Name of the game	Total area available in SQM	Nos.
Carroms (Boys & Girls)	90	6 Boards each
Chess (Boys & Girls)	90	5 Boards each
Table Tennis	90	7 Boards each
Shuttle Badminton	609	3 courts
Snookers	150	4 Tables
Gymnasium Boys	133	1
Gymnasium Girls	104	1
Yoga class room	72	1 Room
Student rest rooms	600	8 Rooms

### **Outdoor Games and Sports facilities available:**

Name of the game	Total area available in SQM	No of courts/field
Cricket	3,600	1
Foot Ball	2,200	1
Basketball	540	1
Volleyball	980	3
Throw Ball	360	1
Tennikoit	150	1
Kabbadi	400	1

#### 15.18.2 Extra-Curricular Activities

To provide a common platform for students to explore their inherent talents through extracurricular activities the following clubs are formed under the Student Affairs division.

- 1. RAAGA CLUB
- 2. NRUTYA CLUB
- 3. REFLEXA CLUB
- 4. FINE ARTS CLUB
- 5. LITERATURE CLUB
- 6. GENESIS CLUB
- 7. NSS Unit

Student Affairs division continuously organised various events under these clubs for encouraging students talent.

#### 15.18.3 Soft Skill Development Facilities

Many of the students enter the portals of the institution are from the first-generation families who look for a job immediate as career option after completion of their graduation. The challenge here is that their eligibility for a campus placement opportunity (the industry expects a minimum of 60% marks at both 10th and 12th standards). The college is totally concern about this. In order to facilitate the students to improve their academic performance and communication skills the college felt there is need for continuous skill building activity. Accordingly, a dedicated student skill development cell was established in the year 2016. The main objective of the Skill Development Cell is to bridge the gap between academia and industry and train the students on the required skill sets. Students are trained on employability skills to suit the requirement of the industry.

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

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

#### **15.19 Teaching Learning Process**

# 15.19.1 Curricula and syllabus for each of the Programmes as approved by the University

Curricula and syllabus for each of the Programmes as approved by the University is available at:

https://vardhaman.org/courses-syllabus-2/#1543816480150-b57ae533-f97b

#### 15.19.2 Academic Calendar of the College

Academic Calendar of the College is available at: <a href="https://vardhaman.org/academic-calendar/">https://vardhaman.org/academic-calendar/</a>

# 15.19.3 Academic Time Table with the name of the Faculty members handling the Course

Department Wise Academic Time Tables are available at:

Department of CSE: <a href="https://vardhaman.org/wp-content/uploads/2020/11/01-CSE-B.Tech-CSE-ODD-SEM-AY-2020-21-Time-Tables.pdf">https://vardhaman.org/wp-content/uploads/2020/11/01-CSE-B.Tech-CSE-ODD-SEM-AY-2020-21-Time-Tables.pdf</a>

Department of IT: <a href="https://vardhaman.org/wp-content/uploads/2020/11/02-IT.pdf">https://vardhaman.org/wp-content/uploads/2020/11/02-IT.pdf</a>

Department of ECE: https://vardhaman.org/wp-content/uploads/2020/11/03-ECE-ODD-

Semester-Timetables-2020-2021.pdf

Department of EEE: <a href="https://vardhaman.org/wp-content/uploads/2020/11/04-EEE.pdf">https://vardhaman.org/wp-content/uploads/2020/11/04-EEE.pdf</a>

Department of ME: <a href="https://vardhaman.org/wp-content/uploads/2020/11/05-ME.pdf">https://vardhaman.org/wp-content/uploads/2020/11/05-ME.pdf</a>

Department of CE: <a href="https://vardhaman.org/wp-content/uploads/2020/11/06-CE.pdf">https://vardhaman.org/wp-content/uploads/2020/11/06-CE.pdf</a>

Department of FE: https://vardhaman.org/wp-content/uploads/2020/11/07-FE.pdf

Department of MBA: <a href="https://vardhaman.org/wp-content/uploads/2020/11/08-MBA.pdf">https://vardhaman.org/wp-content/uploads/2020/11/08-MBA.pdf</a>

#### **15.19.4 Teaching Load of each Faculty**

Department Wise Teaching Loads are available at:

Department of CSE: <a href="https://vardhaman.org/wp-content/uploads/2020/11/01-CSE.pdf">https://vardhaman.org/wp-content/uploads/2020/11/01-CSE.pdf</a>

Department of IT: <a href="https://vardhaman.org/wp-content/uploads/2020/11/02-IT-1.pdf">https://vardhaman.org/wp-content/uploads/2020/11/02-IT-1.pdf</a>

Department of ECE: <a href="https://vardhaman.org/wp-content/uploads/2020/11/03-ECE.pdf">https://vardhaman.org/wp-content/uploads/2020/11/03-ECE.pdf</a>

Department of EEE: <a href="https://vardhaman.org/wp-content/uploads/2020/11/04-EEE-1.pdf">https://vardhaman.org/wp-content/uploads/2020/11/04-EEE-1.pdf</a>

Department of ME: <a href="https://vardhaman.org/wp-content/uploads/2020/11/ME.pdf">https://vardhaman.org/wp-content/uploads/2020/11/ME.pdf</a>

Department of CE: <a href="https://vardhaman.org/wp-content/uploads/2020/11/06-CE-1.pdf">https://vardhaman.org/wp-content/uploads/2020/11/06-CE-1.pdf</a>

Department of FE: https://vardhaman.org/wp-content/uploads/2020/11/07-FE-1.pdf

Department of MBA: https://vardhaman.org/wp-content/uploads/2020/11/08-MBA-1.pdf

#### 15.19.5 Internal Continuous Evaluation System and place

#### **ASSESSMENT**

#### **Assessment Tools**

The academic performance of a student shall be evaluated course-wise by using the assessment tools as mentioned below:

Table: Assessment Tools for Regular Courses / Project Work (Phase-II)

	Assessment Tools						
Type of Course		SEE (70%)					
	CAT1	CAT2	AAT	Practice	Total	Total	
Integrated Course	20 Marks	20 Marks	20 Marks	40 Marks	100 Marks	100 Marks	
Theory Course	40 Marks	40 Marks	20 Marks	-	100 Marks	100 Marks	
<b>Practical Course</b>	50 Marks	50 Marks	-	-	100 Marks	100 Marks	
	Review1	Review2	Viva-Voce	-			
Project Work (Phase - II)	40 Marks	40 Marks	20 Marks	-	100 Marks	100 Marks	

Table: Assessment Tools for Internship/Mini-Project/Project Work (Phase-I)

	Assessment Tools					
Type of Course	CIE (100%)					
	Review1	Review2	Viva-Voce	Total		
Internship	40 Marks	40 Marks	20 Marks	100 Marks		
Mini-Project	40 Marks	40 Marks	20 Marks	100 Marks		
Project Work (Phase - I)	40 Marks	40 Marks	20 Marks	100 Marks		

The assessment of Internship/Mini-Project/Project Work (Phase-I)/Project Work (Phase-II) is done through a well-defined rubrics.

## **Passing Standards**

The passing criterion for various courses is mentioned below:

	Integrated Courses					
S.No.	Type of Assessment Tool	Max. Marks	Conditions			
1	CIE – Theory (CAT1+CAT2+AAT)	60	A student who secures less than 40% of marks (24 marks out of 60) shall not be allowed to SEE			
2	CIE – Practice	40	A student who secures less than 40% of marks (16 marks out of 40) shall not be allowed to SEE			
3	CIE+SEE (30%+70%)	100	A minimum of 40% of marks must be secured to declare as PASS with a minimum of 35% of marks in the SEE and obtain the assigned credits (Total marks=30% of CIE+ 70% of SEE)			

	Theory					
S.No.	Type of Assessment Tool	Max. Marks	Remarks			
1	CIE (CAT1+CAT2+AAT)	100	A student who secures less than 40% of marks shall not be allowed to SEE			
2	CIE+SEE (30%+70%)	100	A minimum of 40% of marks must be secured to declare as PASS with a minimum of 35% of marks in the SEE and obtain the assigned credits(Total marks=30% of CIE+ 70% of SEE)			

	Practical Courses					
S.No.	Type of Assessment Tool	Max. Marks	Remarks			
1	CIE (CAT1+CAT2)	100	A student who secures less than 40% of marks shall not be allowed to SEE			
2	CIE+SEE (30%+70%)	100	A minimum of 40% of marks must be secured to declare as PASS with a minimum of 35% of marks in the SEE and obtain the assigned credits(Total marks=30% of CIE+ 70% of SEE)			

- A student shall secure not less than 40% of marks in each and every assessment tool of CIE.
- If a student fails in SEE then in such an event, he/she shall be provided one opportunity to appear SEE with the same CIE marks in the immediate supplementary semester. The student must get a PASS grade in the said course during the supplementary exam; otherwise he/she shall re-register for the course again and follow the normal rules to obtain the PASS grade.
- A student who FAILs in obtaining 40% of marks in CIE and those who have not cleared in supplementary examination (Advanced supplementary examinations are exempted) has to re-register for the same course. In the event the said course is not offered, the student shall register for the equivalent course prescribed by the college.
- Students are eligible to apply for re-valuation, if he/she fails in semester end examination.

#### 15.19.6 Students' assessment of Faculty, System in place

#### FEEDBACK ON FACULTY

Feedback on all courses will be collected through online from the students twice in a semester. The first feedback will be collected at the middle of the semester i.e., before first midterm examinations and the second will be collected at the end of the semester. During the first feedback a questionnaire consisting of 5 parameters is adopted and a 10 parameter questionnaire along with feedback on course outcomes is taken at the second feedback.

Each parameter is measured based on the rating assigned to it i.e., 5 for Excellent, 4 for Very Good, 3 for Good, 2 for Fair and 1 for Poor. Each parameter average is measured by calculating the average number of students given against each rating. Final feedback of a faculty is measured considering the average rating given against each parameter.

#### Five Parameters used to collect the Feedback at the mid of the semester:

- a. Has the Instructor clearly stated the Learning Outcomes of the course?
- b. Was the class controlled and discipline maintained?
- c. How effective are the communication skills of the Faculty?
- d. Was the Instructor enthusiastic about teaching the class and invited questions and comments from students?
- e. Has the Instructor related course material to real life situations?

#### Ten parameters used to collect the feedback at the end of the semester:

a. Was the class controlled and discipline maintained.

- b. How effective were the communication skills.
- c. Provides up-to-date information on the topic(s).
- d. Did the faculty use real world examples and cases.
- e. Was the class interactive and doubts were clarified.
- f. How was the presentation style of the faculty.
- g. Encourages students to solve complex problems in the class.
- h. Makes objective and impartial evaluation of assessments.
- i. Sincerity and commitment towards academic work.
- j. Approachable after class hours for discussion and advice.

#### **Student Participation Percentage:**

On an average 80% of the students will be participating in the feedback process.

#### Feedback analysis Process and Corrective Measures:

The collected feedback will be analyzed based on the rating given against each parameter of evaluation. Based on the final average of the feedback, corrective measures are taken by:

- 1. Interacting HOD with the faculty to identify the reasons for not performing well.
- 2. Providing further guidance in the subject by available senior faculty / other faculty who taught the same subject.
- 3. Deputing faculty to FDPs if required.

Faculty who get better feedback will be rewarded by giving more weightage in faculty annual self-appraisal for the consideration of the increment

#### 15.20 For each Post Graduate Courses give the following:

- Title of the Course
- Curricula and Syllabi
- Laboratory facilities exclusive to the Post Graduate Course

#### **Curricula and Syllabi**

SNo	Title of the Course	Curricula and Syllabi
1.	PG - M.Tech COMPUTER SCIENCE AND ENGINEERING	https://vardhaman.org/wp- content/uploads/2019/01/R18 M Tech CSE.pdf
2.	PG - M.Tech DIGITAL ELECTRONICS AND COMMUNICATION SYSTEMS	https://vardhaman.org/wp- content/uploads/2019/01/R18 M.Tech-DECS.pdf
3.	PG - M.Tech EMBEDDED SYSTEMS	https://vardhaman.org/wp- content/uploads/2020/09/R18 M.Tech ES.pdf
4.	PG - M.Tech POWER ELECTRONICS AND ELECTRICAL DRIVES	https://vardhaman.org/wp- content/uploads/2019/10/R18 MTech PEED.pdf
5.	PG - M.Tech ENGINEERING DESIGN	https://vardhaman.org/wp- content/uploads/2019/01/R18 M Tech ED.pdf
6.	PG - M.Tech STRUCTURAL ENGINEERING	https://vardhaman.org/wp- content/uploads/2019/01/R18 M Tech CIVIL.pdf
7.	PG – MBA – MASTER OF BUSINESS ADMINISTRATION	https://vardhaman.org/wp- content/uploads/2019/11/MBA R18.pdf

### Laboratory facilities exclusive to the Post Graduate Course

SNo.	Room No.	Details	Carpet area (in sq m)
1	1208D	PG-CSE-CSE LAB	67.50
2	3014B	PG-ECE-DECS LAB	75.19
3	3021A	PG-ECE-ES LAB	66.95
4	3209	PG-EEE-PEED LAB-1	66.95
5	3125	PG-EEE-PEED LAB-2	80.34
6	2012	PG-ME-ED LAB	85.50
7	2B2B	PG-CE-STE LAB	98.70
8	1304	CSE RESEARCH LAB- (Extra)	77.77
9	3117	RESEARCH LAB	131.84

SNo	Title of the Course	Curricula and Syllabi
1.	PG - M.Tech COMPUTER SCIENCE AND ENGINEERING	https://vardhaman.org/wp- content/uploads/2020/11/01-CSE-PG-Lab.pdf
2.	PG - M.Tech DIGITAL ELECTRONICS AND COMMUNICATION SYSTEMS	https://vardhaman.org/wp- content/uploads/2020/11/02-DECS-PG-Lab.pdf
3.	PG - M.Tech EMBEDDED SYSTEMS	https://vardhaman.org/wp- content/uploads/2020/11/03-ES-PG-Lab.pdf
4.	PG - M.Tech POWER ELECTRONICS AND ELECTRICAL DRIVES	https://vardhaman.org/wp- content/uploads/2020/11/04-PEED-PG-Lab.pdf
5.	PG - M.Tech ENGINEERING DESIGN	https://vardhaman.org/wp- content/uploads/2020/11/05-ED-PG-Lab.pdf
6.	PG - M.Tech STRUCTURAL ENGINEERING	https://vardhaman.org/wp- content/uploads/2020/11/06-StrEng-PG-Lab.pdf
7.	PG – MBA – MASTER OF BUSINESS ADMINISTRATION	https://vardhaman.org/wp- content/uploads/2020/11/08-MBA-PG-Lab.pdf

## **15.21 Special Purpose**

### 15.21.1 Software, all design tools in case

### 15.21.2 Academic Calendar and frame work

Academic Calendar of Vardhaman College of Engineering are available at: <a href="https://vardhaman.org/academic-calendar/">https://vardhaman.org/academic-calendar/</a>

#### **Academic Calendar frame work:**

Instruction Period	:17 weeks	19 weeks
Mid Semester Tests	:2 weeks	19 weeks

FIRST SEMESTER	Preparation & Practical Exam	inations	1 week
(23 weeks)	External Examinations		3 weeks
Semester Break			1 week
	Instruction Period	:17 weeks	10 weeks
SECOND	Mid Semester Tests	:2 weeks	19 weeks
SEMESTER (23 weeks)	Preparation & Practical Exam	inations	1 week
	External Examinations	3 weeks	
Summer Vaca	Summer Vacation		

### 16. Enrollment of students in the last 3 years

SNo	Course	Numbe	r of Students A	dmitted
SNO	Course	2019-2020	2018-2019	2017-2018
1.	UG - B.Tech COMPUTER SCIENCE AND ENGINEERING	240	240	240
2.	UG - B.Tech INFORMATION TECHNOLOGY	120	120	120
3.	UG - B.Tech ELECTRONICS AND COMMUNICATION ENGINEERING	240	240	240
4.	UG - B.Tech ELECTRICAL AND ELECTRONICS ENGINEERING	97	119	119
5.	UG - B.Tech MECHANICAL ENGINEERING	93	115	120
6.	UG - B.Tech CIVIL ENGINEERING	54	60	59
7.	PG - M.Tech COMPUTER SCIENCE AND ENGINEERING	02	07	14
8.	PG - M.Tech DIGITAL ELECTRONICS AND COMMUNICATION SYSTEMS	06	09	10
9.	PG - M.Tech EMBEDDED SYSTEMS	08	10	14
10.	PG - M.Tech POWER ELECTRONICS AND ELECTRICAL DRIVES	10	07	09
11.	PG - M.Tech ENGINEERING DESIGN	07	10	13
12.	PG - M.Tech STRUCTURAL ENGINEERING	15	18	
13.	PG – MBA – MASTER OF BUSINESS ADMINISTRATION	60	60	60

### 17. List of Research Projects/ Consultancy Works

# 17.1 Number of Projects carried out, funding agency, Grant received

# **List of On-Going Projects**

S No.	Title of Project / Details of the Conference / Gran to Attend Conference / Granted for / Gran to Organize Event / Grant to Develop	Funding Agency	Principle Investigator & Co-Investigator	Grant (Rs.)
1	Implementation of Science and Technology Research: ROBOTICS and VISION LAB	DST-FIST	Dr. JVR Ravindra	₹ 50,00,000
2	SAMESD - Smartening and Monitoring the Environment using Ad-hoc Wireless Sensor Networks for Disaster Survivor Detection	DST-CSRI	Dr. JVR Ravindra	₹ 41,58,600
3	Understanding Bisociation capabilities in Indian Engineering students	DST - CSRI	Dr. H. Venkateswara Reddy, Dr. S. Sai Satyanarayana Reddy, Prof. Vivek Kulkarni, Mr. N. Hanuman Reddy	₹ 31,28,640
4	Development of GO GREEN Nanopiezoceramics for Knock Sensors instead of toxic Lead based Piezoceramics	DST-SERB	Dr. P. Sarah Prof. Y. Pandurangaiah	₹ 35,32,000
5	Design and Development of Differential Power Analysis and Leakage Power Analysis resistant Cryptosystem.	DST-WOS-A	Ms. C. Padmini	₹ 19,95,000
6	Synthesis-Docking studies and cytotoxic activity of ring fused S-(6-(5-methylpyrazin-2yl)-[1-2-3]triazolo[3-4-b][1-3-4]thiadiazol-3-yl) 2-phenylethanethioates	UGC-Minor Research Project	Mr. Siddhartha Marupathi	₹ 2,00,000
7	Development of Smart Resistance Bands for Elderly and/or Diabetic Patients Physiotherapy	DST - SEED	Dr. S. Sai Satyanarayana Reddy Dr. T. Vijender Reddy	₹ 43,85,490
8	Design and Development of a Low Cost Foot Therapy Device for Plantar Fasciitis and Other Foot Problems	DST -SEED	Dr. JVR Ravindra Dr. A. Chaithanya Keerthan Prof. Y.Pandurangaiah	₹ 50,58,120
9	Impact Analysis and Benefits by Researchers and Innovators in Engineering Studies: India	DST-NSTMIS	Dr. S. Sai Satyanarayana Reddy Dr. Ramesh Shahabadkar	₹ 31,15,104
10	Participating Institute (Pi) under UBA 2.0	MHRD - UBA 2.0	Prof. N. Srinivas Reddy	₹ 50,000
11	Research and development of smart, secure, scalable, resilient and adaptive cyberphysical power system (S3RA-CPPS) - total cost 4 crores	DST	Dr. D. Raman Dr. B. Bruhadeshwar Mr. N. Hanuman Reddy Dr. S. Sai Satyanarayana Reddy	₹ 36,83,600

S No.	Title of Project / Details of the Conference / Gran to Attend Conference / Granted for / Gran to Organize Event / Grant to Develop	Funding Agency	Principle Investigator & Co-Investigator	Grant (Rs.)
12	Identification and Assessment of Factors Contributing to the Return and Success of Indian High-Tech Talent back to Indian Global Cities	DST-NSTMIS	Dr G V Krishna Reddy Dr S Sai Satyanarayana Reddy	₹ 30,57,000
13	Assessing the Impact of Doctoral Program in Science & Technology on Career Outlook and Stimulating High-Impact Research	DST-NSTMIS	Dr V Sreehari Dr S Sai Satyanarayana Reddy	₹ 29,34,000
14	Modernization of Mechanics of Solids laboratory	AICTE-MODROBS	Dr. B. Subbaratnam	₹ 7,94,000
15	SKILL AND PERSONALITY DEVELOPMENT PROGRAMME CENTRE FOR SC/ST STUDENTS	AICTE-SPDP	Dr. S Sai Satyanarayana Reddy	₹ 9,89,000
16	Share & Mentor Institutions (MARGDARSHAN)	AICTE - MARGDARSHAN	Dr. P. Nageswara Rao	₹ 22,00,000
17	Design and development of low power – low cost monitoring system for arrhythmia in elderly and young adults	DST-TIDE	Prof. Y. Pandu Rangaiah Mr. J Krishna Chaithanya Dr. P Sridhar Reddy	₹ 58,10,592
18	Development of IoT devices for upgrading existing SCADA systems to smart grids (Power utilities)	DST	Dr. D Raman Mr. N. Hanuman Reddy	₹ 21,34,734
19	Automatic Pothole detection and listing the GPS Location	Collaborative research Scheme, TEQIP-III, JNTUH	Dr. Renuka Devi SM Dr. Sulakshana Chilukuri	₹ 2,50,000
20	Physio-Chemical studies on geo-polymer treated expansive soils for Pavement applications	Collaborative research Scheme, TEQIP-III, JNTUH	Mr. N. Venkatesh Dr. G. Mallikarjuna Rao	₹ 2,50,000
21	Deep learning Aided-OCR for Handwritten Telugu Characters	Collaborative research Scheme, TEQIP-III, JNTUH	Dr. Muni Sekhar Velpuru Mr. M. Ravi Kumar	₹ 2,90,000
22	STTP - Short Term Training Program	AICTE	Dr. K Muralidhar	₹ 2,43,167
23	MODROB - Aspiring Institutions	AICTE	Dr. Udumula Ramanjaneya	₹ 14,39,608
24	Online FDP on Nine Thrust Areas and Other Emerging Areas	AICTE - ATAL	Dr. P. Srinivasa Rao	₹ 93,000
25	Experimental Investigations on Nitriding of M50 NiL Steel for Aerospace Bearings Applications	Aeronautics Research & Development Board, DRDO	Dr. B. Venkatesh	₹ 24,18,900

S No.	Title of Project / Details of the Conference / Gran to Attend Conference / Granted for / Gran to Organize Event / Grant to Develop	Funding Agency	Principle Investigator & Co-Investigator	Grant (Rs.)
26	Entrepreneurship Awareness Camps	DST-NSTEDB- NIMAT	Prof. RajaniKanth Aluvalu	₹80,000.00
27	Characterizing the Scope, Opportunities, Challenges Future Trends in Technology Entrepreneurship Education in India	DST-NSTMIS	Dr. V. Munisekhar Dr. S. Nageswr Rao	25,66,190.00

# **List of Completed Projects**

S No.	Title of Project / Details of the Conference / Gran to Attend Conference / Granted for / Gran to Organize Event / Grant to Develop	Funding Agency	Principle Investigator & Co-Investigator	Grant (Rs.)
1	Data Embedding for Digital Video Based on Size Direction and Speed of an Object in Motion	DST-SERB	Dr. G. Sagar	₹ 36,38,000
2	Rural Women Technology Park in Kacharam Village, Shamshabad Block, Rangareddy District, Telangana State	DST - SEED	Mr. H S Jain	₹ 62,07,300
3	Modernization of Microwave Engineering Laboratory	AICTE- MODROBS	Dr. P. Nageswara Rao	₹ 10,30,000
4	Pedagogical Training for Outcome Based Education	AICTE-ISTE Induction / Refresher Programme	Dr. P. Nageswara Rao	₹ 3,00,000
5	The 9th International Conference on Mechanical and Aerospace Engineering, Hungary (10 July, 2018 to 13 July, 2018)	DST	Dr. Sulakshana Chilukuri	₹ 1,00,834
6	Investigation and Development of Bismuth Layered Perovskite Ferro- electric for Piezoelectric Applications	DRDO	Dr. P. Sarah	₹ 14,95,000
7	Development of bismuth layered perovskite ferroelectric thin films suitable for high temperature sensor applications	BARC	Dr. P. Sarah	₹ 18,48,150

S No.	Title of Project / Details of the Conference / Gran to Attend Conference / Granted for / Gran to Organize Event / Grant to Develop	Funding Agency	Principle Investigator & Co-Investigator	Grant (Rs.)
8	Thermo-Viscoelastic Analysis of Solid Propellant Grains-Development of A Comprehensive Finite Element Code	DRDO	Dr. G. V. Rao	₹ 9,95,000
9	CSIR Fellowship	CSIR	B. Mamatha	₹ 3,80,000
10	RP of Telemetry System for Gas Turbine Engine	IEI	A Shanmukhi Krishna Prof. B. Subbaratnam	₹ 65,000
11	Design, Development and Analysis of Routing Algorithms for Wireless Sensor Networks: Applications in Environment Monitoring and Disaster Relief	AICTE-RPS	Dr. JVR Ravindra	₹ 3,10,000
12	Environmental Friendly Piezoceramics for NDT Applications	UGC-Minor Research Project	Dr. P. Sarah	₹ 4,70,000
13	Oral Hygiene – Awareness Practices and Delivery of cost effective Dentures among women in the Peri-urban	DST - SEED	Dr. T. Vijender Reddy Dr Rajesh Reddy Dr S Shruthi	₹ 24,52,000
14	Development of power saver for poultry	Vikas Hatcheries	Dr.H.S.Jain Dr.Swati D	₹ 2,00,000
15	Dynamic Parallelization of Pointer Based Sequential Programs	DST - WOS-A	PI:Ms. N. Naga Maruthi, Mentor: Dr. Sagar Gujjunoori	₹ 20,68,000
16	Income Generation and Food Security through Vegetable Based Farming Systems and Entrepreneurship Development for Rural Women of Shamshabad Mandal, Rangareddy District, Telangana	DST - SEED	Dr. K. Malla Reddy (Dr. K. Vijaya Lakshmi- old) Dr. B. Chandra Sekhar Rao	₹ 68,62,200
17	Dynamic Scheduling Methods for Heterogenous, Uniform Instruction Set Many-Core Systems	DST - WOS-A	PI: Ms. K. Sravanthi, Mentor: Dr. S. Sai Satyanarayana Reddy	₹ 22,60,000
18	Characterization of Multilayer Haddfacing on Ferrous Alloys	DST-SERB	Dr. B. Venkatesh	₹ 5,50,000
19	Alarm based control of light for poultry	Vikas Hatcheries	Dr.H.S.Jain Dr.Swati D	₹ 2,00,000
20	DFEAT (Defatal electrical accidents at Telengana)	IEEE-SIGHT	Dr. C. Satish Institutional Support by Dr.H.S.Jain Dr.Swati D	₹ 13,00,000
21	Entrepreneurship Awareness Camps	DST-NSTEDB- NIMAT	Mr. A. Rajanikanth Prof. Vivek Kulkarni	₹ 1,00,000

S No.	Title of Project / Details of the Conference / Gran to Attend Conference / Granted for / Gran to Organize Event / Grant to Develop	Funding Agency	Principle Investigator & Co-Investigator	Grant (Rs.)
22	Design and performance evaluation of a 50v/5a five phase inverter for im drives through Labview	IEI	Dr.H.S.Jain Dr.Swati D	₹ 75,000
23	International Conference on Advances in Mechanical Sciences.	DST-SERB	Dr. P. Janakiram	₹ 75,000
24	International Conference on Nanomaterials and Technology.	BRNS, BARC	Dr. P. Sarah	₹ 50,000
25	Development of 400VA Linear Alternator for Sterling Engine based Solar Thermal Applications.	IE	Dr. D. Swati	₹ 50,000
26	100KWp Solar Rooftop Power Plants	MNRE	Dr. H. S. Jain	₹ 22,00,000
27	National Conference on Nanomaterials, Applications and Nanotechnology Developments. Date: 4-5 Sep, 2009	BARC	Dr. P. Sarah	₹ 1,00,000
28	Conference on Nanomaterials and Technology.	BRNS, BARC	Dr. P. Sarah	₹ 1,00,000
29	International Conference Mechanical Behavior of Materials, Italy.	DST	Dr. P. Sarah	₹ 67,000
30	Industry Institute Partnership Cell	AICTE-IIPC	Dr. Srinivasulu Tadisetti	₹ 10,00,000
31	Entrepreneurship Development Cell	AICTE-EDC	Dr. Srinivasulu Tadisetti	₹ 8,00,000
32	Modernization and Removal of Obsolescence	AICTE- MODROBS	Dr. N. Sambasiva Rao	₹ 7,00,000
33	Modernization and Removal of Obsolescence	AICTE- MODROBS	Dr. A. Rammohana Reddy	₹ 7,00,000
34	Meeting of Programme Advisory Committee (PAC) & Group Monitoring Workshop (GMW) for the Scheme- Scheduled Caste Sub Plan (SCSP)	DST	Dr. H. Venkateswar Reddy	₹ 8,97,200
35	Subject Expert Committee (SEC) on Engineering Sciences	DST	Dr. H. Venkateswar Reddy	₹ 8,43,000
36	8th Meeting of the PAC on "Condensed Matter Physics and Materials Science"	DST	Dr. H. Venkateswar Reddy	₹ 23,30,000
37	Modernization and Removal of Obsolescence	AICTE- MODROBS	CSE Department	₹ 6,90,000
38	AICTE STTPs	AICTE STTP/FDP	Dr. GAE Satish Kumar	3,30,000

# **Details of Consultancy Activities:**

SNo	Name of the consultant	Name of consultancy project	Consulting/Sponsoring agency with contact details	Revenue generated (INR in Lakhs)
1	Dr Harish B	FDP on Deep Learning and Applications	E & ICT Academy, MNIT, Jaipur	1.45
2	Dr S Janardhanarao	Power control boards	Parashakthi powers ltd	2.00
3	Dr J Krishna Chaitanya	Industrial timer control boards	Embedded RF technologies	2.65
4	Dr. B. Subbarathnam	Preparation of Sigma Aldrich 99.99% purity	Genesis Bio solutions	2.50
5	Dr. G. Mallikarjuna Rao	Material Testing	Giridhari Homes	1.09
6	Dr. G. Mallikarjuna Rao	Material Testing	Aadhya Infra Private Limited	0.10
7	Dr. G. Mallikarjuna Rao	Material Testing	The SVS Constructions	0.12
8	Dr. Mukul srivastsava	Fault analysis of fluidized bed conveyor	Scoat Pharma Pvt ltd	0.40
9	Dr. S. Venu kumar	Technical Advisor	RYALI ENGINEERING	0.70
10	Mr. K. Deepak	Technical Advisor	RYALI ENGINEERING	0.80
11	Dr G Mallikarjuna Rao	compressive strength of concrete cubes (construction)	Bandla Bali Reddy Gowlidoddi	0.12
12	Dr S Janardhanarao	Power control boards	Parashakthi powers ltd	0.90
13	Mr. R. Appa Rao, Mr. Prasada Reddy, Mr. V Vijay Bhaskar Reddy	Website Development	Anaxx Food and Beverages Pvt. Ltd.	0.95
14	Dr. Rajanikanth, Mr. Shrawan Kumar	Inventory Management Systems	Anaxx Food and Beverages Pvt. Ltd.	3.75
15	Dr. Rajanikanth, Mr. Shrawan Kumar	Inventory Management Systems	Hemair Systems India Ltd.	3.25
16	Dr. Mukul srivastsava	Fault anlysis of fluidized bed conveyor	Scoat Pharma Pvt ltd	0.40
17	Dr C Hari Prasad	Aggregate impact test	KEPL Infrastructures	0.04
18	Mr.P. Sarkar	R& D Consultant - building capabilities in the area of Magnetic alloys, shape memory alloys, controlled expansion R&D activities	MISHRADHATU NIGAM LIMITED (MIDHANI) Hyderabad	2.80
19	Mr. S. Naresh. Kumar	Design of spill Proof knob for fermentation distillery units	DigiMind Embedded System private Ltd.	0.25

SNo	Name of the consultant	Name of consultancy project	Consulting/Sponsoring agency with contact details	Revenue generated (INR in Lakhs)
20	Mr. N. Srinivasa Reddy	Fault analysis of fluidized bed conveyor.	Scoat Pharma	0.55
21	Mr D. V Ramana Reddy	Product development in CAD	DigiMind Embedded System private Ltd	0.25

# 17.2 Publications (if any) out of research in last three years out of masters projects

S. No	Title of the paper	Authors	Name of Journal
1.	Performance Analysis of Cardiac Segmentation Using ACNN	S. shireesha (M.Tech student) Dr.G.A.E.Satish kumar. (Professor & HOD)	International Journal of Advanced Science and Technology Vol. 29, No. 7 (2020), pp. 14328 – 14338,
2.	Detection of Human Fall on Furniture Using Optimization Algorithm	T.Sravya, (M.Tech student) Dr.M.Narayana	International Journal of Advanced Science and Technology Vol. 29, No.4, (2020), pp.9411 – 9424
3.	Driver Fatigue and Alcohol Detection System for Prevention of Accidents	S. Swathi, (M.Tech student) Mr.T. Ramakrishnaiah	International Journal of Emerging Trends in Engineering Research,ISSN 2347 – 3983, Volume 8. No. 9, September 2020(student)
4.	COLOUR VIDEO WATERMARKING BASED ON WAVELET AND QR DECOMPOSITION	Siliveru Madhuri (M.Tech student) Dr.CH.Subrahmanyam	JOURNAL OF CRITICAL REVIEWS, ISSN- 2394-5125 VOL 7, ISSUE 18, 2020
5.	Detection and Retrieval of Human Falls on Furniture Using Hybrid Method	Mettu Kavya Reddy (M.Tech student), K. Sripal Reddy, Dr.M.Narayana	International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-8, Issue-6
6.	An Improved Leach Algorithm Based on Wireless Sensor Networks	U. Khyathi Chandrika (M.Tech student), Ch. Subrahmanyam <sup>®</sup>	International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8 Issue- 2S8, August 2019
7.	A Smart Home Monitoring System for Abnormal Human Activity Detection using CNN	SamreenSultana (M.Tech student), M.Narayana	International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278- 3075, Volume-8 Issue-12, October 2019
8.	Design of an Intelligent Management System for Agriculture Monitoring Based on the Internet of Things	J Swetha Priyanka, T Parimala (M.Tech student),	International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-8 Issue-12, October 2019
9.	IoT Based Voice Controlled Multitasking System for Home	G. Bhaskar Phani Ram, C. Mounika (M.Tech student),	International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278- 3075, Volume-9 Issue-1, November 2019
10.	IoT Based Smart Home Automation using Blynk	G. Bhaskar Phani Ram, L. Rajeshwari	International Journal of Recent Technology and Engineering (IJRTE)

S. No	Title of the paper	Authors	Name of Journal
	App and Security Alerting System using E-mail	(M.Tech student),	ISSN: 2277-3878, Volume-8 Issue-3, September 2019
11.	Smart Parking Management System Using IoT System	M. Gopi Krishna, Goli Narendhar (M.Tech student)	International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-4, November 2019
12.	IoT Based Integration of Pulse and Temperature Measurement in Medical Environment	G. A. E. Satish Kumar, K. Ammaji (M.Tech student),	International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-4, November 2019
13.	Intelligent assistive system for visually disabled persons	G.A.E.Satish Kumar, Munindhar.M M.Tech Student	International Journal of Recent Technology and Engineering (IJRTE), Volume-8, Issue-4, November 2019
14.	Multi Input Multi Response System with One-Bit Quantization Using Bough & Bound Pre-Coding	1Dr. D. Nagajyothi, 2B.Prakash	TEST Engineering and Management, May – June 2020 ISSN: 0193-4120 Page No. 13856 - 13861
15.	A GPS Based Traffic Light Pre-Emption System for Emergency Vehicle Using Intel Galileo	1.J Krishna Chaithanya 2.Nagarjuna Malladhi 3.Medipally Gouthami	Journal of Advanced Research in Dynamical & Control Systems Vol. 10, 12-Special Issue, 2018, ISSN 1943- 023X
16.	IoT Based Smart Gas Monitoring System Using Intel Galileo Gen-2	1.J Krishna Chaithanya 2.Nagarjuna Malladhi 3.Boddupalli Pavani Mounika	Journal of Advanced Research in Dynamical & Control Systems Vol. 10, 12-Special Issue, 2018, ISSN 1943- 023X

### 17.3 Industry Linkage

- 1. Google Readiness Program
- 2. Github Campus Program
- 3. BSNL-Regional Telecom Training Centre
- 4. NIAR-National Institute of Amateur Radio
- 5. Doordarshan Kendra
- 6. National Instruments
- 7. Vi Solutions
- 8. Orient Cements
- 9. UltraTech Cements
- 10. PRECA Solutions India Pvt. Ltd.
- 11. Santhosh build well Infra Pvt. Ltd.
- 12. S.R. Technologies
- 13. Dreams Structural and Geo technical Consultants
- 14. Adepto Geo-Infomatics Pvt. Ltd.
- 15. Pruthvi Adithya Infra tech Pvt. Ltd.
- 16. Managalam Consultancy Services
- 17. NVLN Constructions Pvt. Ltd.
- 18. Ramco Cements
- 19. Dr.Fixit

# 17.4 MoUs with Industries (minimum 3)

S. No	Name of the industry	Date	Expected Outcome
1.	Apple iOS Developer Program	06-08-2020	<ul> <li>Learn iOS app development courses using iOS SDK and relevant Apple technologies.</li> <li>Access of sophisticated and elegant development resources of iOS SDK.</li> <li>Test and execute applications directly on iPad, iPhone and iPod touch.</li> <li>Share development applications within the team.</li> </ul>
2.	Global Education and careers Forum	18-11-2019	Developing young Indians to become global citizens. Facilitating exchange of views and knowledge between Indian and international educators Showcasing Indian youth and Indian's Education sector internationally
3.	InPods	18-11-2019	Accreditation Management System
4.	Coherendz India Pvt Ltd	14-11-2019	Online Alumni Network Establishment
5.	DATRI	16-10-2019	To promote the social engagement of the institution and Student's.
6.	The Indus Entrepreneurs (TiE) – Hyderabad	27-09-2019	Institutional Charter Membership Student Memberships Mentor support Speaker / Workshops / Seminar support Networking with top Entrepreneurs
7.	UiPath Academic Alliance	17-09-2019	To offer UiPath's RPA Design and Development Course from December 2019 as per the following initiatives:  a) Assign 1 to 2 educators committed to driving RPA/AI technologies and helping build their students' careers  b) Deliver a minimum of one formal, short or complete semester class annually  c) Consider including relevant courses (as indicated in course descriptions) in regular curricula either as required or as an elective (earning credits upon successful completion)

S. No	Name of the industry	Date	Expected Outcome
			d) Participate in at least 1
			Academic event on completion
8.	Urban Rebox IT Pvt Ltd	26-08-2019	To develop Green Campus and Dry Waste Management
9.	Indian Technology Congress Association	02-07-2019	<ul> <li>a) Initiating the building and launching of student satellite.</li> <li>b) Provide opportunities to access to funding the project including the Soft Loan by funding agreement on mutually agreeable terms.</li> <li>c) Assistance to Patent Filling, Ideas, Innovation, and Productization.</li> <li>d) Providing access to Resources for Training &amp; Workshop on Small Satellites, Machine Learning &amp; Al.</li> <li>e) Start-up based incubation procedures &amp; utilities.</li> <li>f) Seminars/Workshops on the latest emerging Trend in Technology.</li> </ul>
10.	Machine Intelligence Research Labs	22-05-2019	To organize the following two international events during 13th to 15th December 2019.  a) 11th International Conference on Soft Computing and Pattern recognition (SoCPaR 2019) b) 9th World Congress on Nature and Biologically Inspired Computing (NaBIC 2019)
11.	ORACLE ACADEMY	14-05-2019	Academy Software Bundle Oracle Premier Support
12.	Risesharp	16-01-2019	Improve Student Outcomes, Job Search, Attract Employers
13.	Idealabs	03-10-2018	Mentor Connect, Boot Camps, Hackathons, Corporate Challenges, International contests, and etc related to Entrepreneurship Development and Promotion
14.	Berkadia Services India Private Limited	23-08-2018	Develop the JCP Curriculum Student Training Conduct for Guest Lectures Student Recruitment
15.	Eleven01	25-07-2018	Mentor Connect, Boot Camps, Hackathons, Corporate Challenges, International contests, and etc related

S. No	Name of the industry	Date	Expected Outcome
			to Entrepreneurship Development and Promotion
16.	L S DAWAR & CO	23-07-2018	Orientation on Patents and intellectual Property Rights
17.	BYJU'S	18-07-2018	Teaching Material including video material Membean Software Diagnostic Tool Kit
18.	EmbeddedRF Technologies	18-06-2018	Contract Research, Joint Development, Research Projects mutually agreed other chosen partners
19.	Genesis Bio Solutions	15-06-2018	Collaborative Research and Consultancy
20.	ELSEVIER B.V. (Elsevier)	13-06-2018	Access to Subscribed Products
21.	TATA Consultancy Services Limited	01-06-2018	Online Examinations for a period of 3 years
22.	The Institution of Engineering and Technology	25-05-2018	Academic Affiliate IET Accreditation
23.	IEEE EPICS	06-04-2018	Encourage students to gain a deeper understanding and appreciation of meaningful technology solutions that will improve their local communities. provide expert guidance that will help India enrich their curriculum and advance the way that India teaches its undergraduate engineering students.
24.	NucleusTech	16-04-2018	To organize e-Summit (Panel Discussions, Talks, Hackathons, Product Pitching, Startup Expo, Mentoring) Getting collaborations from various reputed organizations. Invitation of guests and following up with them. Branding and marketing about the event throughout the country. Website banners and other tech works will be handled by our team. Designing the agenda and the program structure. Approaching sponsors on behalf of the event.
25.	The Indus Entrepreneurs (TiE) – Hyderabad	03-04-2018	Institutional Charter Membership Student Memberships Mentorx` support Speaker / Workshops / Seminar support Networking with top Entrepreneurs
26.	Qlik	05-01-2018	Free Training: Access to all QCC modules in the Business Analyst and Data Architect pathways.

S. No	Name of the industry	Date	Expected Outcome
			Qlik Sense Qualification: Qlik Sense Qualification, including a printable certificate and a digital badge for qualified in Qlik skills test Data Analytics Curriculum: Curriculum helps you teach in demand data literacy concepts to the students in a flexible, multimodal format. Data Visualization and Introduction to Data Analytics courses are available and include on-demand videos, lecture materials, handouts, activities and a real-word, interactive business use case.
27.	Red hat India Private Limited	05-01-2018	Red Hat Academy Program Faculty and Student Training
28.	Cisco Networking Academy	25-10-2017	Faculty and Student Training
29.	Parahsakthy Power Tech	06-07-2017	Contract Research, Joint Development, Research Projects mutually agreed other chosen partners
30.	BERKADIA	15-06-2017	Joint Training Program (JTP) to selected students from B.Tech stream
31.	Powertronics	23-02-2017	Contract Research, Joint Development, Research Projects mutually agreed other chosen partners
32.	Hortonworks Academic Program	16-02-2017	Enables the institution to introduce students to the Hadoop Data Platform (HDP), an open source software Apache™ Hadoop® data platform, and in doing so, to equip them with HDP technical skills to complement their chosen fields of study.  Hortonworks-generated course content and handson technical labs, instructor preparation materials, and go-tomarket assistance, such as course data sheets, descriptions and logos that you may include in your course catalogs.  Available course titles include (but are not limited to):  HDP Operations: Hadoop Administration I (32 hours)  HDP Developer: Apache Pig and Hive (32 hours)  HDP: Data Science (24 hours)

S. No	Name of the industry	Date	Expected Outcome
33.	DEVI ELECTRONICS	27-01-2017	Contract Research, Joint Development, Research Projects mutually agreed other chosen partners
34.	Entrepreneurship Development Institute of India	19-11-2016	Establishment of Project Guidance Center for Diploma in Entrepreneurship & Business Management (DEBM) to promote course, register learners, provide counseling, organize contact sessions and provide other support as required by the learners
35.	EmbeddedRF Technologies	12-11-2016	Student Internships / fellowships, Sponsored R&D, Student training through Continuing Education program and Providing Associated certifications to the students
36.	Intel FICE	19-10-2016	Setting up a state of the art Lab in greater detail
37.	National Instruments	22-08-2016	NI LabVIEW Academy Students/Faculty Training on NI Tools Placements
38.	IBM India Pvt. Ltd	17-08-2016	Collaborate through IBM Career Education Program for Student and Staff Training
39.	EDCIL (INDIA) Limited	20-06-2016	Empanelment of Institute to Provide Foreign National Students
40.	International Technological University	01-04-2016	For cooperation in the Fields of Student, Faculty, and Staff Scholarship Exchange
41.	DevmenIT HPSU Academic Agreement	03-03-2016	Establishment of HPSC and Student and Staff Training
42.	RightLink Technologies Pvt. Ltd.	05-01-2015	Improving Alumni Base
43.	TATA Consultancy Services Limited	10-08-2015	Online Examinations for a period of 3 years
44.	Udvavisk	04-08-2015	Student Training
45.	Devmen IT	04-07-2015	Provide a strong platform in research & development for students. Training students for future ready technologies and providing associated certifications especially from the Microsoft.
46.	L S DAWAR & CO	22-07-2015	Orientation on Patents and intellectual Property Rights
47.	National Small Industries Corporation	29-04-2015	To be most trusted partner in the area of knowledge enrichment for mutual benefit.  To conceptualize research projects to be executed in collaboration on need basis.

S. No	Name of the industry	Date	Expected Outcome
			To collaborate share information and technology to develop the required skills.
48.	Tech Mahindra	15-04-2015	Capability Development, Workshops, Conclave, Seminars. Creating, developing the necessary laboratories. ELITE Program.
49.	Master Education (ARK solutions)	26-03-2015	Skill development courses. Focused on the CAD / CAM / Animation / Gaming / Robotics.
50.	MRPC Company	10-10-2014	Contract Research, Joint Development, Research Projects mutually agreed other chosen partners
51.	National Instruments	22-08-2014	NI LabVIEW Academy Students/Faculty Training on NI Tools Placements
52.	CoCubes.com	06-02-2014	Online career development and training services. Provides guidance to the students in preparing them for the corporate for better career prospects.
53.	SAP	01-01-2014	Generic understanding of SAP software products and Implementation of SAP software.
54.	Devmen IT	03-10-2014	Provide a strong platform in research & development for students. Training students for future ready technologies and providing associated certifications especially from the Microsoft.
55.	ON LOAD GEARS	25-10-2013	Contract Research, Joint Development, Research Projects mutually agreed other chosen partners
56.	IBM (Academic Initiative)	01-01-2012	Training sessions for RAD,DB2,TDS,Lotus,WID. To achieve 200 student certifications Faculty certification program.
57.	IUCEE	27-03-2012	Access to special programs such as Global Webinars, Global Student Programs and International Conferences. Contacts with over 200 US Expert and their Institutions. Invitations to participate in joint proposals with US institutions.
58.	IBM (Rational Software)	18-07-2012	4 days training on essentials of Software Testing and Quality Assurance
59.	Infosys (Campus Connect)	15-04-2011	Increases employability by providing technical and soft skills training.

S. No	Name of the industry	Date	Expected Outcome
			Faculty Enablement Program.
60.	TATA Consultancy Services Limited	04-10-2010	Tata Consultancy services with day1 campus Interview. Conducts Skill development Programmes with TCS HR'S. Soft Skills, Technical Skills programme exclusively for TCS placements
61.	IBM(Academic Initiative)	27-12-2010	Training Activities and provide software. Training and proctorship in RAD/DB2/TDS/RFT with certification.
62.	Infosys (Campus Connect)	29-12-2010	Increases employability by providing technical and soft skills training. Faculty Enablement Program.
63.	Shub Soft Solutions	20-12-2008	Student education enhancement programme. Faculty sabbatical.
64.	CA Academic(Initiative Program)	15-10-2008	CA Academic initiative is to make available certain products. CA encourages certification opportunities to the student of VCE. CA Academic initiative helps in using courses in the curriculum of the programs.
65.	Sun Micro Systems	13-10-2008	Getting started with sun Academic Initiative(SAI). Free access to Instructor Led Training. Free Web-based ePractice certification Exam
66.	IBM(Rational Software)	27-06-2008	Instructor Led Training. Training and skills development in latest technology and software. Opportunity for students to avail IBM Certification, which is valid across the globe through the Sylvan Prometric Testing Centre.
67.	UTS	28-04-2008	To Exchange of view on Engineering and Technical skills. Supports in plant training, industrial visit and project consultancy. Helps in co-ordinating with eminent personalities from industry for project discussions

# 18. LoA and subsequent EoA till the current Academic Year

LoA and subsequent EoA till the current Academic Year are available at: <a href="https://vardhaman.org/mandatory-disclosure/">https://vardhaman.org/mandatory-disclosure/</a>

#### 19. Accounted audited statement for the last three years

Accounted audited statement details are available at: <a href="https://vardhaman.org/mandatory-disclosure/">https://vardhaman.org/mandatory-disclosure/</a>

#### 20. Best Practices adopted, if any

#### I. Centre for Innovation and Entrepreneurship (CIE)

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

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

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

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

- Early stage startups
- Mid to large sized companies with developed ideas
- Mentors to help our startups

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

#### Entrepreneurship Activities on campus

Various Activities were organized regularly to encourage and support students and faculty members.

Frequency of the activities are weekly, monthly and annually.

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

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

#### II. Student Skill Development Cell (Competency Development Cell)

Many of the students enter the portals of the institution are from the first-generation families who look for a job immediate as career option after completion of their graduation. The challenge here is that their eligibility for a campus placement opportunity (the industry expects a minimum of 60% marks at both 10th and 12th standards). The college is totally concern about this. In order to facilitate the students to improve their academic performance and communication skills the college felt there is need for continuous skill building activity. Accordingly, a dedicated student skill development cell was established in the year 2016. The main objective of the Skill Development Cell is to bridge the gap between academia and industry and train the students on the required skill sets. Students are trained on employability skills to suit the requirement of the industry.

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

There are several students who opt for the internship, however, the students don't have a clear idea of how to get the internship and the various assessment processes. Hence, the Student Skill Development Cell assist such students to go through the process and help them to attend and

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

#### III. Engineering Projects in Community Service (EPICS)

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

- Access and Abilities By bringing together student branches at universities, secondary students and nonprofit organizations, there is a greater ability to solve accessibility issues within communities. EPICS in IEEE Access and Abilities projects help enable adaptive services, clinics for those in need (such as children with disabilities), programs for adults and assistive technologies.
- **Education and Outreach** EPICS in IEEE strives to help young students to discover the benefits of science, math, technology and engineering for their futures. Many projects give students hands-on experiences in order to stimulate their interests in those fields.
- **Environment** Many EPICS in IEEE projects concern themselves with new ways to create electricity and energy, recycling and the use of renewable energy sources. Through these EPICS in IEEE projects, young students learn about the impact of environmental issues and how engineering can be part of the solution. They also gain exposure to potential jobs with a growing demand for alternative energy and environmental solutions.
- Human Services Through their experiences in Human Services EPICS in IEEE projects, students find connections between engineering and the tremendous scope of community needs globally. This includes homelessness prevention, affordable housing, family and children agencies, neighborhood revitalization and local government.

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

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

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

#### IV. Innovative Teaching to achieve Program Outcomes

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

Active learning has enhanced the team spirit, learning capabilities and technical skills of the student. It created an environment to think more about technology, research and societal problems and find a solution for the problems around them, which also created a responsibility towards addressing the societal problems. Many of the students are part of research projects leading to patents, publications, startup ideas and few startups are initiated in the campus related to day- to-day student life problems. The proactive involvement in course-based projects enhanced the team spirit and motivated towards participation in National and State level competitions as well. The students' success rate improved and this is reflected in quality and statistics of the placements. The employer's feedback is a clear testimony of this claim. The students opting for international studies are able to come up with good grades and involve in research because of the self and interactive learning aptitude.

#### V. Online Student Feedback System

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

procedure ensures that there is a good and cordial relationship between the students learning environment and the teachers. This has been very effective in identifying the issues related to curriculum and facilities successfully.

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

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