

2.3.1 Student centric methods, such as experiential learning, participative learning and problem - solving methodologies are used for enhancing learning experiences

Teaching Learning Processes

Computer science and Engineering (CSE) program curriculum is designed with guidelines given by UGC/AICTE/APSCH/University. In this B.Tech program courses are designed so as to make the student learn all the fundamentals of Computer science Engineering and basics of allied subjects and also get well versed with all the modern courses suitable for getting jobs and opt for higher studies.

- **The Pedagogical Initiatives**

Pedagogies play an important role in delivering of content and it varies with the audience. Course allocation is made based on the choice/ expertise of the faculty members one month before the commencement of semester. A well-defined process for course allotment and load distribution is adopted at the department level. The courses are allocated according to the UGC/AICTE work load for professors, Associate Professors and Assistant Professors. Then the faculty members prepare a detailed lesson plan, assignments model question papers, etc., for a particular course according to the course outcomes. Faculty members use various pedagogical methods for effective teaching learning process.

- **Lecture/Practical Classes:**

Theory classes are taken by faculty according to the timetable. All Faculties are using Boards, Projectors, and Smart Boards for their teaching in the classrooms. Faculty are also teaching online classes using Microsoft Teams, Google Classrooms etc., For every practical classes, faculty will monitor students such that subject related programs such as hand-on experience will be implemented.

- **Seminars:**

Seminars are a vital part of academic courses that gives an opportunity to develop the functional skills, technical skills, communicational skills and presentation skills. The students are encouraged to participate in Group discussions, technical quizzes, mock Interviews and inter- personality development programs. It helps students to face placement interviews.

- **Project Work:**

Students are encouraged to select the project according to their area of interest. Three to four students will form a batch. Each batch is allotted one faculty as a guide. Proper

guidance will be given to the students relating to the project work. The project work help the student to learn and implement the current applications. Also it will help the student for collaborative learning.



CLASS



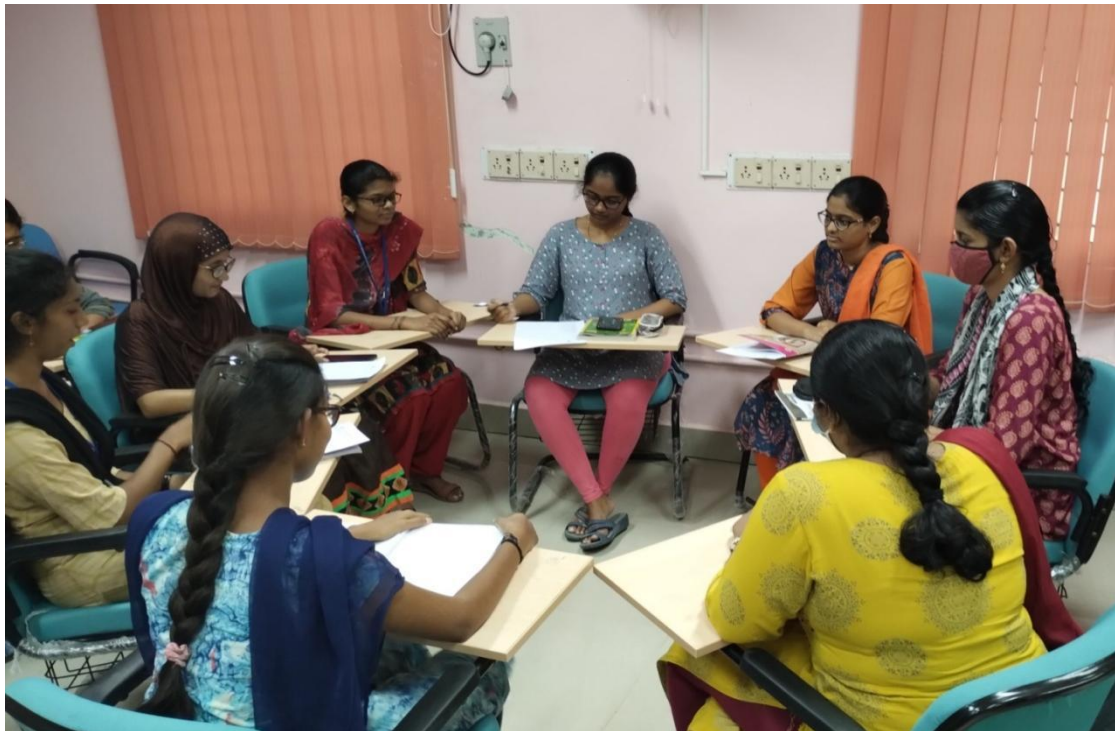
CLASS



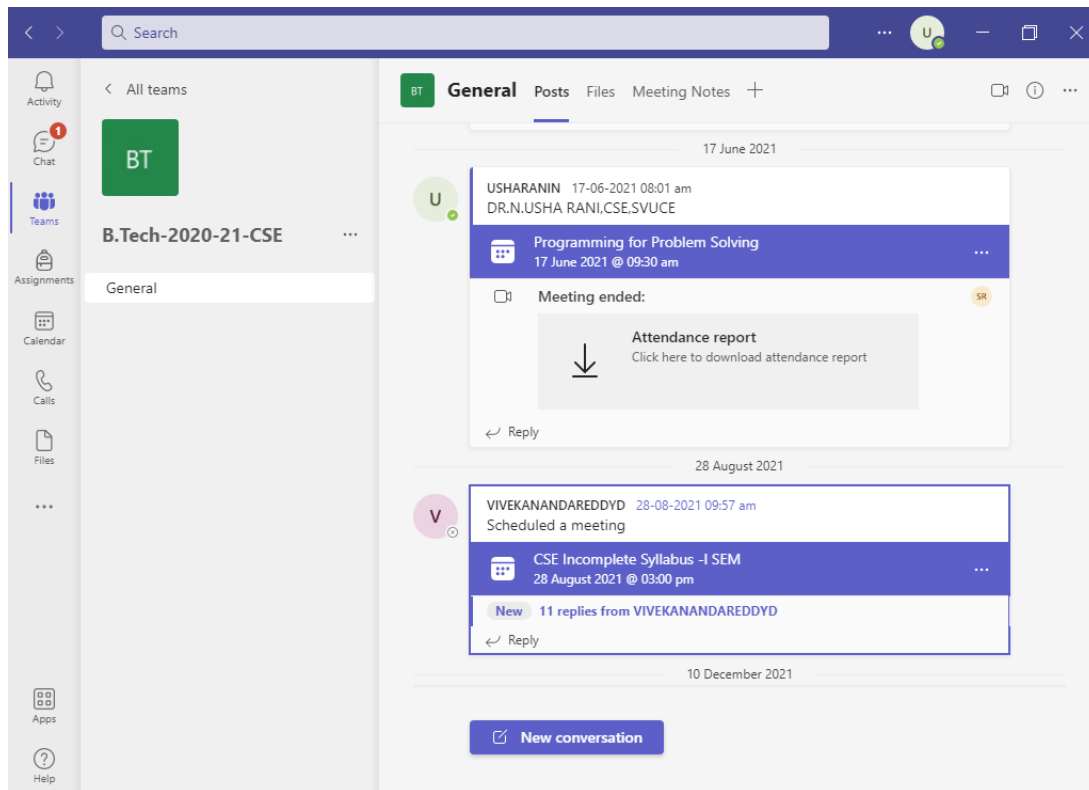
CLASS



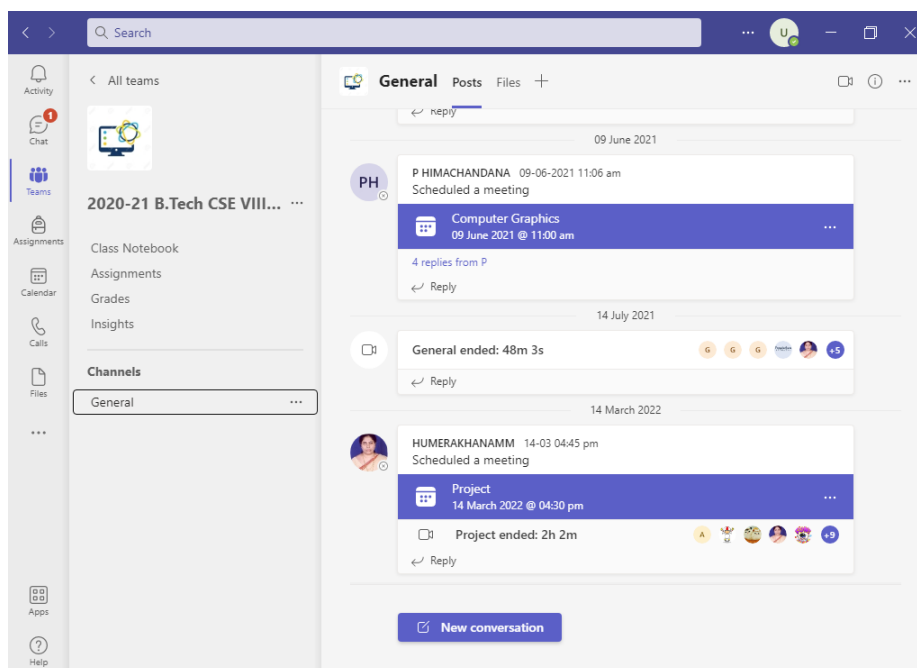
GROUP DISCUSSION



GROUP DISCUSSION



ONLINE CLASS (MICRO SOFT TEAMS)



ONLINE CLASS (MICRO SOFT TEAMS)

- **Learning Resources to improve their self-learning capabilities.**
- MOOCS
- NPTEL

➤ SWAYAM

These E-sources are provided to the students in order to develop self-learning and life-long learning skills. The students are allowed to take MOOCS courses in the NPTEL SWAYAM portal in the fields of their choice to gain wide knowledge. 3 credits are allotted for each of the MOOCS courses.

- **Quality of laboratory experience with regard to conducting experiments:**

At the beginning of every semester, the required software's are installed. Faculty members instruct the students about the Syllabus, Course objectives, Course outcomes, and grading methods and how to debug and test with different inputs of the laboratory course before doing the regular laboratory experiments. Scenario based problems are given to students for programming subjects such as Computer Programming, Object Oriented Programming and Java Programming. For each laboratory course, few experiments are to be included in the syllabus. Extra experiments are also implemented beyond the specified list for relevant courses wherever necessary. Laboratory manual explaining the details of the experiment, designing issues are available with the course teacher and are provided to students at the commencement of the semester. These Manuals are checked and verified by Faculty member before the commencement of each semester. Viva voce is conducted for the students in order to test their knowledge in the experiment. The Laboratory assessment is performed on the basis of rubrics such as, submission of laboratory records, participation in performing the experiment, analysis and interpretation of experiments.

Internal Lab Exam: An Internal Lab exam of 3 hours duration is conducted after the completion all programs to assess the ability of a student performance. Internal Lab exam is conducted for 40 marks. (viva, record submission and written and execution parts)

External Lab Examination: The end semester practical examination is conducted for 3 hour duration. The external Lab exam is conducted for 60 marks .An external examiner will conduct the viva voce.

- **Identification of Weak and Bright Students**

Focus is always placed on ensuring that all the students achieve the Learning outcomes prescribed. In the process, slow learning students and quick learning students are identified. They are identified based on their past performances, classroom performances and their scores in direct assessment methods. Assessments are carried out periodically and hence allow the faculty members to monitor and

provide attention to the students who may not be attaining the POs to the required level. This ensures that all students attain the minimum level of each programmed outcome. In order to facilitate the Slow-learning students, few of the following steps are taken

➤ Support Weak students

- Counseling will be given to the students by subject handling faculty, concerned faculty advisors and HoD.
- Students' performances are intimated to parents.
- Remedial classes will be conducted based on requirements of students.

➤ Encourage Bright students

- Motivate students to achieve Gold medals and cash prizes given on Graduation Day.
- Encouraging them to take part in Research Activities.
- Motivating them to attend conferences, workshop, and other co-curricular activities.

2.3.1 Student centric methods, such as experiential learning, participative learning and problem -solving methodologies are used for enhancing learning experiences

Write description in maximum of 200 words

S.No.	Description	Departments
S.V.U. College of Arts		
1	The Centre is well equipped with IT class rooms and required material to enable the teachers to use the latest available material from the internet in the class itself. The tourism students are taken out on regular basis for field trips to enable them field experience practically.	CSEAPS
2	The Centre for Women's Studies follows student centric methods in teaching, laboratory and extension activities. Students will be assigned with community service activities/issues to analyse and find solutions. Students also participate in community development programmes under extension activities. Students submit project work based on the community survey on different aspects.	CWS
3	Apart from methods followed for teaching, the department concentrates on learning techniques base on experiential learning where students are allowed to join as project internees for on hand job learning. Buy conducting regular class room seminars organised, participate and presentations all by students by themselves, teachers acting as moderator only, making them self-achievers. And Mentor teacher s are giving assignments so the students prepare and learn to solve practical problems arising by themselves.	Economics
4	For teaching learning the teacher educators involve the student the student teacher to gain experience on various aspects of the curriculum being implemented now. Hence they are encouraged to visit the educational institutions residential and non residential schools social welfare schools, inclusive schools to gain practical knowledge. Student teachers are encouraged to present their views in seminars and conferences. Expert lectures will be arranged on education related issues, inter semester break activities (ISB) and dissertation work is made a part of curriculum.	Education
5	• The students are oriented towards code of conduct and discipline at the beginning • To provide study material	FL&Linguistics

6	The Admission to the courses based on S.V.U. & APPGCET. Admissions as per the Reservation Policy of the State Government 50% of the Students are from other University	Hindi
7	For Teaching-Learning, the teachers involve the students to gain experience on various aspects of the curriculum being implemented now. Students are encouraged to present their views in Seminars and Conferences. Expert lectures will be arranged on the trending aspects in History.	History
8	• Paper wise teaching modules are prepared • Expert lectures by visiting fellows • Maintenance of activity dairies TEACHING & LEARNING METHODS - o Lecture Method - o Seminar Method - o Discussion Method - o Case Study Method - o Online Classes - o PPT - o Dissertations - o Practicals and Court Observation - o Visit to other University, Public and Special Libraries - o Computer Aided Teaching	Law
9	• Paper wise teaching modules are prepared • Expert lectures by visiting fellows	Library Science
10	• Sitting along with the students and teaching to them helps to identify the difficult areas, weak areas and make them strong in the weak areas. • Everyday accessing in class room and continuous monitoring helps them to improve their skills	Performing Arts
11	For Teaching-learning, the teachers involve the students to gain experience on various aspects of the curriculum being implemented now. Students are encouraged to present their views in Seminars and Conferences. Expert lectures will be arranged on the trending aspects in Philosophy.	Philosophy

12	Student centric methods:- The course is planned in such a way that all the programmes held in the campus are entirely student centre. Learning as Experience:-The programs of B.P.Ed is totally practical Oriented with all the skills ae taught through training with practical experience of learning skills and learning how to teach. Problem solving Methodology:- The course teaches how to organize and while organizing the pupils come across different challenges which they have to solve. The experience during administering the tournaments, competitions, coaching camps, training methods and organizing different programmes. The course follows all the possible methodologies which help the students to lear fasts and give them practical knowledge for their life time.	Physical Education
13	Student-centric methods are used for enhancing learning experiences by: • Experiential learning • Integrated/interdisciplinary learning • Participatory learning • Problem solving methodologies • Self-directed learning • Patient-centric and Evidence-Based Learning • Learning in the Humanities • Project-based learning • Role play	Population Studies
14	• Paper wise teaching modules are prepared • Maintenance of activity dairies TEACHING & LEARNING METHODS - o Lecture Method - o Seminar Method - o Discussion Method - o Online Classes o Visit to other University, Public and Special Libraries - o Pre-recorded lectures in You-Tube & E-patasala	Sanskrit

15	For teaching learning the teacher educators involve the student the student teacher to gain experience on various aspects of the curriculum being implemented now. Hence they are encouraged to visit the field visits like NGO's, Educational institutions, Social welfare schools and Hostels, Sachivalayams, Raithu barosa kendras, hospitals, Industry Sectors etc., to gain practical knowledge. Student teachers are encouraged to present their views in seminars and conferences. Expert lectures will be arranged on education related issues and Societal Issues.	Sociology
16	☐ Lectures using Black Board ☐ Charts and Graphs ☐ E. Class room ☐ Power Point Presentations ☐ Audio & video presentations ☐ Recorded Programmes ☐ Literary Discussions ☐ Quiz and Seminars ☐ Padya Patanam & Kavya Patanam ☐ Assignments and Internal tests ☐ Invited Guest Lecture Programmes	Telugu Studies
17	The Admission to the courses based on APPGCET. Admissions as per the Reservation Policy of the State Government 50% of the Students are from other University	Urdu
S.V.U. College of Sciences		
18	The Department has the culture of involving the students in experimental learning in the form of practical's relevant to the theory each day. Invariably the anthropology students have to undergo participatory learning methods in fourth semester of their curriculum. Further problem solving methods are also practiced by the students both in subject content and data analysis..	Anthropology
19	Through laboratories experimental learning is implemented.	Biochemistry

20	☑ The students are involved in regular short and long field trips/tours to local and specific plant diversity rich areas to improve plant taxonomic skills and assess the diversity and utilization of plant resources by different communities. The students are taken to National research laboratories and Biotech industries to learn about Instrumentation and processes employed. As a part of Curriculum, experimental methods are used by the students for plant material analysis and involved in solving of problems related to Genetics, Molecular Biology and Genomics.	Botany
21	The student centric teaching is promoted by ensuring classroom environment to the students friendly. To enhance practical utility students are encouraged and guided to undertake projects to gain experience. Emphasis is given on proper academic preparation and syllabus completion. Classrooms are equipped with LCD projection systems, screens and green boards. Lecture notes are distributed after the completion of each unit. The classroom environment is kept conducive to make students feel free share their ideas and form a healthy discussion. Advance information is given about topics to be taught in the next class so that the students can come prepared for active discussion with teachers. Revision of the contents covered in the last lecture is performed by asking some questions to check the understanding of the students and to develop a link for the topic of current lecture. Any doubts raised by learners are clarified by re-explaining the topic at a level where student can grasp the topic more easily. Critical thinking of learners is developed by asking them questions related to topic during the lecture. Faculty performance is closely monitored through student feedback. Library facilities help students in self-learning process. Lectures, group discussions, seminars, lab facilities, short-term project are used to enhance skills. In addition to College library, the departmental library is has been established for quick and convenient reference materials.	Chemistry

22	The Department designed curriculum including practical's for all the courses. In the practical's they gain hands on experience what they learnt in theory. Field and industrial visits were also built in curriculum. Students will be taken to respective fields and industries to observe how the people real working situations. Students interact with the people of industries and learn the safety of employees and environmental pollution controlling measures. Project work- The students will do innovative projects in their fields of specializations for which four credits allotted. Industrial experience- The students of environmental science are placed in different areas of project work for 60 days to understand the field of projectwork and plan solutions and implement and find the solutions. Four credits were allotted in the curriculum for this.	Environmental Science
23	Provision of online subject wise webinars. Provision of study material. Department weekly tests.	Fishery Science and Aquaculture
24	The department exposed learners to words experimental learning, participative learning and problem -solving methodologies during practicals in the RS, and GIS labs and fled work/ internship.	Geography

25	The department designed curriculum including practical's for all the courses. In the practical's they gain hands on experience what they learnt in theory. Field visits was also built in curriculum in this the students will be taken to respective fields to observe how the people real working situations. For example in Food science nutrition and dietetics program the students were taken to Hospitals, Hotels and other Institutions to observe how dietary departments are working, how the dietitians go through the wards and interact with patients etc. In internship – All the students of all programs are placed for 45 days in their course specific places to learn and train and gain hands on experience. For Internship two credits allotted. Project work- The students will do innovative projects in their fields of specializations for which four credits allotted. Rural work experience- The three specialization students of Home science are placed in rural areas for 10 days to understand the community problems and plan solutions and implement and educate the community. Two credits were allotted in the curriculum for this.	Home Science
26	The Admission to the courses based on APPGCET. Admissions as per the Reservation Policy of the State Government.	Psychology

27	The teaching-learning process is one major objective and the strength of our college. Students are given a right blend of traditional and modern methods to make learning student-centric and a rewarding experience. Experiential learning, participative learning and problem solving methodologies are well adopted to ensure the holistic development of students and facilitate life-long learning and knowledge management. Design/development of solutions: Students attempt to develop solutions for complex society problems and processes that meet the specified needs of real-time cases through group analysis, brainstorming etc. 1. Mind Maps for creativity: Teachers create a central node on a Mind Map and provide students the freedom to expand and develop novel ideas. 2. Flipped Classes, blended learning and model making methods are introduced for selected topics to enhance participative learning. 3. Students are encouraged and presently made mandatory to take (Massive Open Online Courses) MOOCs offered by premier institutions of the country. They include online lectures, demonstrations and interaction through skype sessions. 4. Proficiency in soft and communication skills through lab sessions. Industry interaction and summer training Industry projects and collaborations are undertaken to enrich students with pre-employment training. Periodical Guest lectures on topics relevant to employment skills by personnel from respective organizations / industry. Experiential learning Practical courses (laboratory) including virtual labs are made compulsory in the curriculum. Technical know - how regarding maintenance and repairing activities of various lab equipment. Different learning methods viz. problem-based, case-based, project-based, inquiry based, computation-based, co-operative are implemented wherever feasible. Students are encouraged to take up innovative projects and mini projects. Problem solving methodologies adopted are	Zoology
S.V.U. College of Commerce, Management Studies and Computer Science		
28	Wide varieties of methods are used to impart effective learning to the management students. Besides Lecture Method; Role Plays, Case Discussions, In Basket Exercises, Team Presentations, Individual Presentations, Group Discussions and Flipped Classroom are the methods used.	MBA

29	In a college which has a history of valorising the benefits and holistic of students above everything else, it is natural to lay utmost emphasis fine tune, add more value to , enhance and make more productive the over teaching , learning and evaluation experiences of its students. In confer this age old student centric spirit , the college builds , streamlines infrastructures and motivates and orients its teachers and other human be more fruitful for its students. Taking cognizance of the science back efficiency and efficacy of falling back on ICT enabled teaching methodology college is doing its best to build up a highly effective ICT enabled teach ,learning and evaluation eco system in the college and encouraging its make the most of its existing ICT infrastructures for more productive , participatory and enriching teaching, learning and evaluation experience college even encourages its faculties to press into service their person resources and gadgets to serve students' interests and benefit them jus always appreciates and motivates every teacher to maintain a rapport wifi students both offline and online and be the friend, philosopher and guide students as far as practicable. All sorts of innovations on the part of for making teaching ,learning and evaluation more effective are always and the college often aids such endeavours its own way. Such a well play has eventually helped us take care of our students quite well, guide the a more or less robust and productive teaching learning evaluation never during the last two pandemic hit sessions.	Computer Science
S.V.U. College of Engineering		

30	The curricula of various programs have been tailored to emphasize student-centered learning. To develop students' leadership and organizational learning skills, student-centered methods such as seminars, case studies, industrial/field projects, live-case discussions, educational trips, expert talks, practice-based workshops, experiential learning, brainstorming activities, roleplays, group discussions, and so on are used. Students participate in research projects/dissertations to generate novel ideas/creativity. All laboratories are equipped with the necessary software. The SVUCE has a variety of centers of excellence, including Bosch, Cisco, Google, and National Instruments. Students' committees and councils conduct a variety of academic and extracurricular events on a regular basis to help them improve their latent abilities. Assignments and project-based learning are an essential component of the teaching-learning process. Language classes are created for students, especially foreign students, to meet their needs and acclimate them to the medium of teaching for the courses. SWAYAM, NPTEL, MOOCs, and other IT-based educational platforms are also in use. Regular advanced training programs and exposure are provided to medical students at famous medical institutes to help them develop the evidence-based approach to patient treatment. The SVUCE offers students inter-disciplinary immersion through over 1000 multidisciplinary and value-added courses across several degrees.	Chemical Engineering
31	Programme Scheme is prepared after through discussions with subject experts and stake holders to develop centric methods including as experiential learning, participative learning and problem -solving methodologies are used for enhancing learning experiences (Scheme Attached)	Civil Engineering

32	☐ The faculty implements innovative practices to improve course delivery using pedagogical methods like mentioning real world examples allowing collaborative learning for the students while teaching. ☐ The course delivery for certain courses is done in blended mode using conventional Black Board / White Board and ICT facilities to improve the effectiveness of teaching and attract the students towards learning. ☐ Tutorial classes are conducted to bridge the curriculum gap as well as to support the slow learners based on their performance in the regular classes and internal examinations. ☐ Guest Lecturers are arranged by inviting experts from Industry and Academic year to deliver the expert lectures on latest practices in industry and academic advancements taking place in the field of Electrical and Electronics Engineering. ☐ Industrial visits are conducted to reduce the gap between industry and institute and make the student to get practical exposure. ☐ Students are allowed to go for Industrial Internships during the summer vacations and also allowed to do Mini Project and Main Projects in Industries if they are interested ☐ Training Programs are organized to help the students to understand concepts beyond curriculum. ☐ E-learning (using NPTEL Lecture, MOOCS) is promoted for skill development of the students.	EEE
----	---	-----

33	☐ Mentors are allotted for a group of students to interact with the personally for counseling propose advice and suggestions. ☐ Department activities like PPT presentation, Poster presentations, Group discussions, Circuit designing, skill presentation, talent etc., are conducted weekly to create a scope for self-learning and develop the personal skills and life skills among the students. ☐ IoT based Electronic Design and project lab has been established to enable the students to think and design innovative circuits that will be useful for society and industry in general and a common man in particular. ☐ Department has an Independent Library apart from College Library and University Library where in the students can gather required information pertaining to all the courses. ☐ Internet facility is available in the department, college computer center, University computer center and University Library to enable the student to access online resources, journals, text books, a number of magazines and periodicals related to different branches of science and technology and other materials relevant to their courses and other competitive examinations.	EEE
34	In addition to the traditional teaching-learning methods, the institute is providing innovative student centric methods such as Hackathons , Workshops , Seminars, Virtual Lab , Simulation , Role play , Review web literature , Video , Demonstration, Activity-based learning, Flipped Classroom, Guest lecture ,Professional practice school , GD/ debate , Peer learning groups , MOOCs , Google Classroom, Project- based learning, Real-time case studies , Worksheets, PPT, Mind map, Journal Review, Proto-type model , Cross words , Research projects , Language games , Viva , Poster presentation, Public Speaking to encourage Participative, Problem solving and <u>Experiential learning</u>	ECE